FAS52102

1879™

GAME MASTERS GUIDE

1879

ROLEPLAYING GAME

GAMEMASTER'S GUIDE

©2017 FASA GAMES INC.

CREDITS

Line Developer
Andrew W. Ragland

Development
L. Ross Babcock III
Mark Stout
Steve Perrin

Additional Material
Liz Smith
Benjamin Sperduto
Brad Decker
Andrew W. Ragland
Caleb Abbruzzesse
Steve Perrin

Senior Editor
Tiffany Ragland

Associate Editor
Kathy Czechowski

Administration
Mary Harrison

Web Design
Todd Bogenrief

Art Director
Andrew W. Ragland

Cover Art
Amanda Gerold
Yad Mui

Interior Art
Yad Mui
Don Higgins
A.L. Ashbaugh

Layout
Todd Bogenrief
Ian Liddle

Maps
Theresa Williams

DEDICATIONS

To William Levy and Robin Laws, who taught me not only that I could write for the industry, but how to do it through their examples.

Playtesters
Everyone who played in the 2013, 2014, 2015, 2016 and 2017 GenCon demos, thank you all

Copyright Information
1879® is a Registered Trademark of FASA Corporation.
The Grosvenor Land™, The Gruv™, and the Samsut™ are Trademarks of FASA Corporation.
1879 Roleplaying Game ("RPG") Gamemaster's Guide™ is a Trademark of FASA Corporation.
1879® and all associated Trademarks used under license from FASA Corporation.

Published by FASA Games Inc., USA.
First printing April 2017. Copyright © 2017 FASA Corporation. Printed in the USA.
No part of this publication may be reproduced in any form by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publishers. Permission to copy is granted for the Appendices for personal use only.

TABLE OF CONTENTS

Introduction 5
The Portals 9
An Extensive Tour of the Gruv 17
A Guide to Earth 123
Gamemastering 1879 151
Gamemaster Characters 171
Adventures & Campaigns 185
The Perils of Adventuring 203
Fatigue, Illness, Injury, & Poison 231
Steam Powered 255
Secret Societies 305
Bestiary 333
A Treatise Regarding the Astral Plane 433
Appendices 487
Appendix II 496
Index 501
Kickstarter Backers 511

梅逸明
2014

1879 GAMEMASTER'S GUIDE

Introduction

What each must seek in his life never was on land or sea. It is something out of his own unique potentiality for experience, something that never has been and never could have been experienced by anyone else.
– Joseph Campbell

When a group of people get together to play roleplaying games, most build a single character that they will play in the game's ongoing story. One does not. Instead, this person moderates the game, keeping in mind and enforcing the game's limits and rules. This person, called the Gamemaster or GM, determines the effects of the player characters' actions and what the responses to those actions will be. The Gamemaster also plays all the bit parts – bystanders, creatures, villains, and other characters who are not central to the action but still interact with the player characters in some way.

As the Gamemaster, you run the game. You create or adapt the story told during a game session. You create the situations and scenes your players' characters get involved in, you determine whether or not a character succeeds at an attempted action, and you roleplay all the people and creatures the characters meet. You decide what creatures the characters encounter, how those creatures react to the player characters, and who gets to hit who first. You describe the world as the characters see it, functioning as their eyes, ears, and other senses. Being a Gamemaster requires both skill and practice, but the thrill of creating an adventure that engages the players, tests both their gaming skills and the characters' skills in the game world, and captures their imaginations makes the job worthwhile.

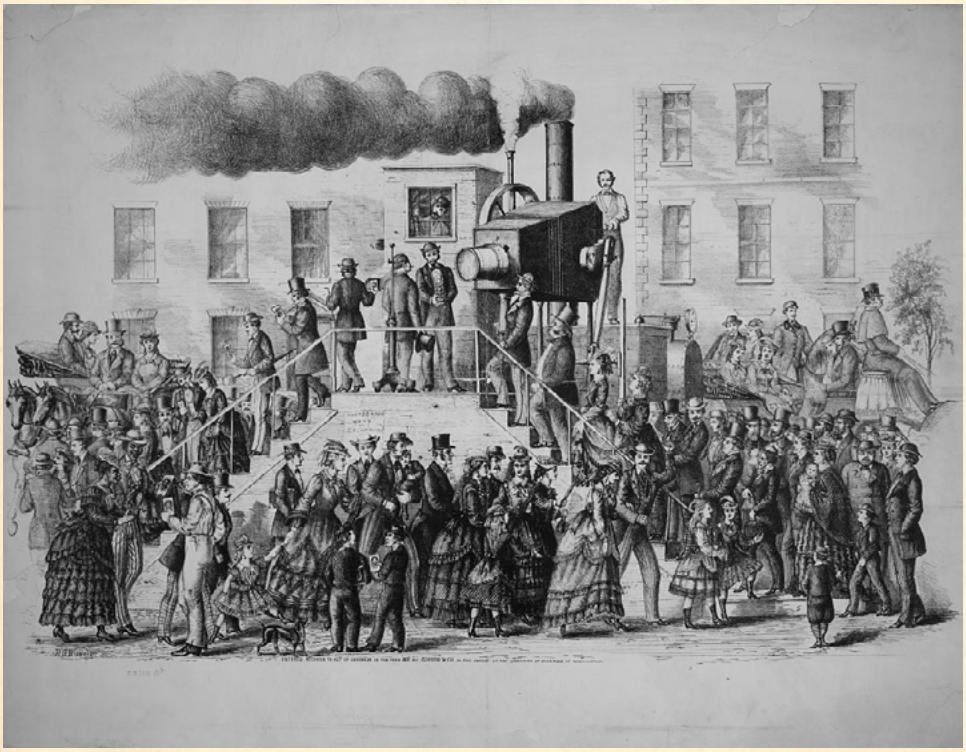
How to Use This Book

If you are new to *1879*, you might wonder what our intentions are by confronting you with four massive tomes of rules. While experienced roleplaying gamers might love us for that, beginners might feel they have a reason to get scared. Don't worry, the *1879* game is really very easy to learn.

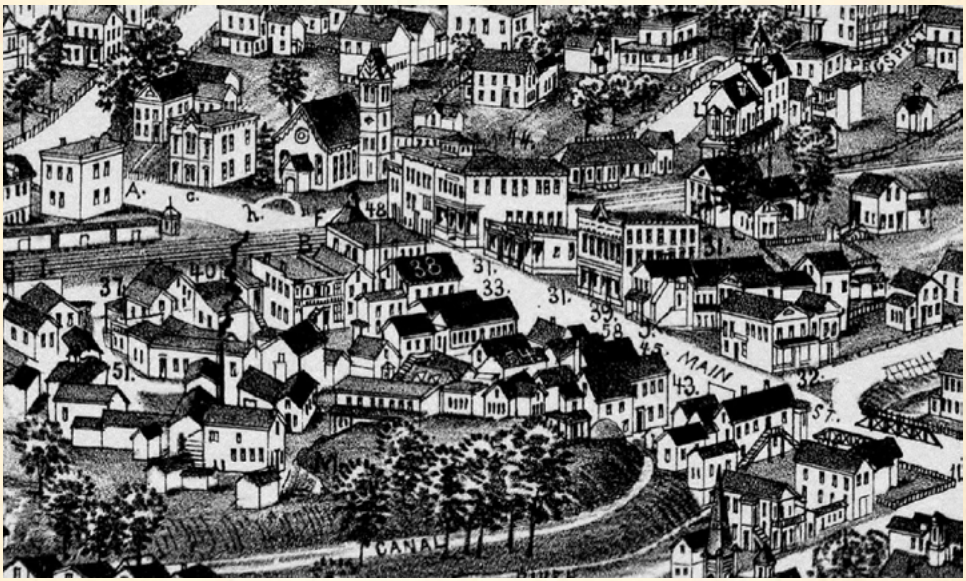
The Player's and Gamemaster's Guides and the Companions contain all the rules you will ever need to run an *1879* game. Since most roleplaying games are played as ongoing campaigns, these books provide everything required for years of play – advanced rules, powerful opponents, legendary magic and devices – you name it, you'll probably find it in one of these books. However, you only need to be familiar with a fraction of the material in order to get started.

The best advice we can give new players and Gamemasters is this – only use the rules you need. You can safely ignore everything else; optional rules, for instance, can be integrated later when you are more comfortable with the game. Much of the content is sorted alphabetically – equipment, skills, creatures, and so on – with other content organized in a similarly accessible order. Creatures, for instance, are grouped by their general type. Beasts go in one chapter, Spirits in another, and Dragons off in the Companions with the rest of the more advanced material.

The first section of this book discusses the game world in a level of detail not available to the players, but necessary for the worldbuilding and plotline development tasks of the GM. We describe the **Portals**, not only the Rabbit Hole but the Samsut Portal and the possibility of others. We follow that up with a tour of the **Gruv**. The political situation of **Earth** gets an in-depth look.



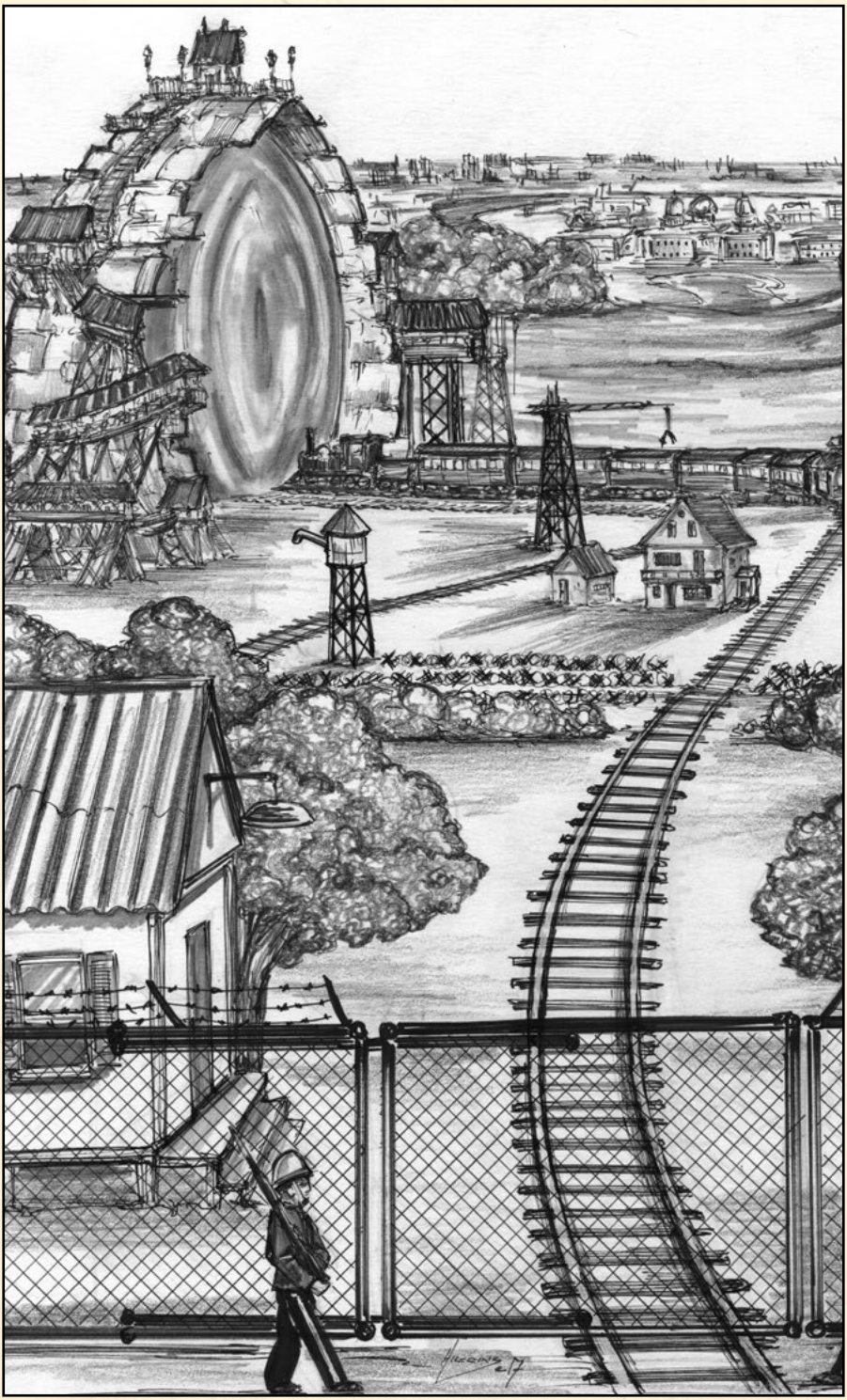
The second section discusses Gamemastering. Not everyone the players meet is an enemy. In the chapter on Gamemaster Characters, we give the GM tips on playing the walk-on speaking parts, the spear carriers, the authority figures who sign the paperwork and provide the traveling funds. We discuss designing Adventures and Campaigns and dealing with Adventuring and Its Perils. We provide rules for Advanced Healing techniques, which explorers inevitably require, and include chapters on the Advanced Technology that might keep them from needing healing quite so much. This section concludes with descriptions of **Steam Powered** vehicles, providing rules for travel on land, across the ocean, and in the sky.



The third section talks about who (and what) the player characters might meet up with on either world. They'll need opposition, as no story happens without conflict, and so we have some nefarious Secret Societies to challenge them. The Bestiary first delves into the nature and taxonomy of the Gruv's flora and fauna, then provides descriptions, statistics, and illustrations for the wildlife that might be encountered. Finally, we present a discussion of the Denizens of Astral Space, where we talk about elementals, spirits, and other entities of non-corporeal existence.

While you might want to read all three books from cover to cover, you will soon realize how boring it can be to read all of these descriptions at one sitting (something your brain might take serious umbrage at being subjected to!). You don't need to memorize everything. Instead, focus on remembering where to quickly find the information you need. A comprehensive Contents and Index are included in each book to help you find things quickly. The Appendices should also prove useful as a quick reference to the powers and creatures found in this tome, along with providing handy forms for in-game use.

Armed with this knowledge, you should be in a good position to quickly get up to speed with your *1879* game and thus get your first campaign running as quickly as possible. Welcome aboard!



1879 GAMEMASTER'S GUIDE

The Portals

Of the ways between the worlds, little should be said that may reach the non-adept, for such knowledge is perilous in the hands of the untrained; but in the hands of the true adept, who has sent his or her spirit questing over this world and into others, walking the path in body presents no more peril than walking it in spirit, which is to say, risking everything for the chance of a glimpse of higher knowledge, which is the true calling of the adept.
– Emma Hardinge Britten

The Player's Guide only talks about one Portal, the Rabbit Hole, in any depth. The Samsut had a Portal of their own once, a long time ago. The existence of these two portals implies the possibility of others. This chapter both confirms that possibility, and discusses four of the portals in detail.

Why Are There Portals?

Let's start off by stating that portals occur both with and without intervention by intelligent races, and that they have a cycle, which varies with each portal. Professor Oswald Grosvenor didn't create a portal. He created the conditions that allowed one to open out of cycle. As to why they exist, several possibilities are available for the Gamemaster to choose from.

- They're naturally occurring weak spots in the fabric of the multiverse. When a portal closes, another one opens somewhere else, as the weak spot gets relocated. The gremlins are mice in the walls of reality.

- They were created, by the Anunnaki or some other race with massively advanced technology, as a means of traveling between dimensions / alternate worlds / locations within a single world. Keep in mind Clarke's Law: any sufficiently advanced technology is indistinguishable from magic. There's a corollary that says that any sufficiently advanced magic is indistinguishable from technology. Weird Science says they're the same thing.
- A highly advanced race took advantage of a natural instability to create the portals, combining the first two options. The portals aren't so much controlled or created as triggered.
- They're faery trods. The gremlins, which eat metal, are leukocytes, trying to remove the painful Iron Tunnel from the fae realm. We'll be referring to the pathways between portals, in the otherworldly continuum between, as trods, because that's a handy term.
- They were created by something inimical that exists in the hostile continuum between worlds as a way of reaching out into physical space. What this something wants is unknown. Anyone that has encountered it has gone mad, vanished, been eaten, or otherwise become unavailable or unreliable as an information source.

Conditions Inside The Portal

Portals actually consist of two openings with a connection between them. The portals allow passage from normal physical space into the continuum that surrounds and divides the netherworlds, and hopefully back out again. This is not the same as a gateway into astral space, which is a spiritual and magical continuum that overlays individual physical worlds. Thus, to pass from one physical world to another, you have to enter the continuum through one portal, and exit it through another. The connection between the portals acts as a path, like a faery trod, allowing travelers to find their way from one portal to the other if they're fortunate, or if they have stacked the deck, more about which under **Portal Navigation further** on.

The trods aren't so much pathways as the idea of pathways. As such, they flex, shift, wander, and meander. The experience of traveling a trod will vary from one person to the next, even within a party that's traveling together. Time doesn't have quite the same meaning within the continuum as in physical worlds, and so can also be flexible. Expectation plays a large part in the experience of the trod. In the case of the Rabbit Hole, a great deal of common belief has been invested, as well as physical anchoring for that belief, which stabilizes the experience to some degree. Odd things still happen during transit.

There's no game mechanic for what happens in the trod, because it's such a subjective experience. The Gamemaster and players are free to describe the passage from portal to portal along the trod however they like. The British portal has some regularity to it because of the technology that's been brought to bear, but even that has its moments. Passage along the trod remains chancy. How chancy? That depends on where the story is going. If it makes a better story to have someone vanish off one train and reappear on another three months later, make it happen. If it would disrupt the story to have the party split up while traversing the trod, let them pass without incident.

There are game mechanics for the immediate environment for the Rabbit Hole. The continuum along this trod tends to be hostile to physical life forms. Heavy magic or specialized equipment must be employed to survive. The British have overcome the hostile environment with modified

diving suits and an iron tunnel that has air continuously blown through it. Other possibilities exist for surviving the passage.

There are also game mechanics for entering a portal, which has some hard and fast rules and some flexible ones. Any time an object or animal or person tries to enter a portal, those rules get applied, and there may or may not be consequences. See the next section for more details.

Portal Navigation

Passing the portal entrance into the trod presents a challenge all by itself. The Rabbit Hole allows some things to pass without issue. Animals and people may be adversely affected, coming down with a bout of LGF or worse. Certain objects, such as the Hat, simply cannot pass the portal. Generally, the less complex the item, the less resistance it encounters. Raw ore finds less resistance than refined metal ingots, which pass more easily than machinery. A box of rocks faces no challenge at all, while a coffin with a dead body in it encounters some resistance, and a living person may be afflicted with LGF or worse. The following tables and mechanic provide a guideline for this effect.

The Gamemaster should not make a Test for everything passing through the portal, as that would slow down the game and cause unnecessary complications. However, if the party needs to be challenged, or reminded of the hazard, this mechanic gives the Gamemaster a handy tool for doing so. The ill effects are not limited to those described in this section. The Gamemaster may apply whatever untoward effects seem appropriate to the campaign for an attempt to pass through the Rabbit Hole.

Make a Test using the Portal Resistance Step against the base Barrier Rating or Toughness Step of the item, creature, or person, plus their base Mystic Defense. This Test can be made each time the object, creature, or person attempts to pass the portal. The results of previous Tests should not be considered. Each Test is a new challenge. This Test may be made by the Gamemaster, or by the player controlling the item, creature, or character, as the player group feels appropriate. This Test is only made on entering the trod. Passing the exit portal does not require a Test.

Augustus Guillamot, being a fairly average adventurer, has a Toughness Step of 6 and a base Mystic Defense of 7. His player makes a Test using a Step of 11 against a Target Number of 13. The result of 16 gives the portal one success, a very near disaster as both dice came within one point of rolling up. Augustus passes the portal, but takes 5 points of damage (Step 4 Test result).He is shaken by the experience, but will recover.

Portal Resistance Table

Item Composition	Portal Resistance
Non-organic: Unrefined	3
Non-organic: Refined	5
Non-organic: Manufactured	7
Organic: Dead	5
Organic: Living: Nonsentient (plants etc.)	7
Organic: Living: Semisentient (animals)	9
Organic: Living: Sentient (people)	11

Consult the following to resolve the Portal Test result.

- On a simple failure, nothing untoward happens. The portal fails to resist the item and it passes without incident.
- On one success, the portal resists entry. The item, creature, or person passes, but takes Step 4 damage from the rejection. No armor protects against this damage except for Mystic Armor provided by Willpower.
- On two successes, the item, creature, or person takes Step 6 damage and does not pass. No armor protects against this damage except for Mystic Armor provided by Willpower. A person may force the passage, but at a cost of Step 5 points of Karma. If the person does not have enough Karma to cover the cost, they may pay any overage in damage (Death Rating and Unconsciousness).
- On three or more successes, the Test is made again.
  - A failure is treated as one success, above.
  - One or two successes allow passage, but the damage taken is equal to the Portal Difficulty number. Thus, a person would take Step 11 damage. No armor protects against this damage except for Mystic Armor provided by Willpower.
  - On three or more successes, any of the following may happen.
    - A person who is currently human is afflicted with LGF. Select one of the four Boojum races, and apply the appropriate racial modifications. The person takes half of their new Death Rating in damage from the abrupt transformation.
    - A human, Boojum, or Saurid takes twice their Death Rating in damage, plus two Wounds. No armor protects against this damage. If the character is brought back, by healing magic or other means, the strain leaves them in a coma for Step 8 days, and -1 to all actions for one month.
    - The item, person, or creature ages due to time dilation. This may be a matter of months or years. The Gamemaster is advised to restrict aging to the point of death or decay to items, animals, or persons that will not disrupt the storyline by their loss.
    - Select one of the options from the **Portal Ill Effects Table**, below. Players and Gamemasters are encouraged to pick rather than roll, and to invent new ill effects suitable for their campaign.

Portal Ill Effects Table

Option #	Effect
1	The item, creature, or person loses one point from one Attribute due to warping damage.
2	The person loses Step 6 Skill Ranks from their Magical Skills.
3	The item, creature, or person takes Step 8 damage from being twisted in form. Manufactured items become unusable until repaired or remade. Creatures or persons lose the use of one limb, inflicting a -4 Step penalty to all actions with that limb until healed or replaced.
4	The person loses one Skill, but gains a Spell, selected by the Gamemaster, in its place at equal Rank.

5	The creature or person has one sense amplified. They gain +2 Steps to Perception Tests made with that sense, but are at -2 Steps to all other Perception tests for one month while they adjust to the increased input.
6	The creature or person has one sense permanently impaired, taking a -3 Step penalty to Perception Tests made with that sense.

The first consideration after passing through the Rabbit Hole on the London end is surviving the hostile environment of the trod. What presents itself as air will not support life as it is known on Earth. This can be altered with strong magic, or ignored with sufficient technology. The atmosphere of a trod reflects that of where it opens. The Greenwich Portal lets into a choking cloud of industrial waste because of London. The atmosphere clears at the Gruv end. Get past the halfway point, marked in the Iron Tunnel by a broad red stripe painted on the walls, floor, and ceiling, and the air changes. Going one way, helmets can be removed, but the other way, they have to be put on in order to survive.

Just a little past the Red Line toward the London end, the stink of coal smoke, ammonia, sewage, hot metal, and unwashed bodies grows to suffocating proportions. Even in the Iron Tunnel, with its continuous supply of fresh air blown in by massive fans, the stink and the fumes require air helmets and sealed carriages. Outside the Iron Tunnel, it's lethal. An unprotected person or animal exposed to the atmosphere of the trod takes Step 4 damage the first round, increasing by +1 Step for each successive round until the person or animal leaves the trod, receives some form of life support, or dies. Armor does not protect against this damage.

The environment suits started out as lead foil lined diving suits, nearly impossible to move in due to their weight. Later, it was discovered that iron worked better than lead. Modern environment suits are made of heavy fabric, woven with threads of drawn iron in both the warp and weft, much like steelworkers' trousers are made of flame-retardant cloth woven with threads of steel to protect against flying sparks. Self-contained air tanks provide breathable atmosphere inside the suit for a limited time. The visor is made of leaded glass, secured with a gutta-percha seal to prevent leaks.

Rabbit Patrol Environment Suit:
Physical Armor: 8
Mystic Armor: 5
Barrier Rating: 23
Weight: 60 pounds
Initiative Penalty: 4
Cost: £150
The air supply lasts for two hours. Treat remaining in an environment suit after the air runs out as **Drowning** (pg.227).

The second problem is finding the exit. In the case of the Rabbit Hole, a massive tunnel of (cold) iron has been pushed through, big enough to run trains through in both directions. Anyone staying inside the tunnel may be reasonably assured of arrival at their chosen destination, although as noted elsewhere, sometimes even the iron tunnel is not sufficient protection. Those traveling outside the tunnel, such as the Rabbit Patrol, rely on a variety of means to keep from losing their way. These range from the simple, such as a line or cable stretching back to the Iron Tunnel, to the complex, such as Weird Science devices made for navigating in the trods. None are reliable. Lines snap. Knots mysteriously untie themselves. Devices may or may not function the same way in the trods that they did on Earth or on the Gruv.

The only really reliable means of navigating in the trods requires serious study of magic. This sort of work has just begun on Earth, and will be developed in a future sourcebook.

The Babylonian Portal

Thousands of years ago, in game time, a portal opened near ancient Earth's Babylon, with a trod that led to the Grosvenor World, the exit portal being near the current-day location of the Edeesmatu Babylon. Exactly why this portal opened, and why it connected those two places, remains unknown. What is known is that it remained open for about three hundred years, with occasional closures, until it finally closed for good. It may reopen at some future date. If the campaign you're playing would benefit from it reopening, by all means have it happen.

The Babylonians, fleeing the sack of their city, found the portal, and made their way through it. How did they manage that without environment suits? Two reasons. The first was the nature of Babylon. The atmosphere of the trod at the Babylon end was hot, dusty, dry, smoky, and smelled like too many unwashed people and livestock in too small an area, but people living in Babylon were accustomed to a lesser form of these conditions. They held their noses, complained about the stink, and marched on through it. The second was fervent belief. Their priest-king told them that the portal was the escape route, the way to a better, less hostile world, away from their enemies. The Babylonians believed their priest-king, and set off into the portal firmly convinced that what he said was right. Belief influences the experience of the trod. Hundreds of people with devout religious faith created enough belief to stabilize the trod and allow the Babylonians to pass through. The people that followed, the Hittites, Akkadians, and others, had the example of the Babylonians to confirm that the portal was safe. They had no reason to doubt the pronouncement of the Babylonian priest-king, and saw that other people had survived the trip, and so they made it through as well.

Without mechanical conveyances, the trip through the portal was no easier than traveling between cities, which in those days was a serious undertaking. Thus, no major trade through the portal evolved. Most of the people who went through were refugees of one sort or another, following the legend of the Babylonian escape in order to make their own. No great roads were built to the portal, no town was built round it to support trade, and when it closed, it faded into legend and further into myth. By the time the Rabbit Hole opened, only scholars of the more obscure Akkadian legends had even heard of such a thing, and nobody put any stock into quasi-religious tales of a hole in the air that led to another world.

That all changed, of course, when the first British scouts returned through the Rabbit Hole.

The Saurid Portal

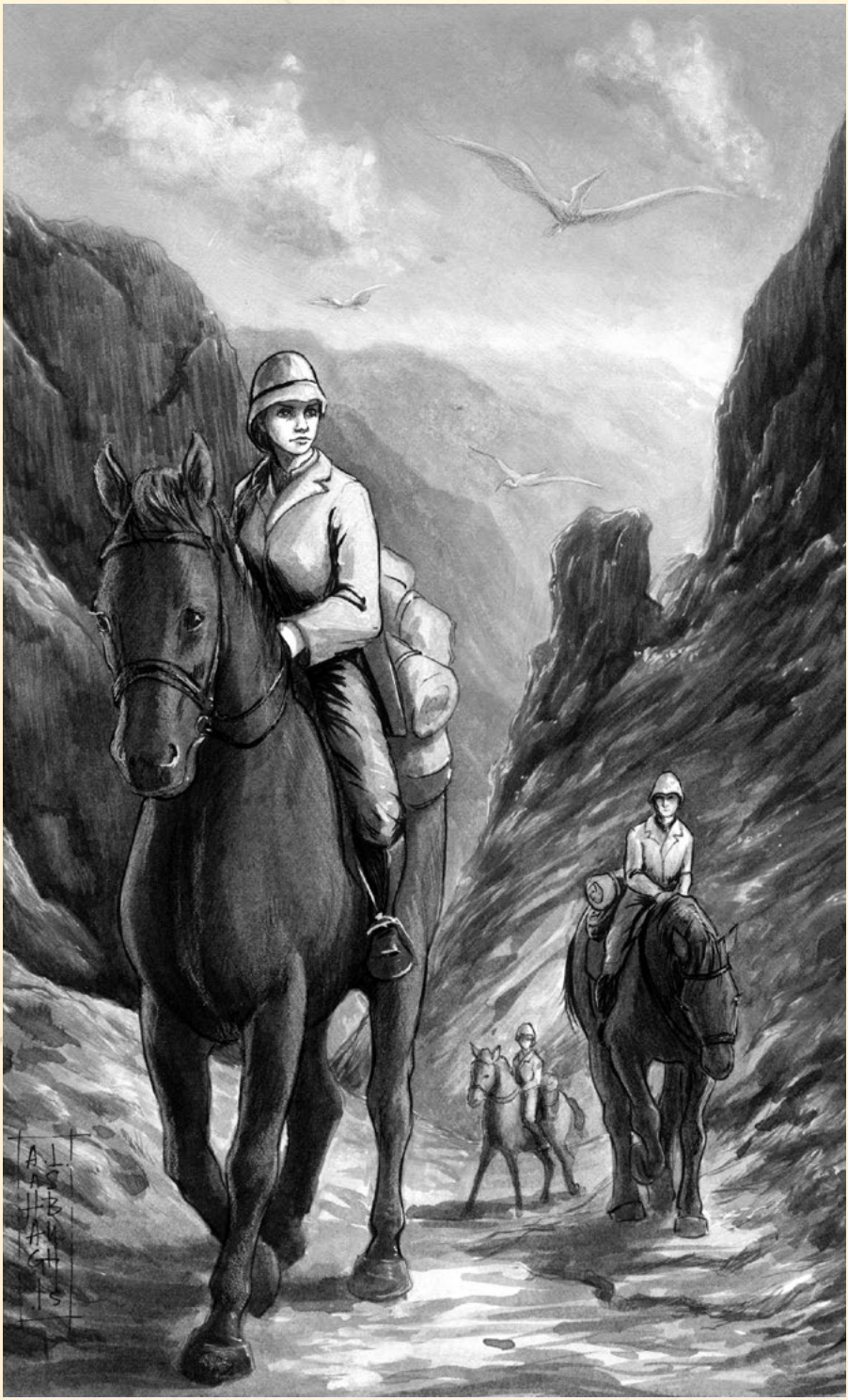
At the far southwestern end of the Saurid Continent, a portal occasionally connects the Grosvenor World with Earth, on about a ten thousand year cycle. Long ago, at the dawn of the Age of Legend, the portal opened, and Saurids went through and colonized Earth. In time their numbers grew, and then the portal closed, and the Saurids on Earth came to think of their adopted world as their home. They forgot the portal, except as images in their creation myths, and took a new Name for their race: t'skrang. Earth wasn't their home, though, conditions just weren't quite right for them, and the t'skrang birthrate declined. As the Fourth World came to an end, so did the t'skrang, dwindling in number until the last was given funeral rites by another race, as there were none of their own left to say the prayers. Modern Earth has no memory of the t'skrang, again except as fragments of ancient legend. One day, though, the portal will open again, and the way will be clear for the Saurids to make another try at living on Earth.

Note that this trod has a breathable atmosphere. The environment remains badly disconcerting. People still become dizzy and uncertain. Losing one's way is a serious possibility. The air, however, will not be what kills the unwary traveler. Toward the Gruv end, the trod smells of jungle and salt water, and the breezes blow erratically, changing direction in ways not possible in the physical world. The Earth end, well, that depends on where it opens. Last time, it was somewhere along the river now known as the Volga, in an era that had no industrialization. Not that this matters, unless the Gamemaster decides to reopen one of these portals as part of a campaign.

The British Portal

Part of the problem with the trods is that the area just past a portal from the physical world tends to reflect the nature of that world. In the case of the Greenwich Portal, the continuum within the Rabbit Hole reflects the nature of a city known as the Big Smoke. The air, or what passes for it, consists of coal smoke, the ammonia that rises off the waste of thousands of horses, the methane and stench of the sewers and the Thames (not that there's a difference), and the exudations of two million people desperately in need of a bath. Thus, the atmosphere at the London end of the Rabbit Hole is toxic. Given that belief shapes experience in the trod, once people from Earth found the air beyond the portal to be unbreathable, and expected it to remain so all the way to the new world, it became so.

Putting that much cold iron through a faery trod attracts attention and provokes reaction. Whatever lives in the continuum between worlds, including the gremlins, has noticed the Iron Tunnel and not approved of it. The Rabbit Patrol deals with attacks, sabotage, and intrusions on a far too frequent basis. The trod itself puts strain on the iron tunnel, trying to force it out at either end, with the result that the center section frequently needs repair. How long the iron tunnel will hold up before failing catastrophically, like the Tay Bridge, remains to be seen.


ALI ASHBAUGH

1879 GAMEMASTER'S GUIDE

An Extensive Tour of the Gruv

What anyone who has ever been to India will immediately understand about the Grosvenor Land is that foreign countries are not there to make the British comfortable. They are there to make their own people comfortable.
– John Storer Cobb

This chapter provides a highly detailed exploration of the Grosvenor Land, expanding considerably on the material provided in the ***Players' Compendium***. Each section describes one region and includes settlements and adventure hooks. GMCs are included with each habitation.

Introductory Remarks

From Her Majesty's Grosvenor Land: An Intensive Survey,
by Lord Peter Charleton, Privy Secretary, Home Office

Approximately two years ago, the British Empire gained access to a New World through the Grosvenor Portal, better known as the Rabbit Hole. Since that time, our military has explored north, west, and south as far as the coastlines of what we have come to realize is a peninsula extending from a much larger continent, and east to the three land bridges that connect the Grosvenor Land (or "Gruv") to the continent proper. Privately funded expeditions and task forces from other nations have added to the effort. Numerous fortifications, settlements, work camps, and other human presences have been established. Denoting these as human became more important when the Empire encountered the lizardmen of the western regions. The fortifications became more

important when the Empire met, and subsequently was attacked by, the Samsut, descendants of the ancient Bablyonians from our world, who long ago had their own Portal.

We have reached a point where a Domesday Book is required. An accounting of the human presence in the Gruv must be made, for reasons of strategy, economic planning, and accountability. Our military and our allies must know the location of each fortification, what sort of armament they possess, and how many troops are stationed at each. Revenue from the civilian and industrial settlements must be properly calculated and collected, to continue funding for the exploitation of the New World and to finance the war against the Samsut. We must know not only the number of civilians in each settlement, but their political leanings and their state of preparedness, so that we might have a measure of their reliability in time of crisis.

With this in mind, this volume will describe in detail the geography of the Gruv, the location and nature of its settlements, and the location and readiness of its military installations. A few definitions and prefacing remarks are in order.

Standard geographic survey terminology is used. Explanation of such is beyond the scope of this document. In deference to the intended audience, proper geological terminology shall be deferred in favor of colloquial names.

Settlements and fortifications divide into the following categories.

Type	Definition
Military/Fort	A fortification in a dangerous or unsettled area. May or may not offer shelter for nearby civilian population in time of emergency.
Military/Support	Supply depots, reserve troop housing, homes for dependents, and quarters for rear-echelon support in safe areas. May include transportation hubs and light industry, which in turn may be provided by civilians engaged by the military.
Civilian	An independent settlement formed by private enterprise. Usually agrarian. Often funded by a religious group or social organization. May have received government funding and/or support in its inception. Primary crops, livestock, and other resources produced are noted.
Industrial	Built and managed by a firm, or consortium of firms, to exploit a natural resource. Having learned an expensive lesson from India, there shall be no chartered companies in the New World.
Workhouse	A labor encampment initially populated with the inhabitants of a large workhouse, or cluster of smaller ones.
Penal Colony	Prisoners imported from Earth for hard labor.
Prison Colony	Those convicted of crimes in the Gruv and not sent back to Earth
Saurid	Not, strictly speaking, part of the survey of human habitations, but one should keep track of one's allies. Saurid settlements listed in this survey maintain cordial relations with the Empire. No hostile settlements currently exist on the Grosvenor Land peninsula. Settlements on Boynton Island and Chaffee Island, and on the land the far side of the Straits of Darwin, are another matter entirely.

No hostile settlements, my granny's false teeth. This lackwit needs to get out from behind his desk and out into the real world.
- Maj. Ambrose Merriwether, BEF Abergavenny, Headquarters Logistics Corps

Population count can be difficult to determine. While a count of individuals passing through the Rabbit Hole has been kept, movement from settlement to settlement cannot be rigidly controlled. Births and deaths are not always reported, for a variety of reasons. With multiple nations now involved in the colonization effort, diplomatic issues alone have rendered the idea of a single centralized record-keeping authority implausible. The following table provides broad categories of population size that shall be applied to the habitations recorded herein, with true count to be determined at some point, once a generally accepted method can be adopted.

Category	Minimum	Maximum
Negligible	1	50
Small	51	200
Hamlet	201	500
Village	501	2000
Town	2001	5000
Large Town	5001	10,000
City	10,000+	–

Habitations may be connected by roads, rails, horse-paths, walking trails, or any combination thereof. The predominant methods of transport rely upon animal power, with a roughly equal division between terrestrial draft animals (horses, oxen) and Gruv draft animals (hunchbeaks, buffs, harpies, garnickeys). Only a few privately owned steam carriages have been put into service at this time, with most of them being used at industrial settlements for cargo and personnel transport rather than on the open road. Funicular railways, which use water power and cables on an inclined track, have been built in the mountains by a few of the more successful mining settlements. British locomotives dominate the rail system, which connects the largest and most important habitations. Most are operated by the military, in order to give precedence to strategic cargo and troop movements. Engines owned by other political powers and private industrial concerns must give way to military trains, being shunted onto sidings or re-routed as necessary. Differences in rail gauge between British and European standards preclude bringing European engines into the Gruv. Thus, all engines in the Gruv, regardless of ownership, are either of British make or are built to British specifications.

Maintenance of order has become an issue. During the initial exploration, the military was sufficient unto itself. Once a civilian population was introduced, however, friction arose. Civilians accused of breaching the Queen's peace complained, justifiably, when brought up before a military tribunal. That sort of thing just simply hasn't been proper since Magna Carta. Creating a system of civilian courts and a police force to support it poses its own challenges, among which are building the necessary facilities, bringing in properly trained officials, ensuring that there are enough barristers in the Gruv that the accused may have representation, and obtaining a Royal charter for the enterprise as a whole. In the meantime, a number of stopgap systems have been implemented. In some agricultural settlements, the Church holds authority. In others, where faith is not as strong,

militias have been organized. Industrial settlements tend to employ private security, creating their own Pinkertons to keep the workers in line. Sooner rather than later, a territorial governor must be appointed, British law extended to the Gruv, and the entire creaking system of regulation, litigation, and adjudication installed, in all of its glory.

Fort Alice and Its Environs

This section describes the primary British-held fortification where the Rabbit Hole is located, and the region surrounding it, comprising the savannah between the northern and southern mountain ridges.

Fort Alice

Type: Military/Support
Form of Law: Military code of justice, military tribunal
Population: Large Town
Astral Rating: Tainted

The name conjures up pictures of a tiny cluster of wood and plaster buildings huddled inside a wall of upended logs, out in the middle of nowhere. Far from this image of a few desperate heroes holding out against an implacable wilderness, Fort Alice outgrew its original palisade wall a year ago, has sprawled farther and faster than San Francisco during the Gold Rush, and serves as the focus of all New World human activity. At the beginning of 1879, covering an area roughly equivalent to the East End of London, Fort Alice is by far the largest of any human habitation in the Gruv.

At the centre of Fort Alice lies the railroad terminal and the Rabbit Hole. Four tracks emerge from the Iron Tunnel that allows safe passage through the portal. Bunkers with steel blast shields flank the tracks, occupied at all times by squads of crack riflemen and a double rank of cannon. The arc of fire for each sweeps around both sides, with overlap, so that nothing can approach the tracks nor leave the rails without passing through multiple kill zones. While many consider these ramparts a final bastion, a few strategists have noted that they constitute a first line of defense for anything that might emerge from the Rabbit Hole unexpectedly. At least once a month, a fusillade announces the arrival, and subsequent departure, of a gremlin. Nearby stands the Tunnel Patrol's barracks, armory, mess hall and pub. Anyone asking why the Tunnel Patrol has their own pub is reminded that firstly, they deserve it for what they do, and secondly, they can't go drinking in a public place in case they forget themselves and speak of things they shouldn't.

Beyond the Portal area, the rail tracks enter a switchyard, no different from any such found in the British Isles save for its being operated by the military and closely watched thereby. Turntables and switches allow for the rapid distribution and assembly of trains. Coaling and water facilities line both sides of the switchyard, so that locomotives coming from and going to the Rabbit Hole can be tended simultaneously. To the west of the switchyard, the railroad maintenance yard spreads across several acres, with large-scale foundries and work areas, spare parts and tool storage, and a scattering of cars and the odd locomotive in for repair. To the east of the switchyard, cranes and platforms interspersed with warehouses make up the cargo facilities. Passenger platforms are found

at the south end of the cargo yard. Two stations have been built, one for the military with rows of wooden benches, and one for civilians which is quite a bit nicer, and has its own tearoom. The far end of the cargo yard adjoins the main road that runs through the old front gate and on out into the Gruv, which sees heavy traffic for much of the day and sometimes into the night, as goods are brought and taken away. The rails likewise extend beyond the switchyard and out of the fortress, although the trains have their own gate west of the main one. Eventually, this facility will have to be expanded, but that will require relocation of nearby facilities to make room, a not inconsiderable effort in and of itself.

Adventure Hook: Gremlins Gremlins Everywhere

Sent to the cargo yard to retrieve special equipment for their current task, the heroes discover that gremlins have made a nest in the warehouse. This batch has been a bit more clever than the usual. Instead of wrecking things straightaway and drawing attention to themselves, these gremlins have kept their pilferage down, and managed to either reproduce or accumulate. There's several dozen of the little beasts loose in the building, and the special equipment isn't all that's in danger.

To the south of the cargo yard, the transient housing marches in neat rows; first the barracks for arriving and departing soldiers, then rowhouses that look suspiciously Irish for officers and civilians. Those of higher social or military rank must walk a bit further to reach the passenger stations, but are thus further away from the noise and smoke of the trains. Dining facilities for both sorts of travelers may be found at the end of each block of housing. The old palisade wall marks off the southern edge of this area. A few sections have been removed to allow the streets to continue on into the newer region beyond. Residents refer to the two areas as Move Through and Staying, as the inner part remains operated by the military and designated for transients, while the outer part, past the old wall, is under civilian authority and occupied by permanent residents and small tradesman's shops.

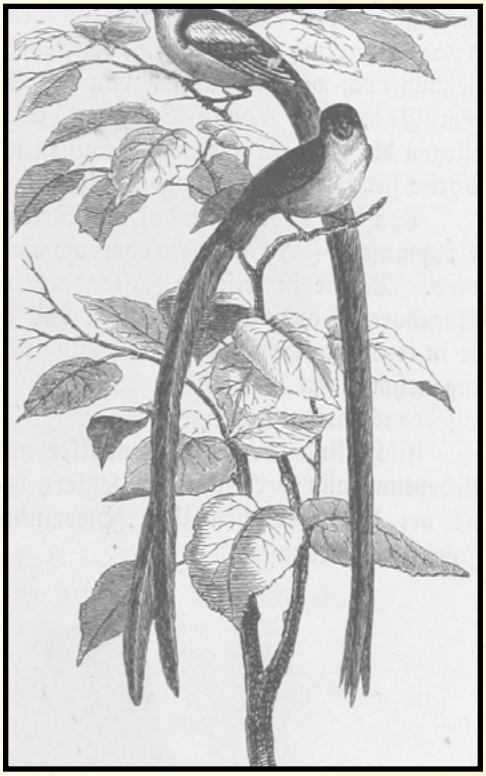
West of the switchyard sprawls the headquarters of Her Majesty's Grosvenor Colonial Corps. A central three-story building of stone reinforced with steel armor plating, known to the troops as the Flagship, holds the central offices, including those of Major-General Nicholas Lethbridge-Stewart, commander of the Corps, his senior staff, and Brigadier Sir Ainsley Roke, the fort commander. The compound, with its own defensive wall, also contains senior officers' housing, the command officers' club, and the regimental halls of the 21st Foot Royal Scots Fusiliers, 19th Foot Prince of Wales' Own, and 17th Lancers Duke of Cambridge's Own. These were the first regiments to be posted to the Gruv, and thus hold pride of place. Regimental halls for successive units deployed to the Gruv have been built next to the barracks where those units are stationed.

The far west of the fort, the largest of the areas enclosed by the old palisade wall, holds barracks for the resident troops, their training yards, mess halls, rifle ranges, supply storage, the main armory, the stockade, and so forth. Housing for officers, military dependents, and civilian personnel form a buffer zone between the main road and the soldiers' area. Ammunition bunkers are located at both the north and south end of the soldiers' area, well away from any neighboring buildings and surrounded by high walls of dry-set local stone. Being assigned to guard these expresses the deepest of displeasure on the part of one's superiors.

At the eastern end of the fort, past the rails and the maintenance yard and the manufacturing facilities where cartridges are rolled and other small necessities created, the Perth River passes through the fortress. At the upstream end, once past the extensive grillwork and guard posts

Adventure Hook: To Boom or Not to Boom

A nest of sparkers has been discovered up against the back wall of an ammunition bunker. Removing the flame-tossing giant beetles without setting off the ammunition will be dangerous work. Emptying out the ammunition bunker is simply not possible. The sparkers were found while a new shipment was being stored, and there's no room in any of the other bunkers or the supply depot to relocate the explosives. Also, the effort of emptying out the bunker would take two or three days, and require a lot of commotion, which could set off the sparkers.



that watch for any attempt to enter the fortress along the riverbed, massive Cornish-made beam engines chuff day and night, rocker arms the size of a ship's mast balanced atop four-story high brick and stone towers pumping water from the river through the purification systems and into the fort's holding tanks. Smaller beam engines the far side of the holding tanks maintain the water pressure for the fortress. Downstream, another row of beam engine towers draw waste water from the settling tanks and send it on down the river. Being assigned to clean the grillwork at the downstream end of the river's passage indicates that one has transgressed so badly that a tour of guard duty at the ammunition bunkers is simply not sufficient.

Outside the old palisade wall, the town of Fort Alice spreads in all directions, clustered most thickly along the rails and roads that extend out into the Gruv. As with most frontier settlements, wood frame buildings dominate, single-story homes or two-story shops with living quarters above the storefront. Stonework takes more time, not only in construction but in gathering and transport of materials, but has the advantage of fire resistance. Thus, more prosperous settlers tend to have a stone building under construction near their current wooden-frame one, with plans to move once the work is complete. Like the American West, the streets are unpaved, with wooden sidewalks to keep people's shoes out of the mud when it rains. Some of the more well to do areas spray their streets, or at least the areas in front of their shops and houses, with oil to keep down the dust.

Effort has been made to maintain some semblance of control, with streets laid out in an orderly fashion, sewage systems constructed, and the like, but the rapid growth has in some areas outstripped the planning committee. Most readily noticeable are the three Zulu villages that abut the British-built town, Gingindlovu on its south, Pongola on its east, and Mfunzini on its west. These comprise Prince Dabulamanzi KaMpande's *ikhanda*, the civilian dependents and support for the Zulu contingent sent by King Nbomani. The Prince commands the Impi, the native Zulu

forces, coordinating with the British command structure. The First Imperial Zulu regiment, under direct British command, is based in the western Zulu village, causing some confusion as to which Zulu warriors are Impi and which are British regulars. As a rule of thumb, if the warrior is in a red coat or has a Martini-Henry rifle, they're a regular, and if armed with assegai and shield, they're Impi. The large herds of African Ankole cattle brought by the *ikhanda* have proven hardier in the Gruv than British shorthorns, Lincoln Reds, and Herefords. Farmers from the British Isles have thus become a common sight in the Zulu villages, buying calves for stock, arranging breedings, and learning about the specifics of care for the African animals.

Well out from everything else lies the airship yard. Tall wooden scaffolds serve as piers for the Giffards, the Confederate-design airships most prevalently in use. A three-story wooden tower provides observation for the field controllers. At its base the single-story pilots' shack contains the chart room, the registry office, and the airfield bar, where those waiting to board can pause in cramped and rustic surroundings for a pint, assuming that they are not on duty. The three-mile distance from Fort Alice proper provides a safety margin. Giffards use hydrogen for lift. One spark touching a thin spot in the gasbag and a very large fireball results.

At the south end of the airfield, a five-story structure, more scaffold than building, houses the Kipp generator. Three massive cylinders, stainless steel lined with poured glass, each the size of the boiler in a beam engine, stack atop each other, festooned with pipes and valves and rubber tubing. The top cylinder has a capacity of three thousand gallons, but is never loaded with more than half that of hydrochloric acid. The central cylinder contains zinc chips, with a capacity of four tons. The bottom cylinder catches the effluent. Releasing acid from the top cylinder into the central one produces hydrogen gas, which is then piped off through rubber hoses to the airships. Closing the stop-cock on the outflow hose causes a pressure build-up in the central cylinder, which then forces the remaining acid back up into the top cylinder, eventually halting the reaction. A skilled Kipp operator can bring the generator to a halt without having to vent excess hydrogen by carefully timing the closure of the acid release valve and the stop-cock. An unskilled operator could quite easily overpressurize the generator and set off a devastating explosion. Safety regulations forbid transfer of hydrogen on days when the Kipp generator undergoes maintenance, the effluent drained away, the zinc chips and acid replenished, and the fittings tested with soapy water for gas leaks. The acid comes from mining settlements around the Gruv, left over as a waste product in the manufacture of sodium carbonate, or soda ash. Bringing it to the airfield poses its own set of risks.

At the northern end of the airfield, a series of wooden sheds house the repair facilities, the rope twisting apparatus, and the coal storage. Drainage ditches surround the coal bunker, usually half full of slurry draining off from the bins inside and the fuel press outside. Ordinary lump coal has to be wetted down to keep the dust from accumulating, which would pose yet another risk of explosion. The microsteam engines of the Giffard design use powdered coal, which is stored as a thick, wet sludge, and put through a press when fuel canisters are to be filled. While the resulting mess is unsightly, it's better than risking a coal-dust explosion in the vicinity of large volumes of hydrogen.

Fort Commander: Sir Ainsley Roke, KCB, Brigadier

From his humble beginnings at Eton, through his career in the offices and parlors of London, to his service in three wars as a master of logistics, Brigadier Roke has never met a regulation or procedure that he did not like. His deportment, like his service record, is beyond reproach. Every last inch the model of a modern brigadier, the commander of Fort Alice has the train schedules well in hand. While his grasp of matters in the lower echelons might be a touch on the sketchy

side, and his knowledge of civilian life restricted to those of the upper class who could be useful to the career of an officer, no one can doubt that Brigadier Roke will know the number of cartridges stored in every bunker, the operational readiness rating of every unit, and the weight to the ounce of the salt pork in every storehouse. As long as the battle report includes a precise accounting of ammunition expenditure, and a clear explanation of how the goals of the conflict were met, Brigadier Roke has little interest in the strategic details. The officers under his command have thus learned that, as long as the paperwork is in order, they have free rein to deal with situations as they see fit.

Infantry Commander: Garyth Hewit, Colonel

The story that Colonel Hewit received his commission because his surname was not Jones, and thus he could be readily told apart from the rest of his Welsh regiment, is most certainly apocryphal. Having joined Her Majesty's army to avoid both the coal mines and the Church, the other two options available for a third son in Abergavenny, Hewit received two brevets on the battlefield, first to sergeant, and then to warrant officer. Putting a brief stint of peacetime to good use, Hewit took a degree in military history at Oxford, which led to a commission and an appointment as a history instructor at Sandhurst. Sadly, hostilities once again broke out, and Lieutenant Hewit was called to the front. Showing a firm grasp of strategy and tactics, he led successively larger units to victory, winning multiple decorations and further promotion. His posting to Fort Alice is seen as a potential stepping stone to the high command. Certainly, his handling of the defenses of the fort and its protectorate, and his establishment of safe traveling routes through the Gruv, have won him acclaim. If he could achieve the same level of grace in society as he has under fire on the battlefield, he might be in line when Brigadier Roke retires. Until he can rid himself of his lower-class Welsh accent, however, and develop more of a taste for wine and cribbage and less for beer and dice, his advancement stands at a halt.

Artillery Commander: Wilfred Ellery Pendergast, Colonel

Colonel Pendergast carries a considerable amount of weight: in body, authority, and force of personality. Being responsible not only for the heavy guns of Fort Alice, but their maintenance, readiness, ammunition supply, emplacements, gunners, scouts, combat engineers, and the draft horses and steam engines to move them, Fort Alice's master of artillery keeps a steady stream of subordinate officers moving through his office, carrying his orders out to the field and bringing back status reports. Only on Saturday and Sunday does the Colonel stir himself from headquarters. Sundays he may be found at the Anglican church in the morning, the officers' shooting range in the afternoon, and the officers' club in the evening. Saturdays, he picks a unit under his command at random and surprises them with an inspection. A few hours later, beet red with the exertion and hoarse from shouting, the Colonel leaves his thoroughly traumatized troops behind and goes off to the railway station, where he spends the afternoon in the tearoom recounting old war stories with Stationmaster Milborrow.

Quartermaster: Cyneburh Tillison, Major

The highest-ranking female British officer in the Gruv, Major Tillison is also the highest ranking Catholic British officer in the Gruv, creating a situation that sometimes becomes far too interesting. Even with the repeal of the anti-Catholic laws decades ago and the more relaxed attitude of the Anglican church in modern times, Major Tillison's faith occasionally causes social awkwardness, such as when Christmas rolls around and she goes to the small Mass held at the

Catholic chapel instead of the large Anglican service at the base's church. As quartermaster, Major Tillison reports to the Commissariat and thence to the Treasury, not to the War Office. This puts her out of the direct chain of command within the Fort, a further bit of awkwardness. She holds primary responsibility for all supplies and transport, not only for Fort Alice, but for all British military presence in the Gruv. The Commissariat looks to Major Tillison as an example of what a woman can achieve in a position traditionally held by a man, putting substantial pressure on her to maintain her performance. Brigadier Roke, an old-line officer who staunchly defended against the idea of women in the ranks, has admitted a grudging respect for Major Tillison, admiring her attention to detail and her ability to produce a clean balance sheet. A tall, strikingly handsome woman in her late forties, Major Tillison's bright red hair has gone half grey in the past few years, which she attributes to the behavior of her subordinates. Faced with a problem, her customary response is to sigh, comment that she's been given another grey hair, then buckle down and get the issue resolved. While she has family back on Earth, like the rest of the Fort Alice command, she has no spouse and thus no dependents on site. If asked about her husband, she replies that, like the men she serves with, she is married to the Army.

Rail Superintendent: Thomas MacIan, Colonel (Retired)

A tall, once muscular Scotsman now going to seed, Colonel MacIan has both a temper and a mustache that could be described as "bristling". He walks with the aid of a cane, as the gout that forced him out of the saddle and into retirement from the cavalry interferes with his mobility and shortens his fuse. His hearing has been damaged from years of working around heavy equipment and blasting sites, but he refuses to acknowledge it, blaming his inability to hear what people are saying on their not enunciating clearly. Some of his subordinates refer to him as the second coming of Brunel. Within his limited hearing, they say, truthfully enough, that Colonel MacIan knows his trains and their rails every bit as well as the great engineer of the previous generation. Out of earshot, which only requires the Colonel to have his back turned, they say that neither man has any tolerance for their demands not being met before they are stated. Heaven help the man who misses a deadline, as he's in for a thorough rollicking in the Colonel's office.

Adventure Hook: Putting on Weight

Someone, party or parties unknown, has been loading a bit of extra cargo on the Northern line, goods that don't appear on the manifest. Colonel MacIan is beginning to suspect that there might be a smuggling ring operating, as the coal usage exceeds the cargo lading. An investigation will need to be made. Meanwhile, the smugglers are working on obtaining enough coal from undocumented sources to make up the difference, so that an on-site audit will turn up nothing, and the discrepancy might be put down to poor bookkeeping.

Chancellor of Research: Milbourne Ignacius Larbalestier, DSc, FRS, CB

Dr. Larbalestier formerly held the posts of Distinguished Professor of Mathematics and Director of Applied Research at Cambridge, the latter a government appointment in a department that provided support to both civilian and military engineering projects of the Crown. As a mathematician, he prefers a world of abstract reasoning, and finds human interaction needlessly messy and complicated. As an administrator, he expects that the political infighting will be kept to a minimum, and certainly not allowed to interfere with the work. As a Cambridge man, he detests

anyone from Oxford, the reasons being complex and reaching back to the separation between the two in the year 1209. Not being the sort to motivate by praise, Dr. Larbalestier formally presents a large wooden spoon to the department producing the least results each month, said spoon being required to be carried as regalia by the head of the department until the next month, when, hopefully, someone else receives the dubious honor. He pronounces the letter "R" at the end of his name quite clearly, and finds it annoying when someone tries to give his name a French pronunciation.

Stationmaster: Horace Milborrow (Captain, retired)

A former artillery officer, Stationmaster Milborrow gained considerable expertise with steam engines in the field. He served with distinction until an incoming round met a boiler with devastating results. Milborrow and two men of the gun crew survived out of eighteen. One of the gunners never recovered his hearing, while the other died three days later of steam burns. Milborrow lost his right leg above the knee, forcing him into retirement. With a clockwork prosthetic and a cane, he gets around well enough, and served for several years as master of Cannon Street Station, a major London terminal with its own hotel. When the Fort Alice railway terminus was under construction, Milborrow's name was put forward as a candidate for stationmaster by Colonel Pendergast, an old friend of Milborrow from their days in the field artillery. Stationmaster Milborrow holds authority over both the civilian and military depots, and the transient housing. Colonel MacIan relies extensively on Milborrow for management of the switchyard, and defers to him in matters of train scheduling. Like any other stationmaster, Milborrow lives by the clock, keeping his pocket watch, which shows both Gruv and Earth time, polished and precisely synchronised. The rail workers refer to him as the Ticking Ghost, as he seems able to appear anywhere within his domain with little warning, only the sound of his prosthetic leg giving him away.

Airfield Master Engineer: Radhburghis Nykvist

Sometimes mistaken for a Valkyrie, Master Engineer Nykvist served on three Arctic expeditions as an aviation engineer, and holds her degree in mechanical engineering from the Royal Frederick University in Oslo. A tall, broad-shouldered woman with close-cropped brown hair and dark blue eyes, she speaks with less of a Scandinavian accent than one might expect, having spent considerable time in the Swedish-Norwegian Union working with British explorers and engineers before relocating first to Glasgow and then to the Gruv. She wears a battered pilot's leather jacket over her grease-stained coveralls, decorated with expedition patches and a pair of gold wings over the left breast pocket. Besides knowing the Giffard well enough to build one from loose spare parts blindfolded and half asleep, she holds a master's certificate from both Her Majesty's air warden and the Swedish-Norwegian air authority, and has piloted airships in Arctic conditions. Master Nykvist has no husband, but does maintain a few lovers in a sort of rotating succession for her convenience. She has a hand tinted photograph of her daughter, Tyrvi Radhburghisdottir, who remained on Earth to study at the Sorbonne, on the wall over her desk in the repair shed.

Ancient Ruins / Camp Burlington

Type: Military/Support
Form of Law: Military code of justice, military tribunal
Population: Village
Astral Rating: Tainted

East of Fort Alice by approximately a hundred miles, and north about fifty, on the western slopes of Mount Somerville, the early scouting parties made a most remarkable discovery. Massive stone buildings, obviously hundreds and possibly thousands of years old, rose from the foothills, the last being nearly to the peak. These cubical structures, still in reasonable condition considering the weather at the site and their obviously having been abandoned centuries before, contained huge chambers, far out of normal human scale, and precious little else. Not so much as a potsherd turned up in the first several chambers explored. The colossal rooms stood empty, devoid even of ornamentation or engraving. Successive expeditions, with scholarly teams highly skilled in the exploration of ancient ruins and the study and preservation of antiquities, have found little more.

Only a small portion of the complex has thus far been explored. The great windowless halls extend into the mountain as well as up its flank, chamber after chamber of echoing emptiness. The base camp at the foot of the mountain has expanded into a research station, named Camp Burlington after the home of the Royal Society, Burlington House, where laboratories have been set up in case anything is ever found in the ruins that can be brought out for study. Given the mapping that has been done thus far, substantial additional manpower, supplies, and funding must be obtained, or exploring the rest of the city will require years and perhaps decades.

Archaeologists continue to hope that preserved areas might be found, or acid used to raise engravings from the eroded walls, but thus far the only clue to the beings that created the complex is a single, enigmatic artifact. Shaped like a child's spinning top, conical, with a small handle at the top and tapering to a point, the Hat lay discarded in a corner, half buried in dust. A soldier, poking at the area with his boot, sent it rolling out into the middle of the room, causing an immediate withdrawal by the rest of his unit, until they were assured that the device was not

Adventure Hook: A Frenchman of Peculiar Origin

An elderly man staggered out of the ruins, emaciated, dehydrated, and raving mad. Besides the filthy rags he wore, he had only a few scraps of paper folded up and stuffed into the sole of his left boot. A curious soldier, assigned to dispose of the stinking mess, unfolded a bit of paper with his bayonet to find part of a map. The paper scraps have since been cleaned, revealing drawings of symbols like those on the Hat, but in different arrangements. The map does not match up with any currently explored area in the ruins. Questioning the man seems pointless, as he does not respond to any outward stimuli. He occasionally babbles nonsense in Flemish or French, recites long strings of numbers in Russian, or gibbers in what may be a language no person at the research station speaks, or may just be random noise. On top of all of this, a patch on the man's shirt identified him as a member of the Seventh French Expedition. No expeditions from France have thus far been allowed into the Ruins. Who is he really, where did he come from, and where did he find the symbols?

some sort of bomb. While the Hat has thus far not exploded, it has caused considerable mayhem and confusion.

Made of an unknown metal and engraved with strange writing, thus far undeciphered, the Hat shows traces of having once been painted, but that has long since flaked away. Whatever the Hat's composition, it does not rust or tarnish, and has proven impervious to any attempts to take a sample or otherwise assay its composition. No tools available to the base camp or at Fort Alice have been able to affect the Hat in any way. Attempts to send it back to Earth for study have met with a succession of disasters. The soldier assigned to carry the Hat through the Portal on the footpath exploded the instant he set foot across the threshold. Sealing the Hat into a strongbox and putting it aboard a railway car resulted in the destruction of both the strongbox and the car, and the derailment of several cars on either side, blocking a rail line for three days. An attempt to shield the Hat from the Portal's energies with living tissue, by sewing it into the stomach of a cow, distributed the poor beast across a wide area. Dr. Finkleshteyn's Etheric Vibration Compensator, which theoretically should have damped out the effects of taking the Hat into the Portal, likewise exploded on entry, with a harmonic that shattered every bit of glass in the area and temporarily deafened all attending the experiment. None of these events left so much as a mark on the Hat itself. Additional equipment has been requested to examine and possibly transport the Hat, but given the destructive nature of such experimentation, the Home Office has been reluctant to expend further resources.

Camp Administrator: Professor Isaiah Vernon Pauncefoot, FRS, DSc. Oxon.

The committee selected Professor I.V. Pauncefoot, Farrimond Professor of Medieval Folklore at Oxford University, to oversee the research station partially based upon his experience in academic administration as Vice Chancellor of Oxford's History Department, and partially because of his extensive research into the historical roots of folk tales and legends. In over thirty books, treatises, and scholarly papers, Professor Pauncefoot has traced dozens of British and Continental myths through original sources, establishing the provenance of the tales and the approximate time period when they were first recorded. In several cases, he located the actual historical truth behind the story, showing how the folk process and the tendency of bardic exaggeration could turn a large man with a club foot and a bad temper into an angry giant who devoured children.

Professor Pauncefoot believes that the Builders, millenia ago, abandoned the hostile Gruv for England's green and pleasant land, and became the source of legends of the elves and the Fair Folk who came from another world beneath the hills. He holds that Stonehenge marked their landing point, the standing stones being both orientation markers and a safety zone around the portal, itself long since closed. He does not react well to anyone disagreeing with his theory, lecturing extensively upon its foundations, and resorting to citing his credentials if his argument looks to be failing. Scholars expressing opinions at variance with the Professor are told quite clearly that when they are

on the steering committee of the Royal Society, and hold an endowed chair at Oxford, then they can debate him in his own field, but otherwise lack the required credibility.

Quartermaster: Color Sergeant Indrabhattarika Sankaranarayanan

Normally, the Commissariat would assign a low-ranking officer to such a position. Sergeant Sankaranarayanan received the post as a reward for meritorious service to the Empire in her homeland, and because of her facility with languages. Being from the Indian state of Gujarat, a crossroads of trade for hundreds of years, she grew up speaking not only English and Gujarati, but Hindi, Bengali, Telugu, Urdu, Pashtun, Farsi, and Arabic as well. Being from a scholarly caste, Sergeant Sankaranarayanan can also read and write these languages. In addition to her duties as master of supplies and facilities for the research station, she provides assistance to the linguists and cryptographers attempting to decipher the Hat's inscriptions. The expectation from all of this is that she will receive a promotion to warrant officer in the very near future, with a commission as a proper officer to follow.

A short, muscular, somewhat irritable woman, she's annoyed by people who turn up without proper written orders expecting food and housing and equipment. She doesn't care if you can pay for what you're requesting. She's not a bloody shopkeeper and will tell you so quite directly. Being able to pronounce her name correctly helps to win her over. Don't try to give her a nickname. She won't appreciate it. The last officer who insisted on calling her "Sergeant Sanka" kept ending up with the bad tins of beef.

Camp Security Administrator: Captain Kieran Redway, 43rd Monmouthshire Light Infantry (detached)

A slender, nervous man, perhaps a bit young for his rank, Captain Redway received his promotion from lieutenant on the field of battle, after showing considerable initiative and not only taking command when his superior officer was killed, but demonstrating tactical cleverness in withdrawing his troops from the situation with only a handful of further casualties. Assigned to the rear echelon afterward due to a shoulder wound, Captain Redway has since been released back to active duty and given command of the research station's defenses. His orders make it quite clear that, in matters of defense, he outranks Professor Pauncefoot, which does not sit well with the professor. Captain Redway has already had to inform the professor three times that technicalities can be argued after the situation is well in hand, and that, if necessary, he will lock the professor in a bunker for his own safety.

Captain Redway could best be described as waiting for the shoe to drop. Nothing large and carnivorous has been found in the ruins as of yet. That does not mean it's not there, especially in the light of the rest of the Gruv, with its mordslangers and sticksand and other perils. He fully expects that a research team not being properly cautious will stumble across something with far too many teeth, and the survivors will come haring back to camp with the beastie hot on their heels. He runs readiness drills at random intervals in preparation, catching his troops at meals or in bed or at other inopportune moments. While Captain Redway may not be popular with his command, at least he can say that he has done his duty.

Adventure Hook: The Swede and the Belgian

Two famous explorers have arrived at the research camp. Both have brought men and equipment to explore the Ruins. Sigurd Amundsen of Sweden has the backing of King Oscar II, the monarch being himself an honorary member of the Royal Swedish Academy of Sciences. Hubrecht Meersman of Belgium has the backing of King Albert, a young monarch new to the throne and anxious to prove the strength of his nation. The two men detest each other, and have battled in the professional journals for years. Personal reputation, academic glory, and national honor are all at stake. Both expeditions have experienced more than their share of troubles. Supplies have gone missing or been found spoilt, equipment has been damaged, and the Swedes suffered a plague of gastrointestinal illness that kept them from stepping off long enough for the Belgians to arrive. Now a dead body has been found in a storage room containing the rival expedition's gear. It's obviously foul play. Captain Redway has his hands full just keeping the Swedes and the Belgians from each other's throats. He would appreciate whatever assistance is offered in ferreting out the truth of the matter, bringing the culprit to justice, and getting both expeditions out of the camp before further mayhem occurs.

New Islington

Type: Workhouse
Form of Law: British common law, civilian administrative tribunal
Population: Town
Astral Rating: Open

One of two Labor Settlements formed from the London/Middlesex workhouses, New Islington, with an initial population of approximately thirty-five hundred workhouse inmates and three hundred guards, attendants, medical staff, and administrators, is shockingly enough the smaller one. London's teeming poor simply were not being served compassionately by the appalling conditions of the overcrowded and underfunded workhouses. The promise of a blanket and bed for each person and three hot meals each day convinced most of the inmates to make the journey to the Grosvenor Land, even in the face of peril to life and limb from the indigenous creatures. The work in the New World is no less hard, but certainly less tedious and done under an open sky in clean air. Many of the structures in New Islington, as in other workhouse settlements, have been built by the inmates as part of their work requirements. They grow much of their own food, manufacture some of their own necessities, and gain skills that simply were not available in the urban setting of London.

In relocating the workhouse population of London to the Gruv, an arbitrary division was made at Farringdon Road. All workhouses east of Farringdon went to New Islington, while all those west of Farringdon went to the sister community, Saints of Westminster. Thirteen workhouses were very nearly emptied - Bethnal Green, City of London, Clerkenwell, East London, Hackney, Islington, Mile End Old Town, Poplar, Shoreditch, St. George in the East, St. Sepulchre, Stepney, and Whitechapel. The inmates who remained behind, unwilling or unable to make the journey through the Rabbit Hole, have been consolidated into the Bethnal Green and Islington workhouses, the rest being shuttered for cleaning and renovation against possibly being required in the future.

The layout of New Islington follows the standard for any frontier settlement: a mixed wooden and stone palisade wall, wood frame buildings with clay-tile or shake roofs within, cultivated fields without. New Islington's livestock are kept in barns and paddocks outside the palisade wall, but can be brought within for emergencies. No military presence is maintained, the force of arms of the settlers and the proximity to Fort Alice, only sixty miles away and on a rail line, being deemed sufficient. Many of the settlers still live in barracks, those having been easier and quicker to put up than individual houses. Settlers fortunate and enterprising enough to start businesses generally reside in the back room of their shop, or in cramped quarters above. No building thus far rises above two stories high, although scaffolding has been put up around the administration house to add a third story. Most construction uses timber framing and plank walls with clapboard siding, wood being plentiful and quicker to work with than stone. Barns and other livestock shelters generally follow a ridge-pole design, again being faster to put up, if considerably more rustic in appearance, than square-timber frames. Plans have been laid for replacement of wooden-frame buildings with more durable stone and brick later on, but the settlement (indeed, every settlement in the Gruv) still has much work to do just getting the basics up and running before more permanent structures can be started.

Adventure Hook: Unfriendly Spirits

The local Saurid shaman set up a spirit post by the side of the road, just inside the settlement gate. The administration, not approving of this unauthorized and non-Christian display, promptly took it down. Now bad things are happening, which could be explained by a rash of accidents, but there are people who want the post put back up and an apology to the spirits made. The Anglican priest has suggested that, in the interest of being polite to the native population and the Church's policy of ecumenism, perhaps this might not be a bad idea. The chief administrator made it very clear, publicly, that it wasn't likely to happen. The shaman, meanwhile, is angry that his gift was rejected, and refuses to come back to the settlement to help set things to rights.

Most of the problems facing New Islington have to do with the policies of the administration. Only recently have pubs been allowed in the settlement, and the three establishments that have opened have markedly restricted operating hours and scanty beer allotments. Attendance at church services remains compulsory, although some of the inhabitants have found it possible to dodge this requirement by volunteering for extra work with the livestock and other chores that do not respect the Sabbath. Exactly what to call the residents has caused some friction. Inmates smacks too much of prison for anyone's comfort. Workers would apply to factory employees, but does not seem quite appropriate for people residing on the site. Colonists might work if the inhabitants had come to the Gruv freely with the intent of founding a new land, but given that the workhouse system demanded an indenture in return for transport and accommodation, the voluntary nature of colonization simply is not present. What label to apply to people who are in effect indentured servants of the government, working off the cost of bringing them to a new land, remains to be determined. In the meantime, the overbearingly paternal attitude of the administration conflicts directly with the effort of the Church and the workhouse societies to assist these people in bettering their station. Small

wonder that the Levellers have found a foothold in New Islington. Introducing the idea of labor unions may very well be the spark that lights the fuse.

Adventure Hook: How Sweet It Isn't

An illicit operation among the workhouse population is distilling splithee sap. Bad enough that they're making an addictive substance, but it's being used for blackmail. One of the labor supervisors has succumbed to withdrawal, rather than obey the demands of the blackmailers, and has been sent back to Earth, where it is expected he will spend the rest of his life in Bedlam. There's precious little to go on, just a few notes written on the backs of old work schedules from the slaughter yards. Those are kept in an unlocked filing cabinet in an office that's vacant half the day, so anyone could have obtained them. The local authorities have been unable to pick up any further clues and need assistance. Quickly.

Chief Administrator: The Right Honourable Hugo Withnall, JP

Mr. Withnall, a tall, thin, severe man of middle years, was formerly administrator of the Bethnal Green workhouse, a model of modern accommodation for the poor. He kept his charges clean (well, reasonably), housed (perhaps a bit crowded) and fed (mostly), and made sure that the work allotments were done and that everyone attended chapel on Wednesday nights and Sunday mornings. He sees himself as a shepherd to a flock that, like sheep, are dimwitted and desperately in need of guidance and protection. After all, if they were competent to lead lives of their own, they wouldn't have ended up destitute and in the workhouse, now, would they? Fastidious to a rather high degree, Mr. Withnall never ventures into the work areas, or for that matter out of the administrative offices, without changing into an older pair of shoes and tucking a freshly perfumed handkerchief into his jacket's breast pocket. He wears gloves for these occasions, and has them burned afterward. One never knows what dreadful illnesses might be lurking, after all. New Islington has the most modern of plumbing and sewage systems, but the miasma theory of cholera was never properly disproven.

Anglican Chaplain: Father Jared Bracewell, Rector of New Islington Parish

Short, rotund, balding, and perpetually out of breath, Father Bracewell does his best to see the brighter side of any situation. Given the number of funerals he's overseen, the mortally wounded men, women, and children he's administered the Last Sacrament to, and the general despair of the workhouses, this speaks volumes about his character. Father Bracewell is the sort of priest who would put off repairing the church roof another month in order to buy more food for the poor distribution. He firmly believes that the Lord helps those who help themselves, and while he isn't physically up to helping with the hard labor of the settlement, he can certainly shoulder a large portion of the emotional burden. While Father Bracewell believes that there is good in every person, and that no one is beyond redemption, he's neither naïve nor a fool. His profession brings him into contact with the very worst of humanity on a regular basis. Yet, somehow, at the end of the day, a cup of tea and a biscuit and a chapter of his current book, and he's ready to face the world again with a smile.

New Islington also has a Catholic chaplain, Father Kryztopher Skarba, a Polish priest assigned by the Vatican, and a rabbi, although Shmuel Cohen mostly tends to the Jews among the administration, there being very few in the general population.

Headmistress, Bethnal Workhouse Society: Penelope Madgett

Miss Madgett is not so much a woman as a force of nature in human form. A short, whipcord-thin spinster in her early fifties who brazenly admits to her age, Miss Madgett has no immediate family other than a sister with whom she maintains a distant, if cordial, relationship through correspondence. She has devoted her life to the betterment of the poor through organization, education, and spiritual uplift. Rigorous adherence to moral principles brings results, as she will unhesitatingly tell anyone who comes within arm's reach. She finds Father Bracewell far too forgiving, and would prefer the style of Father Skarba, but does not hold with Papists and will not give the Catholic chaplain the time of day. She campaigned strenuously against the opening of New Islington's pubs, and has already been warned off for nailing temperance posters to the front doors of two of them. She affects a pince-nez, although as terribly nearsighted as she is, proper reading glasses would be more appropriate, and brandishes her lenses to punctuate her arguments. She carries an old and battered umbrella, that she used shortly after her arrival in the Gruv to dispatch a large scorpion, lunging in between it and a small child and beating it to death before anyone else could react. She wears the stinger on a necklace, which has won her a good deal of respect from the workhouse settlers. Miss Madgett campaigns tirelessly for better treatment of the indentured, making herself a thorn in the side of Mr. Withnall, and a possible ally of Mr. Yonwin.

Leveller Organizer: Lowrey Yonwin

A wheelwright by trade, Lowrey came to the Gruv as a volunteer in the workhouse resettlement effort, one of many skilled tradesmen brought over not only to practice their trade but to teach it to the workhouse inmates. Once settled in New Islington, Lowrey began talking about the dignity of the worker, and the respect to be gained from a trade, and the inequality of society, and how the workers, like an army, were stronger if they joined ranks and stood together. Eventually, the name of the Levellers came into conversation. Now, Lowrey spends all of his spare time trying to organize the laborers of New Islington, but he doesn't just talk about it. Lowrey has gotten neighborhood patrols started. He took up a collection so that Mary Nowell could have a proper wedding dress when she married Stuart Pritchard. He's encouraged people to cultivate an extra bit of land, making more fresh food available, and gotten many of the women to replace the flowers in their windowboxes with kitchen and medicinal herbs. He talked Miss Madgett into teaching adult literacy classes, and while getting her to teach wasn't difficult, getting her students to stick with it and put up with her took a Herculean effort. The next step will be the creation of trade unions, but that's going to bring far more attention from the administration than anything he's done thus far. Lowrey is biding his time, waiting until the moment is right and enough people are behind the movement before showing his hand. He knows that there will be violence, and has been slowly preparing people for it, telling stories about the clashes of the London unions with the factory goons, showing them how to set up home medical kits, and seeing to it that the neighborhood patrols all know how to fight when the enemy is better equipped.

Publican, Mule and Orchids: Corydon "Cory Gee" Gammell

A former workhouse inmate who landed in the system after his old pub burnt down and he was unable to work for a year due to injuries sustained in the blaze, Cory Gee still walks with a limp and favors his left hand, which is missing the outer two fingers. While he's not up to hoisting beer barrels into the rack behind the bar, and his once muscular frame has run to fat and then thin between the lack of work and the scant rations of the workhouse, his mind remains sharp. He knows the tab of every regular without having to look up to the chalkboard, and the contents of the till down to the penny. As proprietor of the second pub opened in New Islington, Cory Gee has worked hard to make his establishment successful, hiring three of the most popular young women in the settlement as his barmaids, bringing in a master carpenter from New Strathspey to build the interior, and having all of the fittings made by metalsmiths from the New Islington population. He's also sponsoring a football team, the Donkeys, with players drawn from the neighborhood surrounding the pub. The team's fans set up a terrific braying at every goal, and hee-haw derisively when an opposing player draws a yellow or red card. Now if he could just keep Miss Madgett from his door.

Saints of Westminster

Type: Workhouse
Form of Law: British common law, civilian administrative tribunal
Population: Large Town
Astral Rating: Open

The larger of two Labor Settlements formed from the London/Middlesex workhouses, Saints of Westminster, or more commonly "The Saints", required the better part of a year just to bring in the initial population; over seven thousand workhouse inmates and a thousand administrators, guards, medical staff, instructors, supply handlers, and skilled professionals in numerous fields. The settlement drew its name from the preponderance of saints in the names of the workhouses: Bloomsbury (St Giles-in-the-Fields and St George), Chelsea (St Luke), City of Westminster, Fulham, Hammersmith, Hampstead (St John), Holborn, Kensington, Paddington, St George's Hanover Square, St Luke's Middlesex, St Martin-in-the-Fields, St Marylebone, St Pancras, Strand, Westminster (St James, St Margaret, and St John), West London, and Westminster Union.

Located fifty miles north of Fort Alice, and a trifle west, The Saints provides substantial labor for the railway construction

ongoing toward the northern ridge, both in direct labor and support. The Bolthole Tunnel project has claimed the lives of seventeen men and four children from the settlement so far, and the tunnel is only half done. Workshops and bakeries and butchers at the settlement send trainloads of supplies to the railway project every week. A ton of candles and three tons of bread and beef go to the Bolthole Tunnel project alone.

Bringing black powder from Earth is a chancy business, and so most of the powder in the Gruv is made in the Saints Powder Works. After substantial debate, the powder manufacturing facility was built inside the palisade wall, at the north end, with an empty area a hundred yards across between it and any nearby structures. Putting it outside the wall would have been safer for the settlement, but would have exposed a critical facility to enemy attack. The larger portion goes to Fort Alice for processing into rifle cartridges and cannon loads, but a good deal gets shipped off to construction efforts. While the sulfur comes in from the salt domes of the west and the extinct volcanoes of the east, and charcoal from every forested region of the peninsula, the saltpeter required comes mostly from the settlement's own livestock. The niter-beds and potash processing have been located two miles southwest, in order to keep the smell away. Laborers assigned to the niter works have become a social underclass, similar to tanners, due to the lingering odor of manure, urine, and rotting straw that clings to them.

Adventure Hook: In Bad Odor With The Law

Smuggling has been added to The Saints' list of problems. Small items of high value have found their way into the tack of riding and draft animals departing the settlement. One such, a tin capsule with a tightly rolled paper inside, contained critical intelligence, the search for which led to the discovery of the rest. The authorities believe that the items are coming into The Saints on the trains, but aren't quite sure how they're migrating from there to the stables. Someone must investigate the possibility of a connection between the yard workers and the niter workers, but it will have to be someone from outside the settlement. Neither group will speak to a known authority figure, nor to anyone they haven't accepted as their own. Whoever takes up the challenge will be in for a long-term undercover assignment.

Given all of this, The Saints has been judged critical enough to the Grosvenor Land effort to have a permanent military presence, and a switchyard in addition to the usual passenger and cargo depot and coaling facilities. The garrison has caused considerable tension at several levels. Having soldiers posted to the settlement creates a feeling among the workhouse population of being in a prison camp rather than a colony. Having a military garrison among a large civilian population center has inevitably led to vice. While there are no streetwalkers, some women and a few men have let it be known that they are not averse to soldierly company in return for ready coin. Lord Chepstam insists that his settlement will not be the location of the first brothel in the New World. His requests to the military to have the soldiers paid in scrip, and to the Royal Mint to allow The Saints to print its own competing scrip, have both been denied. British standard currency remains the coin of the realm, and with a pocketful of shillings the soldiers have no trouble finding what they seek. Illicit brewing and transitory front-room pubs add to the distraction. The few legitimate pubs that have been allowed simply aren't enough to keep up with the demand, and anyone who can brew up a keg of something passing for beer and round up enough tankards to serve it can can

make a bit of fast coin. By the time word gets to the administrative offices, and an armed response can be sent to close down the unlicensed tavern and arrest the proprietor, the beer, the customers, and all other evidence are long gone.

The switchyard has counterbalanced this somewhat, creating jobs and the opportunity to learn new skills. In order to quickly and efficiently refuel locomotives, reorganize cars, and get the trains on their way once more, dozens of flagmen, switch and dispatch operators, telegraph operators, coalers, and general yard workers are needed. The Alice and Gruv prefers women for dispatching, switches, and the telegraph, men for coaling, watering, and general yard work, and either gender as flagmen, partly because of physical strength issues, but also because, in the company's experience, men do better out in the yard where they can show off their prowess, while women do better in the control towers and offices, where the tasks are more detail-oriented. This has led to some rough humor and some stereotyping of railway men as aggressive brutes, pushing the machines around, and railway women as far too clever by half, talking to the machines.

Chief Administrator: Simon Peppercorn, Seventh Lord of Chepstam

Lord Chepstam's title ceased to have any lands associated with it in the time of his great-grandfather, due to a complicated financial situation. The family maintains themselves in a variety of government sinecures, teetering on the edge of genteel poverty. Despite the risks, Simon accepted the offer of governing the Gruv's largest workhouse settlement in the hopes of restoring his family's fortunes and securing property in the New World. Beset by a constant barrage of administrative problems, ranging from revenue collection and distribution to the encroachment of vice, Lord Chepstam often seems distracted. Many speculate that his eldest son occupies his thoughts. The boy has not been seen in public since the family arrived in The Saints. Rumor has it that he contracted a particularly virulent case of Looking Glass Fever, and has changed horribly. Certainly, the visits to the Peppercorn household by a succession of increasingly eminent physicians and scientists seem to bear out this hypothesis. Lady Chepstam's determined charity work with the children of the settlement, to the exclusion of the expected society functions, further reinforces the idea that something terrible has happened within the family.

Switchyard Supervisor: Rioghnach MacPherson

A formidable woman who routinely reminds those under her authority that she has seventeen grandchildren, and that no one is too big for a paddling, Mrs. MacPherson transferred to her current position from Saint Pancras Station, where she served as assistant to the stationmaster. She alternately terrorizes and coddles the yard men, depending upon whether or not she's taken a liking to them, fiercely guards her switch and telegraph women, and generally takes care of the switchyard the way you would a large and unruly family. Sometimes they need loving, and sometimes they need their heads knocked together. Everyone from the greenest yard boy to Sir Reginald addresses her as Mrs. MacPherson, with the greatest of respect. Only in the most remote corners, where she could not possibly overhear, is it said that Mr. MacPherson, gone these thirteen years, passed away from nervous exhaustion and is now enjoying a well-deserved rest.

Police Captain: Bigby Strasthborough Ross

A large, muscular man, Captain Ross affects a jolly, understanding demeanor that everyone knows is a paper-thin sham. The slightest upset and his jovial attitude vanishes like smoke in a high wind, unveiling a brutal temper. He rules the Saints police force with an iron fist, and sees

the populace as one great seething mass of criminals, lacking in any respect for what is right and proper. Lord Chepstam had to issue him written orders to avoid property damage after Ross's men tore down three buildings looking for evidence of unlicensed brewing, making it clear that, while The Saints cannot tolerate illicit alcohol, neither can it tolerate setbacks in construction. Captain Ross takes out his frustration by leading raids, ostensibly in search of houses of vice, that routinely end with suspects in hospital rather than gaol. Sentiment among the women of The Saints is rising against him as the evidence of his using more than his fists as weapons accumulates. One can only hope that Lord Chepstam replaces Captain Ross before he goes completely out of hand.

Adventure Hook: Conduct Unbecoming a Gentleman and an Officer

A young woman flees from a nearby alley, disheveled, a bit bloody, crying and frightened, clearly the victim of an indecent assault. Three police officers pursue her, angry that she's escaped before they were done with her. The police insist that the young woman is a prostitute and that they're just putting her to the use that she chose for herself. What do you do when officers of the law commit rape?

Niter Yard Supervisor: Benjamin Resnick

Mr. Resnick long ago accepted that he would spend his life in unpleasant business. After all, his family's name indicates their hereditary trade, that of the ritual slaughterer required for the production of kosher meat. Within The Saints' small Jewish community, he and his family find acceptance, and if the greater part of the population shuns them, well, they were already shunned just for being Jews, what's another justification for bigotry matter really? He keeps the saltpeter production up to quota, he commiserates with the workers, and he negotiated a benefit for them that no other facility has. On Fridays, the niter yards shut down at noon, so that the Jews among the labor force can go home and bathe before the Sabbath begins. To balance this, they return to work on Sunday, allowing the Christians among the niter workers to attend early morning services. Besides his work at the niter yard, Mr. Resnick also supports the construction of The Saints' first synagogue, currently about half done. Work can only proceed in the evenings and on weekends, as it's not an official project of the settlement, but rather being done by volunteer labor. Raising the money for the necessary tools and supplies has also taken a considerable amount of time. Vandalism and theft have set the work back three times already, but Captain Ross's police just don't seem interested in either investigating the incidents, or in preventing further ones.

The Alice and Gruv Railroad

Initially, the rails into the Gruv terminated at Fort Alice, and were only used for ferrying goods and people back and forth through the Rabbit Hole. This of course grew as the land came under proper control, with the rails extended to nearby fortifications and settlements. Now, two years on, the Royal Alice and Grosvenor Railroad has a charter from the crown. Rails extend from Fort Alice south to All Saints and Torgau Freistadt, west to New Wigan and Pinking Swinburne, and east to Fultingham. North of Fort Alice, the Bolthole Tunnel project works at drilling through two and a half miles of rock to connect Fort Alice with Shillington, Gorran Wood, and King Edward, in an

effort worthy of Brunel. Plans have been drawn up to go through the southern ridge and connect with the south coast. No further eastward expansion will be done until the Samsut are pushed back from the land bridges, with the exception of two supply lines being laid out to Fort Wellington.

The Alice and Gruv has its own security forces, both uniformed and plainclothes. Between the Samsut and the thorny molecrabs, an armed response to threats to the rail lines and trains needed to be readily available, and the military was already stretched thin. Given the massive profits to be made in smuggling through the Rabbit Hole, and the ever present problem of illicit traffic along any rail line, an investigative task force simply could not be done without. As with the Pinkertons in the Union, these men and women have not enjoyed any popularity with the populace, who refer to them as "raggers", a derogatory name that refers both to the initials of the Railroad and to their low pay in comparison to their criminal opponents.

A special unit, the Tunnel Patrol, maintains security on the Iron Tunnel through the Rabbit Hole. Comprised entirely of volunteers, and paid (so it is rumored) over twice what any other railroad security agent receives as salary, the Tunnel Patrol constantly advertises for new recruits, as their turnover and loss ratios are roughly equal to front line troops. Despite iron and lead lined protective suits, the finest of weaponry, and the best of equipment, "Tunnel rats" going into the passage on patrol face poor odds indeed of emerging alive and unchanged. While they suffer no greater incidence of Looking Glass Fever than anyone else, roughly three out of every hundred people exposed to the Rabbit Hole, their changes tend to be more pronounced. Very rarely do they revert to normal, and when they do, the process tends to be fatal. Far more frequent are derangements, ranging from withdrawal to paranoia to ranting hysteria, striking approximately fifteen percent of the work force, sometimes on their first trip into the Rabbit Hole, other times not until they have become seasoned veterans. These poor souls end up either in an asylum, or the government's Portal research centre, where they are studied in the hope of finding both a cure and a preventative. One out of a hundred men entering the Rabbit Hole simply vanishes. Some reappear days or weeks later, usually changed, insane, or mutilated in terrible ways, but once in a great while having no clue that anything untoward has occurred (referred to by the Tunnel Rats as Van Winkles). Guarding the switchyards at either end of the Rabbit Hole is no safer. The regular guards call in the Tunnel Rats at least once a month to deal with something that has escaped from the Rabbit Hole. Usually, it's just a gremlin or two, and they're caught before they cause too much equipment damage to be quietly covered up. A few times, however, larger creatures have emerged. Seven Tunnel Rats died in a recent incident on Earth, where a covey of shardraqxi burst out of the Rabbit Hole. Of the incidents inside the Rabbit Hole, where Tunnel Rats have died in combat defending the passage, no word is spoken in public. Only the highest levels of the railroad company and the military know the truth.

Headquartered at Fort Alice, the railroad employs thousands of men and women across the Gruv, from the navvies who dig the beds and lay the rails, to the coal miners who provide the fuel, the mechanics who build the locomotives, the engineers who drive the trains, and the ticket clerks and stationmasters at the depots. Besides locomotives, passenger cars, and freight cars, the railyard at Fort Alice is starting to build steam-powered cranes for loading and unloading the trains, which will be distributed to rail stations across the Gruv. The Alice and Gruv intends to build more and more of its own equipment, and the heavy equipment required throughout the New World, of local materials, with local labor, as a lower-cost alternative to bringing everything in through the Rabbit Hole. Sir Pembroke envisions a future when nine out of ten steam-driven machines in the Gruv bear the A&G logo.

While the trains within the Gruv run on a precise schedule, trains passing through the Rabbit Hole are less predictable. Time does not seem to move at the same speed within the passage as in the worlds at either end. More often than not, the locomotive emerges from the far end before the last car passes into the near. About three times out of a hundred, similar to the incidence of Looking Glass Fever, the train may be delayed, sometimes for only a few minutes, sometimes for hours or days, and in one case a month and a half passed before the train, long since given up for lost, emerged, its passengers having no idea that anything untoward had happened. Two trains are still missing.

Chairman of the Board: Sir Reginald Pembroke III, KCB

"Old Puffer" received his nickname from his resemblance to a locomotive: large, round of belly, and prone to making a great deal of chuffing noise when laboring up a hill. Of course, only his closest friends would ever use the name where he might hear about it, and then only in the privacy of a gentleman's club. Sir Reginald received his knighthood as a Commander of the Bath for his work in finance, which paid for (and produced a tidy profit from) the construction of most of the southern railways in England. Rather than take a comfortable retirement, Sir Reginald organized the first private financing of rail in the New World, and positioned himself to head up its first chartered railroad. Now he holds power nearly equal to a baron, and may be in line for further honors when the New Year's List is announced. Sir Reginald knows enough about trains and rails and rights of way to make the strategic decisions necessary. His greatest strength lies in managing money, and knowing who to hire to manage the technical details.

Chief Mechanical Engineer: Tobias Coulthard, BS, MS, PhD

A thin, rather weedy man rather too fond of wool and tweed for the climate of the Gruv, Dr. Coulthard holds responsibility for the design and construction of the A&G's rolling stock and railyards. With advanced degrees in engineering and metallurgy from Dresden Technical University and two decades of service with the London and North Western Railway, he brings considerable expertise and practical experience to the A&G. While he lacks the physical strength to step in and show a workman how to use his tools, as Brunel was famous for, he can spot a variation in tolerance from ten paces, and tell you which wheel is out of round by the sound of a passing locomotive. Beside doing the finer bits of design work for the engines and cars, and laying out the general plans for the yards where the rolling stock is built and maintained, Coulthard oversees quality control of raw materials and makes decisions regarding site selection. This takes him into the field more frequently than he would like, to the mines and foundries and outlying habitations, but survey maps and assay reports are no proper substitute for hands-on inspection. He carries his most prized possession, a stainless steel micrometer presented to him at his doctoral degree ceremony, in a velvet-lined box in his waistcoat pocket, and relies on it more than any instrument the A&G has ever provided.

Chief Civil Engineer: Bronwen Brunel Pelloutier, DdE, Ir

A niece of Isambard Kingdom Brunel on his father's side, Dr. Pelloutier has shown herself to be every bit as brilliant as her more famous uncle. A short, slender woman with dark hair and dark eyes, she speaks with a pronounced Provençal accent, especially around Parisiennes, whom she detests as being shockingly rude and unrepresentative of the French people. She received her Doctorat d'Etat (DdE) from the Universite' de Douai Faculty of Sciences at Lille in 1869, and her accreditation as

an Ingenieur Civil (Ir) from the French government in 1872, becoming the third woman in all of France to achieve this. After only three years with the Compagnie du Nord, Dr. Pelloutier, tired of the bureaucracy and low pay of the nationalized French railroad, accepted an offer from the Great Indian Peninsula Railway, where she spent two years solving the unique problems of bringing rail to India's northern states. When the portal opened, and the decision was made to put rails through it into the Grosvenor Land, Sir Reginald made an offer to Dr. Pelloutier that she simply could not turn down. She now holds responsibility for design and construction of all rail lines, bridges, tunnels, depots, and switchyards in the Gruv, under the auspices of the A&G. Currently, most of her attention is being taken up with the Bolthole Tunnel, although she spends as much time as possible attending to surveys for later stages in the northern rail project, and occasionally travels south to oversee the southern ridge surveying. Very rarely is she found in Fort Alice, and then only for long enough to make her reports to the board, replenish her supplies, and catch the next train back out to the project sites. She carries what looks to be an artist's portfolio, but which unfolds into a portable draftsman's table, allowing her to create plans and engineering documents wherever she happens to be. Her knowledge of mathematics and physics approaches encyclopedic levels, and her grasp of geology, materials science, and construction methods is expansive, but she cannot tell a rose from a tulip, and has no time for the traditional French pursuits of music and poetry.

Adventure Hook: The Missing Table

Dr. Pelloutier's portable drafting table has gone missing. Was it innocently mislaid, or was it taken by an unfriendly power? Whoever has it holds the latest revisions and future plans for the A&G's rail routes. Retrieving it intact would be preferred. If it's in the wrong hands, destruction is an option.

Locomotive Superintendent: Virgil Catling

Born in a workhouse in the East End of London, raised in a factory by an unmarried mother, Virgil Catling spent much of his early life chasing every opportunity to better himself that he could find. He learned sums and literacy from the parish priest, apprenticed himself without pay to a mechanic, and joined a trade union for the advancement possibilities. His knowledge of and skill with steam engines, and more specifically locomotives, far exceeds that of most other men in the company, surpassed only by that of the mechanical engineering professionals who design the machines. Sadly, without either inclusion on the Honours List or an advanced degree, or both, Mr. Catling has advanced as far beyond his origins as possible. He reports to Dr. Coulthard, and holds responsibility for the Alice and Gruv's locomotives and their engineers, firemen, and coaling tenders. Being a hands-on sort, he routinely travels the circuit, inspecting locomotives on-site, seeing to the upkeep of the coaling apparatus, and speaking with the men under his authority. Sir Reginald has been asked by members of the Board why he appointed Mr. Catling to such a high position within the company, given his low birth and lack of proper academic background. He replied that the men who operate the engines have more respect for a supervisor who has grease under his fingernails, and without that respect, the locomotives would not run at peak efficiency. Virgil knows that he owes his position to Sir Reginald, and has some anxiety about the succession at the top of the company, worried that the next man to hold the chair might not be so favorably disposed towards him.

General Manager: Matthew Hawkins Wicken

Some children are born to the purple. Matthew Wicken was born to the ledger. The second son of a middle class Catholic family in Dublin, named after the patron saint of accountants, whose medal he wears, Mr. Wicken showed great promise in the parish school, commended for his excellent handwriting, high grades, and tidy organization. Never a leader, Mr. Wicken excelled in supporting roles, as treasurer for the class charity drive, records keeper for the student garden, and assistant to the parish secretary. Following a degree in accounting from the Catholic University of Ireland, he entered service with the Great Western Railway. From there, his rise to senior management was slow, steady, and inexorable. Hired away from the Great Western by the London and North Western, Mr. Wicken was positioned perfectly for consideration when Sir Reginald organized the Alice & Gruv and needed a general manager. Mr. Wicken, now in his late fifties, still single, the sort of thin, neat, tidy man one would have expected to have gone into the priesthood, relocated to the Gruv with only a cat for a dependent. He holds responsibility for daily operations, route scheduling, personnel management, and payroll. If there's paperwork, time, or money involved, it falls within his jurisdiction.

The Bolthole Tunnel Project

In between the Fort Alice region and the mining communities on the northern ridge lies a region of foothills, streams, and ravines. While picturesque, the landscape presents a series of obstacles to the building of a railroad. Connecting the northern spur of the Alice & Gruv to King Edward, the closest of the ridge habitations, would require either bridging a series of chasms and looping the rails back and forth in long, lazy curves to deal with the change in elevation, or cutting through a large hill on a bit of an upward slope. Given Isambard Kingdom Brunel's success with the Box Tunnel between Bath and Chippingham, the company asked Dr. Pelloutier to create a tunnel

along the shortest route, the savings in rail and bridge construction being expected to outweigh the cost of the dig.

Dr. Pelloutier opted to begin from a natural cavern, located a year previously by a military contingent in pursuit of a covey of shardraqx. Several of the beasts having eluded their pursuers in the cavern system, the location received the name of Bolthole Cavern. The name carried over to the project, and the Bolthole Tunnel dig commenced in early 1879.

When completed, the Bolthole Tunnel will run for some two and a half miles, at a gradient of 1 in 75, three quarters of a mile longer and a few degrees steeper than the Box Tunnel. Work proceeds around the clock, in four shifts instead of the customary three, so as to not exhaust the laborers and increase the risk of accidents. Instead of blasting, Dr. Pelloutier has opted for an experimental model of steam drill. These massive machines resemble ironclad battleships mounted on flatcars, except that they have four pairs of mechanical legs instead of wheels, and wedge-shaped steel chisels the size of a man's leg projecting from the cylinders where the bow gun would be. Four operators are required to move the drills, one for each pair of legs, one to work the chisels, and a driver and fireman to operate the steam engine that powers the system. In operation, the steam drills resemble enraged mechanical elephants, tearing a spray of rock loose from the work face with their trunks, accompanied by an earsplitting noise of steel against stone and escaping steam. Massive fans have had to be employed to draw the steam out of the tunnel, to keep the work crews from passing out from the heat and humidity. While the steam drills were expensive, and unproven until this project, thus far they have borne out Dr. Pelloutier's faith, with a projected completion date only a year in the future, a speed nearly double that of Brunel at Box Tunnel.

Adventure Hook: Cave-In At The Bolthole

The tunnel has collapsed close to the work face, killing a dozen laborers and injuring a score more, and leaving the steam drills and their crews trapped on the far side. The first survey team sent in to check the stability of the tunnel took a telegraph with them to maintain contact with the surface. They reported seeing pale greenish lights, and then communication with the team ceased. The second party, which added men from the Alice and Gruv's private armed force to the rescue crew and safety inspectors, found the frayed end of the telegraph wire, a few splashes of blood, and no bodies. Pieces of the tunnel shield, the wood and metal system that protects the workmen and keeps the tunnel from collapsing as it's dug, lay strewn about, broken and twisted. Three survivors of the party reported a sudden attack by a highly numerous enemy armed with some sort of projectile weapons, perhaps a sling or a bow as the attack was silent. None of the three got a good look at the enemy, describing them only as large dark shapes a little bigger than a man, and accompanied by pale greenish lights. The enemy fired on the party's light sources, then closed, at which point the survivors fled for their lives. The project foreman has sent out a call for a specialist team to help resolve the issue, and quickly, before the air runs out for the steam drill crews.

North: The Gladstone Mountains

Rich in mineral wealth, the Gladstone Mountains also hold their share of natural hazards, and in the Gruv, that's a large helping. Besides patches of exploder pods and sticksand, the northern mountains provide a home to thorny molecrabs, shardraqx coveys, and other carnivorous beasts too numerous to list here. The veins of metal ore that attracted many settlers to the region have also attracted gremlins, which are found here in an abundance not normally seen so far from the Rabbit Hole. The minerals themselves can present considerable danger. One of the early settlement attempts, Kemp's Riding, a privately organized group intending to dig for riches, failed because the colonists couldn't tell an arsenic spring from a safe one. The entire group died within three days of putting up their first tent on their intended claim. Would-be settlers really should know to test the water supply before relying on it. The environment ranges from savannah at the base of the ridge, to temperate forest in its foothills and lower slopes, to boreal forest covering the upper slopes and peaks. Numerous streams trickle down both sides of the ridge, originating from springs further up. Seasonal snowmelt runoff swells these in the spring, creating significant torrents that must be accommodated when building roads or bridges. Cultivation is possible, as there is arable land and sufficient irrigation, but in practice tends to be limited to subsistence gardening, with the majority of effort going into mining.

Shillington Labor Settlement

Type: Workhouse
Form of Law: Civilian tribunal, English common law
Population: Hamlet
Astral Rating: Open

Comprised of Bedfordshire workhouse inhabitants from the Shillington, Ampthill, Clophill, Cranfield, Flitton, Hawnes, Houghton Conquest, Maulden, Silso, and Steppingley workhouses, and children from a few orphanages in the area, Shillington's initial complement consisted of some one hundred and seventy men, women, and children, with thirty-eight left behind on Earth as being unfit for transport to the Gruv due to disease or infirmity. A token force of some thirty guards provides defense and enforces order, and another two dozen administrators, teachers, nurses, and tradesmen see to the health and training of the population. The nearest doctor resides some eighty miles away, in King Edward, and is only called in for the direst of emergencies, being in the employ of the mining company, which demands recompense for loaning out their staff. The inhabitants are colloquially known as "clangers" from an old nickname for people from Bedfordshire. The principle industry is brickmaking, because of the clay beds and coal mines of the area. Most of the bricks are currently being shipped down the mountain to the Bolthole Tunnel project, for lining the tunnel. As with all workhouse settlements, the population resides primarily in barracks, with private homes being reserved for the staff. Other structures include the chapel, the workshops, the lookout towers, and the brick works. The kilns at the brick works are thus far the only stone structures in Shillington, massive beehives eighty yards across at the base and extruding into central chimneys five stories high. Coal-fired, the kilns take two to three days to remove the previous batch of bricks and load in the next, two days to bring up the fire to the proper heat, five days to bake the bricks, and another two days to cool down enough to unload. Shillington currently has three kilns, allowing the

settlement to keep one going nearly all the time. Plans are afoot for a fourth, but the land issues must be resolved before construction can begin.

A faulty survey put Shillington in an unstable area. Subsidence has brought down two buildings and weakened the palisade wall. Far too much effort and money has been spent already, and trying to relocate would be an economic, logistical, and political nightmare. The administration has appealed to the workhouse relief council for instructions, but thus far no decision has been forthcoming.

Adventure Hook: Collapsing Potential Buildings

Riders from Shillington have run their horses nearly into the ground to spread the alarm. One of the kilns has collapsed, and the workshop and drying shed nearby have gone up in flames. The sparks present a severe risk not only to the workhouse community, but to the forest surrounding it. As well, the injuries are horrific and widespread. They need every hand that can be spared for rescue and medical treatment. The King Edward Company has refused to send relief to Shillington, but has drawn up a fire line in case the flames spread to the forest and threaten the company's property. The Alice and Gruv Railroad of course will send whatever men and supplies it can spare, seeing as how its principal source of bricks for the Bolthole Tunnel is in danger. What else can be done?

Shillington has two primary routes in and out, one being the road that leads off to the main route across the ridge, the other being the tramway that connects the brickyard with the rail terminal at the base of the ridge. Calling the first route a road might be giving it more honor than it deserves. Roughly described and constantly in need of maintenance, it's more a cleared path loosely suitable for horse-drawn wagons and foot traffic, if one doesn't mind the occasional drift of loose stone. The road leads off about two miles, then links up with the main route across the ridge, which goes further up to Gorran Wood and down to King Edward and the foothills. The tramway's narrow-gauge rails take a more direct route down the ridge, snaking through the forest at slopes up to thirty percent. The trams aren't much more than glorified mining carts, a bit larger and with straight sides and independent braking. They're hauled up the ridge empty in a string of six or seven by draft horses, loaded with bricks at Shillington, then taken back down the rails by gravity, with the driver riding on the lead car and controlling speed with the brakes, and the horse riding on a dandy car at the tail end. Once in a while, small cargo is sent up to Shillington by the tramway, but the uphill load has to be kept light to avoid overtaxing the horses on the steep path.

Chief Administrator: Katherine Orpett

Previously the administrator of the Bedfordshire workhouse district, Miss Orpett (she never married) followed her charges to the New World. While her experience in Bedfordshire equipped her for handling the usual problems of a workhouse, and gave her a certain adroitness in raising funds from the well-to-do for supporting the effort to house and clothe the poor, the issues facing her in Shillington have found her wanting. She has no clue how to manage a business, and has had to leave the operation of the brickworks to the brickyard foreman, Mr. Trenchard. When it comes to defense of the colony, Miss Orpett has accepted the word of any officer of the British military who would give her so much as the time of day, with the result that Shillington's defenses are

haphazard, and sometimes at cross purposes. She alternates between wanting to lead her charges to independence and spiritual redemption, and treating them like recalcitrant and willful children. Father Gribble's ineffective ministry has left her resentful and in need of guidance from an authority, such as the Church, that she simply is not getting.

Priest: Father Josiah Gribble

Most of the Anglican Church's representation in the Gruv were chosen for their leadership capabilities, their talent in counseling the downtrodden and bereft, or their long and illustrious service to the Church. Father Gribble received the assignment in the hopes of keeping him out of the way until his retirement, which can't come soon enough for the bishop's peace of mind. He had washed up at the Houghton Conquest workhouse as its spiritual counselor after his previous tenure as a parish priest had very nearly brought the Anglican presence in Littlehampton to an end. When it comes to hearing the needs of a congregation, he has a tin ear. His sermons tend to come at the problem entirely the wrong way, when they're not completely irrelevant. When in doubt, he falls back on the liturgical cycle and preaches the same homily as last year. Overweight, inept, and indecisive, Father Gribble has proven himself utterly useless outside of the chapel. He faints at the sight of blood, which has left three of the faithful without Final Unction in the last year alone. Miss Orpett has petitioned the Church for a replacement, but thus far no such action has been taken.

Nurse: Judith Horovitz

A quiet, determined young woman who grew up on stories of the Erzsebetvaros ghetto in Budapest, where her grandparents lived before emigrating to Britain, Judith Horovitz received her assignment from the Jewish Relief Society. One of the very few Jewish women to thus far graduate from the Nightingale Training School at St. Thomas Hospital, Nurse Horovitz takes her Nightingale Pledge very seriously. Constantly busy, going from one crisis to the next as quickly as she can, she holds the people of Shillington together by force of will. Following her grandparents' example, Nurse Horovitz makes do with what she has ready to hand, or creates what she needs from what is available. She has taught herself a good deal of basic chemistry, and produces some of her own medications in a small laboratory at the back of the clinic, working late into the night to keep up her stock. Her ready supplies of calamine lotion and zinc oxide salve have relieved considerable suffering caused by the aggressive plant life and harsh conditions of the northern ridge. Obtaining the raw materials has required her to develop connections with Gorran Wood, and to a lesser extent King Edward, as Shillington has no mining of its own, only clay digging, and thus the metals and reagents she needs are not produced locally. Nurse Horovitz has taught enough botany to a small group of children that they are able to range out from the settlement each day, gathering plants for her to process, and seeking for new species that might yield better medicines. The work is dangerous, and she prays over the children every morning before they depart, but the need is so great. She has yet to find anything in the Gruv equivalent to willow or meadowsweet, which has left her without a non-addictive pain reliever. Her one attempt to grow poppies ended badly, with a few rough men raiding her patch and subsequently being arrested for opiate use.

The Nightingale Pledge

I solemnly pledge myself before God and in the presence of this assembly to pass my life in purity and to practise my profession faithfully.

I shall abstain from whatever is deleterious and mischievous, and shall not take or knowingly administer any harmful drug.

I shall do all in my power to maintain and elevate the standard of my profession and will hold in confidence all personal matters committed to my keeping and all family affairs coming to my knowledge in the practice of my calling.

I shall be loyal to my work and devoted towards the welfare of those committed to my care.

Brickyard Foreman: Malachi Trenchard

Malachi lost his wife to influenza many years ago. His sons grew up, married, and made lives of their own. All he has left is his work. A rugged, careworn man, Malachi started out loading the clay mixer when he was a teenager, advancing to brickmaker, kiln boss, and yard boss over the years. When the Bedfordshire workhouse district sought an experienced brickyard foreman for emigration to the Gruv, he took the job, figuring the extra pay for the hazard would help with his retirement. Now, he wonders if he will live long enough to retire. He's warned Miss Oppert about the instability of the land that the brickworks sit on several times, but she just tells him that there's no money to relocate, that the district hasn't provided an alternate site, and that he needs to keep up production so that they might be able to pay for relocation when and if it becomes possible. Malachi does his best to see to the safety of his workers, as they and Nurse Horovitz are all the family he has left. He regards the young woman as the daughter he never had, and does whatever he can to ease her burden. Recently, Malachi has been organizing the brickyard workers to do some of the repair work around the settlement in their off hours, using the bad bricks and tailings from the kilns as fill to shore up the foundations where the worst of the subsidence has taken place. It's not enough to see to his job. Now he has to see to his community as well. There won't be a job if the workplace collapses. While not a union sort, he does believe that if everyone pulls together, Shillington might just survive.

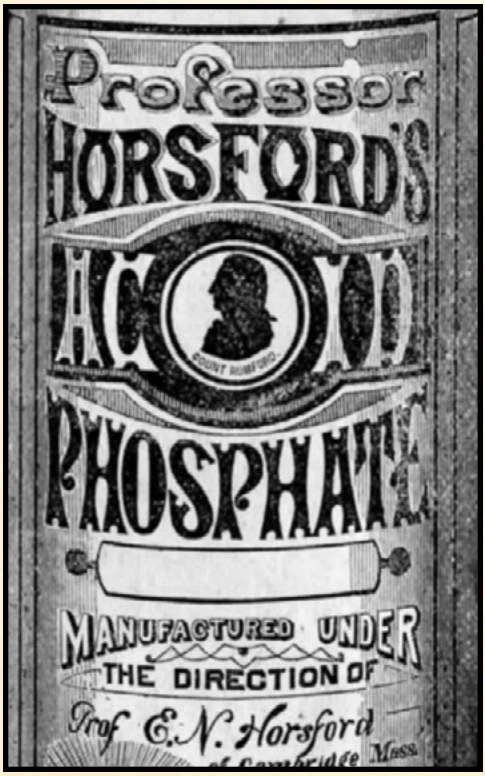
Clay Bed Foreman: Basil Jaggard

Too clever for anyone's good, Basil Jaggard's intellect is well hidden behind a gruff, muscular exterior. Looking more like a longshoreman than a confidence trickster, Basil prefers people to judge him by his appearance, so that he has an advantage over them later on. Fifteen years ago, one of his schemes went badly askew, and he served time for theft. With the conviction on his record, Basil was unable to find honest employment after his release, not that he looked for it too terribly hard, and ended up in the workhouse. Never one to let a setback impede his fortune for long, Basil soon had a few rackets going, among them slipping children out the back to dance at a nearby music hall and taking most of their earnings as agent fees. The Clophill workhouse administration couldn't ever catch him at any of it, and eagerly shipped him off to the Gruv when the opportunity presented itself. Once at Shillington, Basil got himself put in charge of the clay beds because he was literate and the administration didn't have anyone else. Mind you, there would have been a few other candidates if they hadn't either been paid off or warned off, and in one instance had two

fingers broken as an example. Now Basil spends his time avoiding the mucky work of digging out the clay and transporting it back to the brickworks, and trying to figure out how he can make a profit for himself out of the operation. The clay beds themselves aren't worth anything, but maybe there's something else out there that could be smuggled, or someone out there who might pay for something Shillington has. If not, there's rackets that could be organized within the settlement. Sooner or later, Basil will find a way to turn a coin at someone else's expense.

Adventure Hook: A Rumor of Beetles

One of the brick-tram drivers whom Basil has struck up a casual friendship with heard a rumor that sparkers lay their eggs in wet clay. The driver swears that there's a team of some kind of boffin on their way up to Shillington to watch the migratory swarm. Basil may be dishonest, but he's not stupid. A wave of sparkers coming through could put an end to Shillington, just as Basil is really starting to get a handle on the place. No one in authority will listen to him, so he's spreading the rumor through the populace, figuring that eventually, if enough people start talking about it, the administration might listen. Unfortunately, what he's actually doing is starting a panic. Combating the rumor may be difficult, as it would require convincing a population of illiterate laborers that they're not about to be overrun by fire-spouting giant beetles, when they know that such creatures exist.



Gorran Wood

Type: Civilian

Form of Law: Village council, English common law (more or less)

Population: Hamlet

Astral Rating: Open

The furthest human settlement up the northern ridge thus far, Gorran Wood is a predominantly Cornish mining settlement, the population consisting mostly of miners who have bought out their indenture, and their families, friends, and relatives they've brought over from the Old World. Outsiders may find it a bit of a rough place. The miners keep their own order, and have no police force. An elected village council makes decisions regarding issues that affect the village as a whole, based approximately on English common law as practised in Cornwall, and otherwise leaves matters to the populace.

Adventure Hook: We'd Like A Word With Him Down At The Station Please

Detective Inspector Aparajita Nirupama of the Delhi bureau holds a warrant for the arrest of Evan Thomas, a former apothecary's assistant, for making off with several hundred pounds of his employer's hard earned profits. She tracked him as far as the Rabbit Hole, which he passed through using falsified papers identifying him as Evan Jones of Wales, a factory worker. Mister Jones, nee' Thomas, vanished from Fort Alice within a day of his arrival. Oddly enough, Ervan Lowry, who works at the Gorran Wood laboratory, turned up at the settlement just a week later, with a letter introducing himself as a distant relative of the Lowry family of Bodmin in Cornwall, which has quite a few members present. Of course, they welcomed in their apparent relative. Ervan bears more than a passing resemblance to the sketch of Evan Thomas, but it's not the best of likenesses, and a photograph would of course be more convincing. The Lowrys are not about to give up a relative to some official with a bit of paper that doesn't even name the man properly, and have objected further on racist grounds to DI Nirupama specifically. DI Nirupama does not like the idea of having to leave Gorran Wood without the man she came for, and is concerned that if she does go back to Fort Alice for additional manpower to effect the arrest, that her target will change identities and flee once again. Any assistance that clears up the situation one way or the other would be greatly appreciated, not only by DI Nirupama, but by the village council as well, as the tension is rising and the Lowrys have a reputation for resolving problems with their fists.

Like most settlements, Gorran Wood raises a good bit of its own food. Every household has a pig or two and a kitchen garden. Larger cultivated fields occupy much of the arable land between the village and the mine head. Workers on their way to the mine head do a bit of weeding and cultivating on the way, and bring home fresh veg when it's ready to harvest. The buildings started out wooden, but several have already been replaced with stone, the miners having agreed to pool their efforts to create more permanent (and more defensible) structures. Housing tends to be in rowhouses, one family per unit and seven or eight units in a row. The units on the end are generally given over to tradesmen, as shops and workplaces. The village has no palisade wall. A waist-high drystone wall has been erected across the approach, with wooden gates for the road and the tramway. The men rotate between patrol duty, construction, and mining or tradesman's work on a self-organized schedule. The women take their turn at patrol duty, but alternate it with gardening, livestock tending, textile work, child care, and in a few cases tradesman's labor.

Gorran Wood, like Shillington and King Edward, uses horse-drawn trams to bring coal and stone down from the mine to the village, and finished products from the village to the railway depot at the foot of the ridge for further distribution. They intend to replace the horses with narrow-gauge steam engines, like those pioneered in Wales and now used in many other locations. When the village locomotive fund accumulates sufficiently to purchase the engines, the Alice and Gruv will bring the small locomotives to the foot of the ridge on flatcars. Once at the depot, the small engines can be offloaded, set onto the narrow gauge rails, and make their own way up the ridge.

Adventure Hook: The Spring of Dreams

During excavations for a new mine shaft, an artesian spring was uncovered. Drinking the water from it sends humans into a coma lasting anywhere from an hour to several days, during which vivid dreams of a peculiar nature are experienced. Thus far, no Saurids have tried the water. Repeated use increases the chance of contracting Looking Glass Fever: the more consumed, the greater the chance. A few of the LGF victims have changed in strange and heretofore unseen ways, and don't seem to think quite like humans any more. Despite the risk, word is beginning to spread about the Spring of Dreams, and people are coming to Gorran Wood to experience it. (The water loses its potency within a few hours of emergence into the air, and so must be consumed close to the source.) This has started a row among the villagers, as to whether or not to allow in spring seekers and turn a mining village into an opium den. There's also the question of what the spring's LGF victims are up to, as they've set up a little community of their own out in the woods, and seem to spend much of their time sitting in a circle chanting.

Besides coal and dressed stone, Gorran Wood distills coal tar for a variety of products. This of course takes a good deal of equipment, including glassware, and a bit of know-how. Thus far, they've got the process for carbolic acid down well enough that they're making it by the pint. Its use as a reliable disinfectant creates a ready market. They've managed to produce a passable carbolic soap which, if they can improve the quality and produce in enough quantity, will bring in quite a bit of coin. Creosote, pitch, and sealcoat have also been relatively easy to produce, and are in demand for waterproofing and as industrial sealants. Coal tar by itself is useful in treating head lice, which keeps it in high demand in the workhouses and by the military. They're also producing arsenic, as a cheap byproduct of the mining process. Not only useful in rat poison (and effective against many smaller Gruv species, but unfortunately not against gremlins), arsenic is also in high demand for the making of green dye, fashionable in wallpaper and textiles. Firms back on Earth have expressed interest in sourcing their dye arsenic from the Gruv, given its ready availability in plentiful quantity compared to the Old World's sources.

Unfortunately, while Gorran Wood's products are quite profitable, their manufacture has some nasty side effects. Some of the waste products are highly toxic, and the distillation processes dangerous. Safety procedures and medical assistance would be useful, but the Cornish settlers' insularity has offended people at King Edward and Shillington, their closest neighbors. As well, the staunch independence of the Cornish miners leads them to try to solve the problems on their own. The last few village council meetings have dissolved into shouted arguments over whether or not to seek outside help. Sooner or later, something must be done, as the arsenic leaching and coal tar fumes are having more and more effect on the health, not only of the villagers, but of their land as well.

Village Councilman: Columb Trethewey

Councilman Trethewey held district office back in Cornwall for many years, and enjoys the respect of a considerable part of the population. He's easy to get along with, tells a good joke, will stand a round down the pub, and gets things done that need doing without causing a lot of fuss and bother. He's also an assiduous student of the occult, although he's kept that bit quiet.

Wouldn't do to have it noised about that a respectable government official spends his evenings and weekends conducting ancient magical rituals. Columb holds membership in a secret society that believes magic was once active in the world and may be a source of great power again, now that it has returned. The incidents of LGF since the portal was opened encouraged the society. They're very excited about the Spring of Dreams, and have tasked Columb to thoroughly study its effects. He has been ordered to guide the victims into established practices if possible, and if not, to observe and meticulously record every detail of their rituals and practices for further study. The society seeks power through the return of magic to the world, and is willing to pay a very high price for it. Their use of humans as experimental subjects indicates the lengths to which they will go. As such, Columb, despite being an elected official of Gorran Wood, does not have the settlement's best interests at heart.

Patrol Chief: Nechtan Littlejohn

While Gorran Wood does not have a police force, it does have a defensive patrol, a sort of militia consisting of all of the men of fighting age and condition (and a few of the women). The patrol maintains a watch on the village perimeter, the mine head, and the roads and tramway, thus far only against inimical wildlife. With the Samsut being hundreds of miles to the east, and the nearest Saurid village a similar distance west, no enemy assaults are expected. This does not prevent Chief Littlejohn from drilling the patrol for the possibility. Elected to the position of patrol chief due to his experience as a constable back on Earth, Chief Littlejohn has not let his increasing age slow him down, and takes a hands-on approach to both training and organization of the patrol. Currently, though, he's getting around on crutches, and only at the expense of considerable pain, after a fall into a ravine. The broken ankle slowed him down a bit. The infection that followed, some sort of grubs that hatched in his foot, very nearly cost him his leg. Daily applications of carbolic acid have been necessary to burn out the grubs, which don't seem to have quite all hatched out yet. Miss Pengilly, the chemist, and Stithian Bray, a retired miner who was an ambulance attendant with the Knights of St. John during the Crimean War, have done the best they can with their limited knowledge and resources, but really, Chief Littlejohn needs to see a proper physician. Getting a doctor to come to Gorran Wood, or getting Chief Littlejohn down the ridge to the rail depot and from there to a settlement with a doctor, have thus far both proven to be insurmountable tasks. And yes, there's a good deal of fun made of his surname.

Mine Head Supervisor: Endellion Curnow

Back in Cornwall, Mrs. Curnow ran the telegraph office in Truro, a city with a direct route from London Paddington on the Great Western Railway, seat of the Bishopric of Truro, and a center of industry. Gorran Wood might be seen by some as a step down from such an important and highly responsible position, but Mrs. Curnow sees it as investing in her own people. Someday, Gorran Wood will rival Truro in its industrial might, and she will have been there at the beginning. While she lacked direct experience with mining when she started, seeing to the daily operations of the mine head isn't all that different from running a large and busy communications centre. There's scheduling, and equipment maintenance, and keeping up production, and dealing with crises when they occur. It all comes down to people, and being there to catch them when they fall, and they do fall. Mrs. Curnow is the safety net. Twice already her visits to the boiler room have caught the firemen slacking off and the boiler for the pumping engine losing pressure from lack of coal. Once more and the fire boss will get the sack, but she's given him two more chances than most mine

supervisors would have. Her insistence on the Mining Commission regulations being followed to the letter has annoyed some of the younger miners, but gratified the older ones, who fought long and hard to get the safety regulations passed. Her suggestion to use phosphorescent chalk to mark directions on the walls down in the mine got one group of miners out when their carbon-arc lamps all failed at once. Even the most recalcitrant miners, who initially put up a great fuss about a woman being put in charge, now treat her as well as their own mother, and call her "ma'am" and touch their caps when she passes by.

Lead Chemist: Tamsyn Pengilly

Considered by far the most eligible young woman in Gorran Wood, Miss Pengilly really doesn't have time for a suitor. She gained her knowledge of chemistry from working as an apothecary's assistant and paying close attention. Where some would have learned the procedure and gotten on with making whatever it was that the druggist wanted, Miss Pengilly asked questions and learned the theory behind the reactions. Within a few weeks of coming to the Gruv and helping set up the laboratory at Gorran Wood, she found herself in charge, it having become obvious that she knew what she was doing better than anyone else in the project. Now she's busy from dawn til dusk, overseeing the bulk production of a variety of chemicals, doing some of the work herself, and experimenting with the available materials to see what else Gorran Wood might be able to produce. She's cut her hair unfashionably short, the better to fit under a kerchief, and does not use cosmetics, having far too clear an understanding of what's in them to apply them to her skin. Her hands are stained with coal tar and usually spotted with a few tiny acid burns, and she keeps her fingernails cut back nearly to the quick. Despite all of this, and her customary dress being an old and out of style women's business suit with a leather apron over it, and her active discouragement of the men who try to come calling, at least once a week there's a bouquet of flowers left on her desk. Nine times out of ten, they're in a retort by afternoon, being cooked down for essential oils.

King Edward

Type: Industrial
Form of Law: Company administrative council, English common law (more or less)
Population: Village
Astral Rating: Open

The King Edward Mining Consortium made its operating capital in the tin mines of Camborne in central Cornwall. Since coming to the Gruv, the firm has expanded its operations considerably. Seven mines comprise the fields of King Edward, two producing tin, two iron, one copper, one antimony and bismuth, and one coal. Each mine head has its own processing facility, and access to the tramway that connects the King Edward settlement with the rail depot in the foothills. Much of the coal produced goes straight into the beam engines that keep the mines clear of water, and the lift engines that send miners down and bring ore up. Some goes to feed the furnaces at the smelting facilities, where processed ore is reduced to metal ingots. As with any coal mining community, each household receives a coal allotment for cooking and heating, although in King Edward the amount delivered tends to run out before the next batch arrives if it's not hoarded in a miserly fashion. The mining and ore processing produce arsenic as a byproduct, but since it does not fetch a high price, it's not generally collected, and is allowed to run off in the waste water.

The land downstream of King Edward has thus become toxic, and had to be abandoned for farming purposes after a few deaths from tainted vegetables.

Adventure Hook: The Sleeping Map

Miners found a sealed chamber a few days ago, a square room deep underground. Inside was a stone pedestal with a single line of symbols carved into it, and a rolled-up map that, on first glance, appeared to be the Gruv and a considerable part of the lands beyond. Unfortunately, anyone touching the map with bare hands, or spending more than a few minutes studying it, falls into a coma. The firm would like to find a way to make a profit from the map, but is on the verge of giving up and turning it over to the military. Would anyone else like to have a go at figuring it out?

A company town in every sense of the word, King Edward issues its own scrip, which goes into the working class's pay packets. Residents can exchange company scrip for British currency, but there are sharp limits on the amount per day, and on the amount of currency that may be held. Food, clothing, and other necessities may be obtained in company stores, which only accept scrip. Stock for the stores is either grown or made locally, or brought in by contract with supply firms on a lowest-bid basis. No outside merchants or trades in non-scrip currency are allowed. While there are several pubs, residents carry beer tokens good only at one of them, and only allowing two beers or one drink of distilled liquor per day. Service at other pubs or beyond the token limits requires substantial bribery to offset the risk of violating company alcohol consumption regulations. Non-residents cannot obtain service at the pubs, but if well connected enough may be allowed in to one of the private management clubs, which have free, no-limit bars.

Adventure Hook: Rotten Apples

Someone has managed to extract the addictive part of splithee-laced tea and has been injecting it into apples and other fresh fruit, which have found their way into the homes of a few lower-ranking managers of the King Edward Company. Notes included in later fruit baskets provided instructions as to how to ensure that the baskets continue to arrive. While initially the orders seemed innocuous, adding an hour to a miner's shift and taking an hour from someone else's, delaying a shipment of tin by one day, holding a surprise safety inspection on the tramway, added up they begin to form a pattern of subtle interference not only with the operations of the King Edward Company, but of the Alice and Gruv Railroad, and the war against the Samsut. Senior management wants the issue cleared away quietly, without scandal touching the firm or the military becoming involved.

Company security forces guard the defensive walls and patrol the streets, jobsworth sorts that refer any request for cooperation by Crown authorities to their superiors. While British law ostensibly holds sway, since the settlement is privately owned and operated, the firm's regulations have the force of law. Instead of courts, King Edward has company disciplinary review boards, which do not allow representation. Anyone brought up before the review board for violation of

regulation or law must stand on their own, without benefit of counsel. Of late, the regulation against labor organizing has seen considerable challenge from the miners. While arrests have been made, and those found guilty of violating the regulation sent to punishment detail or imprisoned, the unrest continues to grow. Company security tried putting a few of the leaders in hospital, but that backfired, with the pit bosses at the mines complaining to management that they weren't able to meet their quota due to being deprived of key workers. Pinkerton-style leg-breaking might work in England, but the Gruv does not have a large labor pool from which to draw replacements. A solution must be found that both management and labor can live with, or the current conflict is going to end in disaster for all sides.

As a further complication, King Edward does not employ Boojums, thus reducing its pool of available labor even further. Company regulation forbids Boojums from residing in the town, or taking rooms as transients. The company has issued a policy stating that, since the cause of Looking Glass Fever is unknown at this time, it must be treated as a contagious illness, and therefore no person exhibiting symptoms may remain within the firm's lands. Any resident contracting Looking Glass Fever is sent off to Fort Alice for treatment at their own expense, which is then charged against their earnings and holdings, or that of relatives if necessary. If the victim recovers unchanged, they are allowed to return.

Chief Operating Officer: Wilfred Percival Dewdney

An amateur archaeologist, Mr. Dewdney spends rather more of his time poking through the mine tailings and chipping away at the hillside than proper attention to his duties as de facto governor of the settlement should allow. He reminds his subordinates frequently that he did not come to the Gruv to toil like a peasant, but rather to explore this wonderful new land and oversee the efforts of others in proper comfort. When not puttering about with what may or may not be fossil specimens, Mr. Dewdney may be found in the kitchen, berating his cook and bemoaning the lack of quality ingredients and properly trained people to prepare them. He tends to take care of

business matters in an offhand fashion, waving off requests for his attention with whatever solution will result in his being left alone to pursue more interesting things. His continued refusal to take the workers' unrest seriously, telling the security forces to just knock a few heads together, that always worked before, has raised concern among the other officials of the settlement, but as yet they have not gone over his head to the firm's home office.

Foundry Supervisor: Somerville Brunger

Two generations ago, the Brunger family were sheep farmers in northern Yorkshire. After a devastating liver fluke infestation wiped out their herd, they sold their land and moved south. Somerville grew up in Wealdstone, a working-class borough of northern London, and has never seen a sheep outside of a picture book, but speaks with a decidedly Yorkshire accent, picked up from his family. Following his father into foundry work, Somerville rose quickly through the ranks, showing a talent for getting the other men to follow his lead. Being relatively young, and unmarried, the King Edward firm saw him as an optimal candidate for emigration to the Gruv, and offered him a reasonable bonus for leaving his previous employer. Just a few weeks before he was to leave for the new world, Somerville's father was badly injured on the job, and left unable to work. Having already committed to King Edward, Somerville had no choice but to go, but sends home the larger part of his pay to support his family. In his spare time, he has been experimenting with a Prussian technique of using electricity to induce heating. Thus far, he's met with only moderate success, partly due to lack of the proper tools and materials and partly due to his lack of formal study of the subject. He believes that if he can successfully build an electrical induction furnace, not only could he earn a nice bonus from the firm, but possibly advance his career, moving up from the labor force to the jacket and tie environment of the engineers.

Mining Engineer: Hedayat ibn Saeed

One of the difficulties faced by the King Edward firm in expanding its operations to the Gruv was finding candidates for the more highly skilled positions. The senior engineers already in employ could not be spared from the existing mines in Cornwall. Contacts with Her Majesty's military offered a few recommendations. Given Hedayat's strong references and substantial background with initiating modern mining techniques in his native Egypt, the firm extended an offer and brought him and his family to the Gruv. This necessitated building one of the larger homes in the King Edward settlement, as "family" included two wives and thirteen children. It has also required some adjustment on the part of his coworkers, as they have had to learn to schedule around his daily prayers. The slaughterhouse built a second facility to ensure that beef and pork would not cross paths. While the initial costs were high, the reward has been substantial. Hedayat's work has improved efficiency of the existing mines by an average of twenty percent, reduced miner injuries and equipment damage, and opened three new mines in record time. He carries a wooden lap desk so that he does not have to go back to his office to do paperwork or produce new engineering drawings, and puts in a full day's labor every day of the week. Now if they could just find someplace to meet with him socially. He won't attend the management club because of the open bar, which makes discussing the real business of the firm a bit of a problem.

Union Organizer: Trevenna Couch

A scale operator at the tin mine, Miss Couch took up the cause of union organizing after her brother and cousin landed in hospital for their efforts. While new to the game, she has proven

a quick study, and has learned that the firm's security officers are reluctant to strike a woman. Miss Couch takes shameless advantage of this effort at gentlemanly behavior by the company leg-breakers to press her cause right in front of them, even going so far as to point out their own situation and how organizing within the security forces could be to their advantage. She gives a good speech, motivating her audience not to anger but to positive action, pushing the idea of the slowdown over sabotage or violent confrontation. Management has yet to decide what to do about this young firebrand who has so abruptly popped up in their midst. Miss Couch meanwhile has organized the children into a spy and courier network, making it something of a game with practice runs sneaking about, gathering information, and carrying messages. The lunch pail a miner's daughter brings him may very well have the time and location of the next union meeting written on the bottom.

Geologist: Grainne Rankeillor, MSc, DSc, FRS

Dr. Rankeillor spends most of her time in the forest outside King Edward proper, surveying the land to find new mining sites. Traveling with just two assistants and four men who double as roustabouts and security, she follows a grid search methodology borrowed from the military, working her way up one column of the map and down the next. In each grid square, she spends a few days gathering specimens, assaying the samples, and writing up the results. Once a month or so, she returns to King Edward for a week, so that her team can have a few days in what passes for civilization, supplies can be replenished, and she can present her findings to the engineers and planners. In the field, she prefers a loose blouse of military origin, jodhpurs, and boots. At King Edward, she dresses more conservatively, in a dress of her clan plaid as befits an unmarried Scotswoman, but wears her auburn hair scandalously loose, tumbling down over her shoulders. A few months ago, she developed Looking Glass Fever while surveying in an area close to Gorran Wood. Her team agreed to keep the event to themselves, so that she could retain her position with the firm. Hiding her taller, more slender figure only required discarding her corset and taking a bit off the heels of her shoes. She uses her profusion of curls to hide the pointed tips of her ears. She avoids being seen at night while in the settlement, so that no one has a chance to notice that her eyes reflect in the light like those of a cat. Feeling more at home out in the wilderness, and knowing that her Boojum status cannot be kept secret forever, she has begun making inquiries with Her Majesty's Exploratory Corps and various private organizations involved in pushing back the borders of the human presence in the Gruv.

East: The Boreal Forest

Encompassing the culmination of both the Gladstone and Darlington ranges, the eastern region is beloved of Scots and other mountain-dwellers. Out past the forest, where the mountains give way once more to lowlands, lies the Swamp of Sorrows, an immense bog taking up most of the northeast corner of the Gruv. Little is known about this region. The Saurids, from whom the name was learned, refuse to talk about it, other than to say that once, long ago, they lived there, and that now, no one with any sense will ever go there again.

New Strathspey

Type: Civilian
Form of Law: Civilian tribunal, Gaelic common law
Population: Village
Astral Rating: Safe

Located well up in the Darlington Mountains, a good hundred and fifty miles east by northeast from Fort Alice, New Strathspey can be reached only by an arduous journey up mountain trails passable only on foot or on horseback. The founders of New Strathspey deliberately struck out as far as they could go through difficult terrain. Predominantly of Scottish ancestry, New Strathspey's population traces their lineage back to Highlanders forced off ancestral land by the Clearances of the early to mid century, and to the survivors of the Potato Famine that finished off the Highland clans. Some came from Newcastle and Liverpool in the UK. Others hailed from Canada, from Nova Scotia or Glengarry County. A few made the journey all the way from the United States or Australia. All came to reunite, and build a Scots community in a place that just might be out of reach of the landlords.

Visiting New Strathspey is a step back in time. The villagers live in stone huts with thatch roofs, without electricity or running water (although a gravity feed piping system is under construction). They herd cattle and sheep, and cultivate crops with sturdy draft ponies and oxen pulling the plows. No English is spoken, except in the classroom, where the children are taught it as a foreign tongue. Scots Gaelic holds sway here, the younger adults spending their evenings with their elders to learn more of their ancestral language.

Many old traditions have been resurrected, initially as a return to the Highland ways, as best anyone could remember them, but later for more practical reasons. Granny's charms and hexes have real power in the Gruv. The village has no palisade wall, just a series of posts with bramble wreaths hung from them, but those keep out the wild animals just fine, thank you. Many of the villagers carry a lucky penny, kept in the left pocket, that they take out and turn over three times at the first sight of each full moon (which happens much more frequently in the Gruv than back on Earth, with three moons in the sky). Coins are buried under the hearth and threshold of each home, face up in a triangle, because they keep the fire in the fireplace and the mice out of the house. The villagers do not speak of these traditions with outsiders. Partly, this is because of bad memories of British historians who came to study the quaintly amusing Highland ways during the Clearances, capturing the funny little Scots people in their books before they were all gone. Partly, this is because of distrust of Her Majesty's military. If the redcoats find out that the Strathspeyans have something of military potential, they'll come marching in and dragoon everyone who knows how to work a charm, and leave the village with no one to protect it, heal the sick, and find the water.

That said, the grannies and gaffers who do the work can be recognized by the staff they carry, each one unique to its owner. In Scottish Highland tradition, the staff is the primary magical tool. The second tool is the dirk, a long knife of specific design and decorated with thistles and similar Scottish motifs, carried in a sheath at the waist. Don't confuse the dirk with the sgean dhu, the short knife men carry in their boot. These are two very different knives for very different purposes. In general, the grannies gather the herbs, brew the potions, weave the charms, midwife the babies, tend the sick and dying, and dispense advice. The gaffers see to the animals, the paddock walls, the homes and barns and the village's defenses, bury the dead, and tell the stories.

Adventure Hook: Bug Bitten

Some of the men decided to begin training for traditional Highland competitions, including turning the caber, the stone throw, and foot races, ignoring the Victorian inventions for those sports documented in Malcolm Canmore's calling of the clan in 1040 and the Book of Leinster, written in the twelfth century. During one of their practices, a thrown stone crashed into a nest of a previously unknown insect, and three of the men were stung, putting them in a state resembling a drunken stupor for two days. While the swelling went down and they recovered, they've started behaving strangely, hoarding food that they don't eat but won't allow anyone else to have either, and going out to the nest to be stung again. The men can't explain their actions, only saying that they have to do it. An attempt to burn the nest failed when the insects rose up in a swarm and relocated, in the process stinging two more men, who now show the same symptoms. No women have been stung, but it's not known if that's because the insects avoid women, or because so few women went out with the burning crew. The grannies and gaffers have tried all the cures and charms they can think of, and are willing to seek help from beyond the village at this point.

While Christianity is not overtly rejected, much of it has been abandoned. The pre-Christian gods have not been brought back, but the religion followed by the chiefs and nobility who enacted the Clearances is tainted in the eyes of the Strathspeyans. The people here do not celebrate Christmas and Easter. Instead, twice a year, at Bealltainn in the spring and Samhainn in the fall, ritual burnings are performed. The spring rites include effigies of the Duke and Duchess of Sutherland, spat upon and kicked before being consigned to the fire. The fall sees an effigy of MacDonnell of Glengarry, the Traitor Chief, put to the flames. The fires used for the effigy burnings are doused afterward, and the embers dumped into a nearby stream. The cattle fires are kindled from a separate source, those being used for protecting the herds by driving them between two bonfires. Brands from the cattle fires are then used for rekindling the household fires, which are doused and re-laid at each of the two festivals.

The leadership of New Strathspey, by village law, can include no man or woman with ancestry traced back to either Highland chieftainship or British peerage. Those few residents of the village with such lineage keep it secret, a source of family shame. Those holding titles in the British Empire, or priests of the Anglican or Catholic faith, are not welcome. While the villagers will not turn violent against these intruders, they will refuse to understand anything said, and will not allow such persons to remain in the village after sundown.

Midwife and Herbalist: Ciannait Rhoney

Grannie Rhoney has been a midwife much of her life, first in the Orkney Isles, then in Newcastle, and now in the Gruv. She's made do with whatever was available, seeing to the health of mother and baby, and anyone else who sought her help, with a combination of high street pharmaceuticals and old country herb craft. She reminds people that a high street pharmacist is just an herb doctor with a fancy shopfront. If you go out back, there's a kitchen where they cook up their medicines from herbs and oils and salts, then put them in a fancy box so you think they're all modern. She brought a wide variety of seeds from Earth when she emigrated, and has done a good deal of work testing the Gruv's plants for possible uses. Her charms aren't all that powerful, but

then that's not her speciality. Knowing which leaf to chew up for a poultice that will draw the poison out of a bite, now, that she's good at. Her husband, Fillan, was a mechanic at a boiler factory, but died eighteen years ago in a steam explosion. Her children emigrated to Canada and Australia as soon as they were of legal age, apologizing to her for leaving but there just wasn't a future in Newcastle. With no family to hold her back, she joined the migration to the Gruv, seeing the new village as giving her life new purpose. Now if she could just get Eadaoin to get herself pregnant.

Adventure Hook: Hooked on a Seedling

A tree found only in the upper reaches of the Darlington mountains blooms only in its upper branches. Thorns covering the bark make gathering the blooms difficult. However, the grannies and gaffers of New Strathspey have discovered that chewing the blooms substantially improves their ability to move the energies of the world, making their charms and hexes vastly more powerful. Of course, there's a downside – the user is left badly fatigued and unable to summon up so much as a spark of magic for anywhere from a day to a week, depending on how much effort they put in while under the influence. Granny Rhoney believes that she can extract the essential oil and store it for emergencies without losing the effect. Meanwhile, the British military has preliminary results suggesting that an extract of the blooms might be effective in breaking Samsut control over their zombie troops, interfering with the logic module and its control over the brain. They're sending an expedition up into the mountains to gather the blooms for the war effort. Conflict between the expedition and the people of New Strathspey is unavoidable.

Harper: Tadgh MacMhuirich

Tadgh, born in Glengarry County to first generation immigrants, inherited his grandfather Domhnall's books and harp, kept in a strongbox after the old man died during Gordon of Cluny's clearance of the Hebridean island of South Uist. When he turned fourteen, his father gave him the key to the box, telling him that it was full of old, sad memories, best forgotten. Tadgh instead found a harper at the local college, learned how to string and care for his grandfather's harp, and then to play it. He studied the Gaelic poetry of his grandfather's time, learned its language and its conventions. He made a bit of a reputation for himself as a singer of the old folk songs, and became popular in the pubs and bars. This brought him into contact with the older people, who remembered their ancestral home, and with the angry younger generation, who wanted to return to it. When the Portal opened, and a movement began to organize a Scots return, not to the Highlands, but to the new world, Tadgh signed up for the first available ship to England. The Gruv has brought new strength and energy to his songs. With the right tune, he can influence people, bring up the flowers a little more quickly, and ease the winds of a storm. As a harper, he occupies a sacred place by tradition, and is guaranteed the warm spot by the hearth and a meal at the end of the day. Not content to be just a poet, Tadgh works extensively with the gaffers and grannies, exploring the boundaries of his harp's effect on people and the world.

Herdsman: Lachlan Chalmers

Back in Liverpool, Lachlan made his living as a stockyard worker, seeing to the massive number of cattle brought in each day for the slaughter to feed the city's appetite for beef. Now

he sees to a much smaller number of cattle, and they live a good deal longer and under better conditions. Lachlan, like everyone else in New Strathspey, gave up a lot to come to the Gruv and help found the village, but he says that he sleeps better at night, feeling that what he does is morally more correct. He still helps with the slaughtering, but it's done the old way, around the back and down the path a bit, one cow at a time, so as not to spook the rest of the herd with the scent of blood. No more than can be eaten or preserved is killed, and more than just the meat is put to use. The bones become tool handles or flutes or eating utensils. The hide gets tanned and turned into boots and other leather goods. The village dogs are fed the offal. Lachlan, a young single man when he left Liverpool a year ago, has not yet married, but has been noticed paying special attention to Garniflaith MacCorkill, the daughter of Gaffer MacCorkill, one of the village's defenders.

Weaver: Eadaoin Auchnie

Eadaoin, one of two weavers in the village, spends her days working at a floor loom, turning wool thread into fabric that in turn becomes clothing, blankets, and other household goods. Weaving goes back in her family several generations, although Eadaoin herself worked in a textile mill in Manchester before coming to the Gruv, and her mother tended one of the first Jacquard looms in Edinburgh. The loom Eadaoin uses belonged to her grandmother, who convinced the family to keep it, disassembled and crated, through their migrations. When people started talking about emigrating to the Gruv, Eadaoin's grandmother had the loom brought out, and taught her grand daughter how to put it together, thread it, and weave a few basic patterns. Since then, Eadaoin has referred to books on the craft that her family gave her as goodbye presents, learning how to weave the old regional tartans, from before the English standardized (and bastardized) the patterns. Her distaste for male company and preference for her own gender has caused some concern. While the Christian-influenced taboos against same-gender relationships have been deliberately discarded along with a good deal else of similar origin, the village needs children in order to continue. It's all well and good if she takes up with another woman as a life partner, the grannies have told her, but she needs to do her duty by her people and have a bairn or two.

Dhankar

Type: Civilian

Form of Law: Civilian tribunal, combination of Tibetan and Indian secular law and Buddhist religious law

Population: Town

Astral Rating: Open

Dhankar represents one of the largest mass migrations from India to the Gruv thus far seen. Over four thousand people, men, women, and children from the Spiti district of Himachal Pradesh sold everything they would not carry with them, including their land and the homes and workshops upon it, packed themselves into train cars, and endured weeks of cramped quarters, tight rations, disbelieving stares, and British bureaucracy to travel to London and through the Rabbit Hole. The migration included an entire monastery, or at least the monks and students and everything portable they did not give to other religious orders or sell to fund the trip. Once in Fort Alice, they set off east by northeast, traveling on foot and with pack animals and livestock, until they reached a peak in the Darlington Mountains a good two hundred miles away, becoming the furthest outlying

human settlement in that direction thus far. Asking them why tended to meet with blank stares or stubborn silence, and occasionally a small handful of coin, as if the question had been a demand for a bribe, or the questioner was simply being paid to go away.

What the British did not know was that the lamas, the senior monks, had revealed an insight obtained through long days of analytic meditation to the people of Dhankar. China, having been forcibly awakened to the outside world after generations of deliberate isolation, would soon enter a phase of expansion and imperialism similar to that of the British Empire. As an abused child tends to grow up to become an abusive parent, China would emulate the ways of the Empire that had forced open its borders, seized its territory, and brought its culture in to replace long-established local ways whether or not the locals agreed. This would inevitably lead China, with its substantially larger military, to a conquest of Tibet and possibly northern India, making the area unsafe for Tibetan Buddhists. The only rational course was to leave the region while a peaceful and orderly departure was possible.

What the people of Dhankar did not know was that the analytic meditation of the lamas had been guided by a terma, a hidden text, written by a lama in the late 800s and put away as something the world was not yet ready for. Three years ago, the Kapsho Terma (named after the lama, Kapsho, who wrote it) was revealed to the current lamas. Kapsho predicted the course of events of the next thousand years, including the rise and fall of the Mongol Empire, the legitimizing of the Mongols as rulers of China as the Yuan Dynasty, the increasing insularity of China, the coming of a Western power with substantially advanced weaponry, a series of wars over the importation of narcotics, and the expansionist conversion of China. The terma concludes with speculation regarding a great change, an Opening, that will awaken a New World. The seniormost lamas, who have studied the terma, believe that the Opening predicted is the Grosvenor Portal, and that their migration to the Gruv is not only a way of preserving their culture and faith from Chinese imperialism, but also a necessary part of awakening the New World. At some point, yet to be determined, the New World will need the Buddhists, and so they must go there.

Adventure Hook: Seventeen Angry Chinese Men

A Chinese delegation has come through the Rabbit Hole, quite angry and making all sorts of vague demands. It seems that someone, but they don't know exactly who, strolled off with some sort of valuable and ancient object, but they won't provide any details about

it. They're pretty sure it was someone from Tibet, or who fled into Tibet after the theft, or something like that, but anyway, which way did those Tibetans go? Brigadier Lethbridge-Stewart has better things to do than pacify some raving nabob from the Far East who won't even be specific about what he wants. Somebody has to be delegated to babysit these foreigners, not even part of the Empire, diplomatic papers and a Home Office request to render all due assistance blah blah blah, go take care of it. And do try to not let them tear apart Dhankar when they get there, all right old chap?

Political and economic power in Dhankar derives from terrestrial positions, the structure having been maintained in the transition to the Gruv. The lamas administer the monastery and its estate, consisting of the monks and the du-jung, or bound serfs, and the land claimed by the monastery for its structures, paddocks, and fields. The monks perform a good deal of the manual labor required for building and maintaining the monastery as part of their discipline, believing that hard work helps focus the mind. The du-jung (the term is both singular and plural) see to the livestock and plants, and take care of much of the support of the monastery, in return being provided their basic needs by the monastery. Children of du-jung receive no special consideration when applying to the monastery to become monks or nuns. Because they are constantly present, long familiarity does exert some influence on the decision, but that could go either way depending on how the child in question has behaved over the years.

The khral-pa families hold the rest of the land and own most of the livestock outside of the monastery's flocks and herds. Less feudal lords and more bureaucratic administrators, the khral-pa families bear the tax burden for the town, payable to the rdzong, or district. As Dhankar currently has no district beyond itself, the tax moneys that would normally be collected by the rdzong dpon, the District Commissioner, each year are being held in trust, with the expectation that the funds will be used to help bring another town from Earth to the Gruv at some point, thus creating a district. Each khral-pa family holds mi-bo and du-jung families, being responsible for the tax burden of the serfs and directing their labor. The mi-bo families lease their freedom from their khral-pa, generally paying in kind or in a quota of labor, earning the right to work for anyone they choose and to set their own price for their labor once the rent is paid. The du-jung families remain in serfdom, with their labor directed by their khral-pa. In turn, the khral-pa holds responsibility for the well-being and taxes of the du-jung, with the debts owed to Heaven and the district respectively. A khral-pa family that does not tend properly to its du-jung may be brought to account by the rdzong dpon or the lamas for default on either a secular or religious obligation.

Currently, Dhankar primarily consists of brightly dyed yak-wool tents and woven-wood livestock pens, the inhabitants living in much the same way as their ancestors two hundred years previously. Wooden and stone construction is under way for a defensive wall around the town, homes (starting with the khral-pa families and working their way down to the mi-bo and du-jung families), barns, and a monastery. The people of Dhankar have lived relatively isolated from the rest of the world for centuries, their original home being in a remote area and accessible only by narrow pathways through the mountains. While some of them are having a bit of trouble adjusting to being even further isolated, cut off even from the annual tax collection visit of the rdzong dpon, the change simply isn't great enough to cause serious problems. More pressing are the dangers of the Gruv, although being so far up in the mountains, Dhankar does not lie within the territory of

the larger carnivorous animals. The khral-pa family elders know that the lamas know more than they have let on, but have not pressed them on the subject. Tibetan Buddhism follows an esoteric tradition, in which knowledge is not revealed to someone who is not yet ready for it. The elders are accustomed to the lamas keeping secrets, and thus far have decided to follow their spiritual leaders' guidance and not ask questions. All will be revealed when it is time.

As a side note: Tibetans do not attach their family name to their personal names. The people below are listed by personal name only, those names in some cases having two parts. Only the head of a family can be addressed by the family name, so calling a young man of the Lobsang family "Mr. Lobsang" would be inappropriate, and would result in the young man quickly denying being such a person and directing the speaker to his patriarch.

Lama: Norgay Tempa

Sixty-five years ago, Norgay Tempa was born into a du-jung family in a distant village. Always in the wrong place at the wrong time, wondering about the deeper subjects of life when he should have been paying attention to the goats, Norgay Tempa finally found a place among the monks. Once he passed his novice years, the high lama of the monastery sent him off to north India, where nobody would know him and remind him that once he was Wrong-Way Norgay, the absent-minded shepherd. As a guru, or enlightened spiritual leader, Norgay Tempa has done well, his mind turning ever inward and delving into the deeper truths of reality. However, his students must make sure that he remembers to eat, and walk with him so that he does not fall down the stairs while contemplating a subtle point of logic. Norgay Tempa has read the Kapsho Terma. He will not discuss it with anyone who does not already know of its existence, but would really like to compare ideas as to some of the more obscure points within it.

Tagtsher, Khral-pa Dpon Po

(patriarch of a khral-pa family)

Broad shouldered, of average height for a man of Tibetan stock, Tagtsher's hair retains little of its original coal-black among the grey, but his eyes are still bright and clear and his grin ready. As patriarch, or dpon po, of the Sadutsang khral-pa family, Tagtsher holds primary responsibility for the payment of taxes, the administration of labor, and the well-being of his family and the mi-bo and du-jung families of his estate. While the land itself, and the great house and barns and so forth on it, was sold to pay for bringing everyone to the Gruv, Tagtsher's family still hold their position and titles, and with them the obligations to the rdzong and to the town. They brought a considerable amount of material wealth to the Gruv, in livestock, tools, seed, and gold, and hold claim to about a sixth of the land in Dhankar, the other two khral-pa families holding the other two sixths, and the monastery the remaining half. Along with that land come a third of the mi-bo families (the monastery has no mi-bo relationships) and a sixth of the du-jung. Since the migration, though, Tagtsher has become less reliable. He often seems distracted, as if hearing something audible only to himself. He hesitates at decisions, always wanting to know more about the situation and having trouble moving forward. He's become sharp-tongued and devious, setting family members against each other to keep them from interfering with his own plans. If someone else doesn't sort this out soon, the lamas will have to take notice, and that will make the issue public in a very large way.

Adventure Hook: Raining on His Parade

Tagtsher has withdrawn into himself, under a black cloud of depression. He shows no interest in his family or his responsibilities, and won't even tend to his basic physical needs unless someone makes him. The town's physician and the lamas have examined him and found no ready explanation for his behavioral changes. The lamas suspect some outside influence, possibly something native to the Gruv, but do not know enough about the New World. They sent to Fort Alice for assistance, quietly, expressing the issue as a medical one. In response, a small team is being sent out to Dhankar, for scientific investigation of the problem. If it's caused by something native to the Gruv, it could affect other settlements. The example of splithee has been discussed. The team has been asked to sort out Tagtsher's problem, but also to find out if it's part of something larger, and to report back to Fort Alice forthwith.

Shepherdess and Animal Healer: Pema Dolkar

A large woman in both body and personality, Pema Dolkar was born into a mi-bo family in serfdom to the Sadutsang family. Starting out in her preteen years as a goat herder, Pema Dolkar showed great promise in handling animals in general, and an interest in treating their illnesses and injuries. She now serves as primary animal healer for the Sadutsang herds and flocks, her own daughters doing the herb gardening and prep work for the salves, ointments, poultices, and extracts she uses to keep the livestock healthy. As a mi-bo, she hires out to the other two khral-pa families on an as-needed basis, taking care of sick or injured animals in their herds and flocks, midwifing the occasional difficult birth, and doing preventative work, such as the monthly anti-parasite treatments. Pema Dolkar still spends at least one day a week tending a flock or herd herself, partly to keep her hand in, partly so that she can observe the animals directly while giving another shepherd a day of rest or family time, and partly as a means of religious self-discipline, doing the humble work necessary to keep the town functioning. This also gives her a chance to get out and get some exercise. Marriage and multiple pregnancies have resulted in considerable weight gain. Pema Dolkar complains often about being twice the woman she used to be, but nobody has seen her skip a meal.

Dyer: Kukula

Kukula's family, du-jung in serfdom to the monastery, grow and process the orange and red dyes needed for the monks' robes, and apply them to the fabrics turned out by the monastery's weavers. They can all be easily recognized by the permanent orange and red stains, mostly concentrated on their hands, but scattered here and there wherever the dye splashed. Kukula, a young woman not quite yet ready for marriage, lives with her parents, and attends the monastery's classes in the early morning. She carries her bowl of porridge with her to eat during the lesson as many of the students do, having not had time for their own morning meal after preparing food for their family. A few months before the Migration, Kukula began asking a few more questions of the teachers, politely and with all proper reverence, but pushing forward into territory the rest of the students just didn't seem quite ready for. The monks have considered approaching her family and asking if they would like to submit her for candidacy as a nun, as her mind seems to be reaching for deeper truths. Thus far, the process has not yet started, and only Kukula could say whether she would put herself forward for such a position, but unspoken expectations are rising around her. Kukula, meanwhile, continues

diligently tending the dye gardens, working the extraction press, and asking the occasional question that's just a little past where the lesson was planned to go.

Fultingham

Type: Civilian
Form of Law: Civilian tribunal, English common law
Population: Town
Astral Rating: Tainted

East of Fort Alice and south of Camp Burlington and the Ancient Ruins, the town of Fultingham would be typical of British settlements in the Gruv except for one thing: overpopulation. Not due to bad planning on the part of the settlers, or a boom in the nursery, or some jack-in-office deciding the town could use another two trainloads of people, Fultingham's woes lie at the feet of the saints of agriculture and charity, one of whom reached out when the other failed.

Six months ago, the nearby settlement of Peltingsford found itself in desperate straits. The terrestrial crops they'd brought along, that had been doing so well, suddenly fell over and died. The entire lot, from beans to marrows to barley, all came down with some sort of wilt or root-rot or nutritional deficiency. Abruptly, Peltingsford found a new guest at the dinner table: Famine. The Potato Blight wasn't all that long ago. Some of the older settlers could readily remember the emaciated Irish and Scots flooding into southern England, desperate for even the tiniest scrap of food. A message sent off to Fort Alice brought the same type of sluggardly response seen two decades previous. Oh yes, we'll see what we can do, relief supplies, redistribution of population, kindly wait while the machinery of government lurches into action. An air of quiet desperation settled onto Peltingsford as rations were reduced, stores counted and recounted, and the hard reality that the settlement had failed began to be confronted.

The people of Fultingham, who had not experienced the blight, and whose crops had in fact done quite well up to that point, reached a decision. Christian charity demanded that they open their homes to Peltingsford. Convoys of wagons started up, bringing to Fultingham not only the settlers, but everything that could be readily carried – tools, household goods, and any supplies that were still under seal. Peltingsford's fields were burned, the remaining seed tossed into the flames, and everything brought to Fultingham wiped down with Javel water or carbolic acid to prevent the spread of any infection. The tents that Fultingham's people had resided in when they first arrived were set back up, along with those from Peltingsford that hadn't been salvaged for their canvas and rope. A somewhat meager Christmas was held, supplies stretched too thin for a proper dinner to be had, but the people of the conjoined towns made it through to spring.

And still relief from the government had not arrived. Oh, yes, a team of inspectors came out and had a look at things, took some soil samples from Peltingsford's fields, approved heartily of the heavy use of disinfectants in the relocation, and toddled off to file their report. A few crates of surplused military rations came in on the train, but not nearly enough. Fultingham settled in for the long haul. The tent city began to fade away, a tent here and there replaced with a new house or a pub or a shop. The palisade wall was extended to wrap around the doubled territory of the town. The refugees incorporated themselves a bit more into society, into the work force, into the government. New fields were plowed and sown, but only so much could be done. Fultingham only had so much seed set aside from its first year crops. Obtaining more took ready cash, and there just wasn't anything to sell that wasn't already in use in the overcrowded town.

Adventure Hook: Ants In Pints

Galvanants, like many other ant species, occasionally spawn new queens, which take to the air in a cloud of drones and winged workers, looking for a place to establish a new nest. A swarm of galvanants took up residence in MacArthur's Pub last week. The usual procedure for getting them out involves dousing the nest with kerosene or carbolic acid, risky enough in a wooden building, but MacArthur's is in the tent part of the town, a large storage tent converted to a bar by a few enterprising men. Painted in fancy colors and made of canvas, it's already a fire hazard, to the point where MacArthur himself had to ban smoking in the pub and put aside his own pipe. Using flammable chemicals against ants that can release static electricity is right out as a means of resolving the situation. Someone, and MacArthur doesn't remember who, suggested magnetism as a possible solution. Magnetism and electricity are related, aren't they? Maybe this adventurer team that just came into town might know something about that. Can't promise any coin, but we can pay you in beer, and you'd be saving a pub and that's a worthy cause in and of itself, isn't it?

Fultingham today totters along as best it can. Its people, still not quite unified, some still living in tents, try to get through the day without tripping over each other and getting on each other's nerves in the tight quarters. The town council, nearly doubled in size, tries to figure out where the food will come from, how more seed can be brought in, and how many people can be spared from agricultural duties to go back to the remains of Peltingsford to salvage it for building materials. Wood and stone can be doused with carbolic acid, after all, and bringing planks and ashlars from the failed town would take less effort than cutting new. Somewhere, the paperwork that would bring relief to the town lies buried on some minor bureaucrat's desk, and maybe, someday, it will rise to the top of the stack and finally be acted upon. Until then, the people of Fultingham will keep a stiff upper lip, and do their best to not let the side down. Hanging on in quiet desperation is the English way, after all.

Adventure Hook: A Wild Unorthodox Wrong'un

To keep the children amused, cricket teams have been organized. During a practice out at the edge of the fields, the intent being to keep the children out from underfoot in the overcrowded town, a bad bowl sent the ball off into the woods, and into an area designated as sacred by a nearby Saurid tribe. One of the children dashed in and retrieved the ball. This wouldn't have been a problem except for two things. First, the boy kicked over a standing stone. Whether this was accidental or on purpose has not been determined. Second, a Saurid girl, in training to become a shaman, and who was sitting vigil in the sacred space, saw the event and reported it to her matriarch. The Saurid tribe has demanded that the boy participate in a cleansing ceremony, to restore the sacred space. The people of Fultingham aren't enthused at all about the Saurids' demands that the boy atone for the trespass. They're not about to have one of their children take part in some heathen native ceremony. In their defense, the Saurids didn't do a good job of explaining the situation in the first place, being upset and aggressive over the violation. Someone neutral needs to come in and mediate before this gets out of hand.

Barrister: Isidore Peppercorn, Esquire

Perpetually overworked and harassed, Mr. Peppercorn came to the Gruv with the expectation of drawing up contracts for new businesses, making wills, and handling the sort of quiet paperwork that fills the pockets of practitioners of the law with a minimum of fuss. Instead, he's in court at least twice a week, and on the train to Fort Alice for its court fortnightly, dealing with the repercussions from the Peltingsford failure. Some of it relates to property, and insurance, and guarantees of financing, but half at least results from frayed tempers and desperation. In the past few months, Mr. Peppercorn has learned more about criminal law than he had to revise for admittance to Her Majesty's Bar. Back in law school, he specialized in property law, and stood for the bar with the intent of representing clients in Chancery. Instead, he stands up for clients charged with assault, or property damage, or public drunkenness, or any of the dozens of charges that are applied to men (and shamefully enough women too) who have lost everything but their self respect, and that only because there's no market for it at pawn. The only reason he hasn't turned to drink is his clientele – not that they need him sober, but that he's seen what trouble they get into when under the influence. Mr. Peppercorn dreams of an appearance before the High Court in London, where the Peltingsford debacle could be resolved with a single judicial decision, leaving the sorting out to the clerks and letting the barristers go back to validating real estate transactions.

Airship Pilot: Catreen Sprackling

A fiercely independent woman in her mid thirties, Cat left her position as a draftsman and absconded to the Confederacy ten years ago to take up aviation as a career. Working her way quickly up from groundsman to mechanic to pilot, she flew for Chalmers and Hedge, a Confederate export firm, until a telegram arrived from her parents telling her they'd signed up to emigrate to the Gruv. Cat resigned her position, took the first available fast packet to England, and joined them in this grand new adventure. She brought along her own airship, the *Barbara Beasely*, a small craft capable of carrying three passengers and a limited amount of cargo, purchased with the bounties from a series of dangerous missions that she won't discuss. Cat suffers from occasional bouts of vertigo since a minor crack-up five months ago. Her airship was easy to repair, having suffered only a small amount of damage, but the knock on the head left Cat with an ongoing problem. She does her best to hide it, as her airship is not only one of the vital supply links back to Fort Alice, but also a source of revenue, taking explorers and adventurers out for a look at the wilds beyond Fultingham.

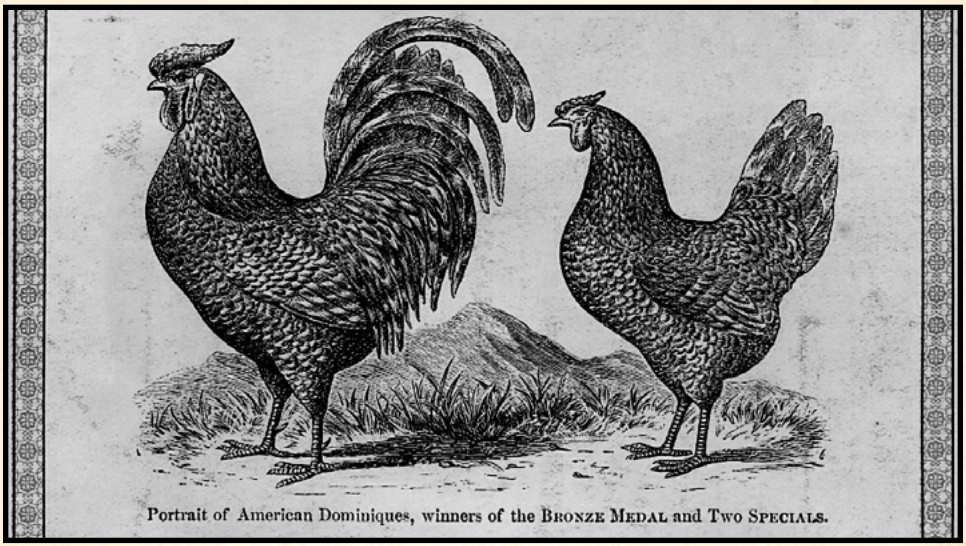
Former Mayor, Peltingsford: Barnard Clemas

Mr. Clemas blames himself. He's not a farmer. He doesn't know much about plants, although he knows a great deal more now than he did when Peltingsford came to an end. He's learned more about livestock, and land management, and everything he can find a book on or someone to tell him about that could possibly apply to colonization. He's spoken with other Boojums, to find out if his elven transformation subsequent to his passage through the Rabbit Hole might have had something to do with the failure of his colony. It doesn't matter if he wasn't directly responsible for it, if he didn't set the blight loose in the fields himself. He was in charge, was the mayor, was responsible. Ultimately, the success or failure of Peltingsford was in his hands, and he failed. His wife Clarissa has tried to get him to see reason, to make him understand that he needs to let go, to end his hubris and allow for the hand of the Almighty in the events that transpired, but to no avail. Mr. Clemas spends his days toiling in the fields, as if trying to expiate his guilt through sweat, and his nights studying, sure that somewhere in the accumulated knowledge of Fultingham is the answer he

seeks. If not, he'll move on to Fort Alice, and back to London if need be, but the question must be answered: why did Peltingsford fail? What could he have done to save his town?

Childrens' Welfare Worker: Naomi Sisson

Earnest, young, and devout, Miss Sisson is fanatically devoted to making sure that the children of Fultingham, and especially those formerly of Peltingsford, are fed and clothed and housed and sung to. She gathers worn-out clothing and sews it into new outfits. She helps out in the soup kitchens (where most of the settlers eat, in order to make sure that everyone gets a share of what's available). She visits every tent in the refugee section in turn, night after night, seeing to it that the children are getting on as best as possible. Miss Sisson means well, but she gets on people's nerves sometimes being so determinedly helpful. She knows every last bit of dirty laundry in the households she visits – she's neither naïve nor stupid – but would really rather not speak of it. Perhaps if the situation were to take a better turn, and she didn't feel quite so necessary in everyone else's lives, she could pay a bit of attention to her own. Several parents have remarked on her facility with a pencil or bit of colored chalk, drawing pictures to amuse their children. Maybe she might someday have a career in art.



Portrait of American Dominiques, winners of the Bronze Medal and Two Specials.

South: The Darlington Mountains

The *Darlington Mountains* stretch across the southern part of the Gruv, dividing the central plans from the southern coast and scrublands. Mount Somerville, the highest peak in the Gruv, rises in the eastern part of the range. Camp Burlington, at its foot, is included in the *Fort Alice and Environs* section because of its proximity and relationship to Fort Alice. The habitations described in this section are all in the mountains proper, or at least in the foothills, and on the northern side for the most part.

All Saints Labor Settlement

Type: Workhouse
Form of Law: Civilian tribunal, English common law
Population: Village
Astral Rating: Open

The collapse of the paper industry and the explosion of the powder works in 1868 left the Surrey district with no real industry to speak of, and the expansion of London into Surrey County necessitated a clearance of the region. The slums would prove a larger problem, but relocating the workhouse population to the Gruv took care of a substantial part of the effort required. St. Mary Magdalen in Bermondsey, St. Giles, St. Mary in Lambeth, St. Mary in Newington, St. Mary in Rotherhithe, St. George the Martyr, St. Olave, St Saviour's, and Clapham workhouses were shut down, their able-bodied residents packed onto trains departing for the Rabbit Hole. Wandsworth workhouse remained open, taking in all those found unsuitable for relocation due to age, infirmity, or other disqualifying conditions. All Saints, taking its name from the preponderance of patrons in the source district, established itself with an initial complement of twelve hundred workhouse residents, and another one hundred and eighty administrators, guards, skilled tradesmen, medical professionals, and other support staff. Following the same basic plan as all other workhouse settlements, All Saints put up barracks for the workhouse inmates, a palisade wall with guard towers, a central administration building, small houses for the non-workhouse residents, and a few additional buildings for workshops, storage, and the medical clinic.

The monthly fever began just as the last inmates were moving out of tents and under proper wooden roofs. Eighteen people came down with a high fever, chills, delirium, and tremors, overloading the just-opened clinic and requiring a makeshift hospital to be set up in one of the storage buildings. Three of the patients, a young woman, an older man, and a child barely old enough to walk, died in the first two days. The rest recovered, although six of them were debilitated for another three weeks after their fever broke, with fatigue, nausea, and body aches. The remaining nine were up and about in three days' time as if nothing had happened. Other than their all being workhouse inmates residing in the same barracks, no connection was found among them and no cause was determined.

Ever since then, every thirty days, more or less, the fever breaks out again. Each time, a cluster of fifteen to twenty people come down with it, related by home location, workplace, or social connection. No person outside of the connection group comes down ill. Of the afflicted, one or two, and very rarely three, die within two days' time. A handful of others suffer long term debilitation. The rest recover within three days. The medical staff is in an uproar over this, as there doesn't seem to be a commonality among the groups. Doctors from Her Majesty's Grosvenor Colonial Corps have been brought in, to no avail. They've looked at diet, water supply, rats and their fleas, everything they can think of. No physical changes occur, so Looking Glass Fever has been excluded. Someone even brought up the old discredited miasma theory, in a fit of desperation. The population is in a state of near panic.

Adventure Hook: A Growing Problem

As if the fever wasn't bad enough, now some of the buildings have trees growing up through the floors. Overnight. None of the barracks or homes have been affected, nor any building that is occupied overnight. Half a dozen times, however, when the doors to a storage building or workshop left vacant during the night are opened the next morning, a sapling has been found, erupting through the floorboards and brushing the ceiling. Thus far, no damage has occurred that couldn't be readily repaired, with the exception of a tray of glass jars that was overturned, but the strangeness of the situation is unnerving. From the evidence, the trees are not only growing overnight, but abruptly, quickly enough that their rising branches fling aside obstacles in their path.

Senior Physician: Jailekha Rajagopalan, MBBS, MD

Dr. Rajagopalan graduated from the Ecole de Médicine de Pondichéry, which has been training women in medicine since it opened in 1823. Once she achieved her post-graduate MD, she worked as a rural physician for several years in the Puducherry region, but made little headway due to conflicts with the regional administration. During one of the brief times the British took possession of the region from the French, they recruited her as a general practitioner, offering her better resources to see to the needs of the Indian population in British-held territory. When the Mahana Pravasa, the great migration to the Gruv, began, Dr. Rajagopalan saw a need for physicians to attend to the colonists, and made the trip to the Gruv. A recent bout of the monthly fever left All Saints' previous doctor badly weakened and unable to continue his practice. Dr. Rajagopalan was the first physician willing to travel to All Saints, although she was the seventh asked. Quiet, determined, formal and polite to a fault, Dr. Rajagopalan has dealt with tropical disease epidemics, nutritional deficiencies, and raging infections, and is not going to be put off or defeated by a fever that doesn't appear to be communicable. She speaks with a noticeable French accent, a legacy of her having learned English during the French occupation.

Adventure Hook: Footprints in the Night

When All Saints was still a collection of tents and the palisade wall not even halfway done, massive footprints were found in the encampment, as if something vaguely human but with a five-foot pace and requiring a size twenty-two boot had prowled about, with specific interest in the supply tents. At the time, the footprints were ignored as a prank, the administration knowing that carving wooden feet and leaving strange footprints was a well-known jape. Nothing had been taken or disturbed, after all, and there were more important things to do than look into a practical joke. The footprints have resurfaced. Three times recently, a trail has led out of the woods, up to the palisade wall, then resumed on the other side with deep prints as if the creature had leapt over. The prints prowl about the clinic, the fever ward, and the food storage buildings, then go back to the wall, over it, and off into the woods once more. Captain Kenway has tried to keep the incidents quiet, ordering the footprints to be erased upon discovery, but rumors are spreading. Most worrisome is that each incident has happened four nights before the onset of the next wave of the fever.

Workhouse District Nurse: Oriella Fielding

Nurse Fielding suffers from agoraphobia, which she hadn't realized in her native Manchester, or in London, surrounded by large buildings and enclosed by city streets. When she first glanced out the window of a railway carriage leaving Fort Alice, though, and saw the broad, open plains of the Gruv, panic overtook her and she fainted. She spent the remainder of the rail trip in a baggage car, so that she could not see the terrifying distance outside. Getting from the last rail depot to the All Saints tent camp in a horse-drawn wagon required regular sips of laudanum. Even now, she cannot bring herself to set foot outside of the fort wall, nor to go out of doors at night except in an emergency. The sky has too many stars. Within the palisade wall, Nurse Fielding has done her best to make herself useful, apologizing profusely for her weakness whenever it interferes with her duties. Along with several of the other medical staff, she came down with the monthly fever not long ago, but was one of the lucky ones who recovered without any lingering effects. Dr. Rajagopalan has taken one too many blood samples for the nurse's comfort, and she flinches whenever the doctor picks up a syringe.

Resident Block Representative: Cynvelyn Shone

The last survivor of a large Welsh coal-mining family that migrated to London in search of jobs just in time to run into a cholera epidemic, Cynvelyn made his living as a rotary press operator until the Surrey paper industry fell victim to cheaper manufacturing elsewhere. The printing industry followed the paper manufacturers out of the region, leaving most of their lower-ranking employees behind. Cynvelyn ended up in the St. Giles workhouse. He remains bitter about not being able to work in his proper trade, but at twenty-three, has enough of his life remaining that he can learn a new one. Through hard work and determination, he's risen to gang boss of a carpentry team, putting up buildings in the settlement, and is learning cabinetmaking in his off hours. A few months ago, Cynvelyn stood for election for representative of his barracks block, and won against two older candidates. While his primary concern is better housing, especially for barracks residents who want to marry, the fever has to be dealt with as well. Cynvelyn has no real working knowledge of medicine, which is hampering his efforts to bring news to his block, but finding both the time and the source to learn the basics has proven difficult. Between his frustration and his youth, sometimes his temper gets the better of him.

Captain of the Guard: Harding Kenway

One might have expected someone as well-read as Captain Kenway to hold a commission in Her Majesty's service instead of running a private watchman's firm. His knowledge of history, especially that of the military, is extensive. In his spare time, he paints landscapes. His random reshuffling of patrol assignments annoys the men under his command, but has kept the guards from growing complacent, which in turn has prevented several potential disasters since All Saints was founded. Hired to provide security for the workhouse district back in Surrey, after his firm, only a few years old, made headlines foiling a string of attempted burglaries, Captain Kenway brought the larger part of his men to the Gruv with the workhouse migration, commanding the division personally. What no one in All Saints, or back in Surrey, knows, is that Captain Kenway was cashiered from Her Majesty's service under the name of Alistair Whatman, after his affair with a fellow junior officer was brought to light. He has kept a very careful distance between himself and everyone else ever since, his lack of interest in feminine companionship earning him the nickname "Father Kenway".

Ganshakar

Type: Civilian
Form of Law: Civilian religious tribunal, Sharia law
Population: Village
Astral Rating: Open

Having a well-funded Sufi order to cover the expense allowed the people who founded Ganjshakar to join the Mahana Pravasa. Respecting the requirements of the order took them far away from Fort Alice, deep into the wilderness of the southern ridge. Ganjshakar has no plans to bring rails to their community, and can be reached only by a long climb up a steep road barely worthy of the name.

The Muslims of the Chishti Sufi order are known for being open and accepting of seekers from other faiths, following the pillars of Islam strictly, not bowing to secular authorities, expressing devotion through music, and intensive meditation. While only a small part of the community are actually members of the order, they have a labor rotation that allows each adult member time once a year for cilla, spending forty days in solitary meditation and prayer. All work throughout the community stops five times a day for prayer, everyone laying aside their tools at the call of the muezzin.

Adventure Hook: Old Bones

In the process of digging a new aqueduct from a nearby stream to the village, a deposit of reptilian-appearing bones was found. Abu Jaid Hanbal, the mathematician, went out to the site to estimate age based on how deep they were buried, and realized that while the soil layer they were found in was from thousands of years ago, the bones themselves were not nearly so old. Further investigation showed that the village had chanced upon an ancient and long abandoned Saurid graveyard. Now someone must contact the closest Saurids, who are not of a friendly tribe, apologize for disturbing the remains of their ancestors, and find out if the graveyard can be relocated, or if the aqueduct must be re-routed. Religious law demands treating the remains of the dead with respect, but the village needs the added capacity for its water supply.

As far up the ridge as Ganjshakar is, the likelihood of a Saurid or Samsut attack is virtually nil. The settlement has no perimeter wall. Residents live either in drystone buildings or in tents, both elaborately painted with verses from the Q'uran, animals, and nature scenes. A grand ceremony is held each time a new house is finished, and another family can fold their tent and move underneath a more permanent roof. The community as a whole resembles hundreds of other villages throughout the Middle East and western India, following a style of living reaching back for hundreds of years, with one notable exception: their religious practices. The days are spent building, farming, tending the livestock, and keeping watch for hostile animals. The evening devotionals, held out in the village's central plaza when the weather is good or in the mosque when not, resemble a concert more than a church service.

The Chishti follow the qawwali tradition of Islamic music, expressing their faith through complex songs. The evening opens with an instrumental piece invoking the saints of the Sufi

movement. A hymn of praise to God follows, then a song of praise to the Prophet Mohammed, then a series of songs praising the various saints. Eight or nine musicians perform as a group, called a humnawa, all men as women are forbidden from singing in the presence of men. They employ a variety of instruments and drums, including the tabla and dholak, familiar to anyone who has spent time in India; the sarangi, which carries the melody; and additional instruments, such as the sitar and the santoor, as the various songs require. The congregation claps along, and the men often join the chorus. The entire performance can run anywhere from half an hour to nearly two hours, although the lengthier works are reserved for special occasions.

Adventure Hook: Gang Micro-Warfare

The village's children divided up into rival gangs several weeks ago, getting into all sorts of trouble and holding mock wars with each other. Some amount of strife is expected, but the children seem a little more organized than the usual and determined to do each other serious harm. Thus far, only a few scrapes and bloody noses have resulted, but their parents are worried. The imam has tried counseling the children, but they nod solemnly and then go right back to what they were doing. As the adventuring party arrives at the village, one of the gangs attacks with improvised projectile weapons and rotten fruit. Are they firing on the party, or is the party caught in a crossfire with the rival gang? What is driving the children of the village to violence?

Ganjshakar has a small Boojum community, mostly consisting of Boojums who have moved to Ganjshakar because of the Chishti's open and accepting ways. The Chishti do not question the wisdom of God, or the forms God chooses to give to His creations. They will take in anyone who is willing to work hard to build the community, no matter the shape they wear. While the Sufis are not evangelical, word of this has reached some parts of the Gruv more readily than others. A Boojum who finds themselves unwanted in their present location may hear of a better place for those willing to accept Mohammed as the final prophet of God.

Imam: Abu Fawzi Nagib bin Nadeed Chishtiyyun

Not the easiest person to get along with, Imam Nagib embodies much of the stereotype of the prickly desert dweller, the tough old bird who has survived out in the harsh wilderness and has no time for your nonsense. Being the spiritual leader of a settlement that includes a Sufi order known for their strict interpretation of the Q'uran and hadeeth requires him to take a strong, uncompromising approach to his faith and his life, and to counsel the faithful to do likewise. He regards the Gruv as a gift from God, not only a new land and all of the opportunity that represents, but a land that changes people, often for the better. The imam himself changed shortly after he arrived, a bout of Looking Glass Fever leaving him taller, leaner, and decidedly more youthful. He can see in the dark like a cat, and hear sounds far above the range of human ears, his own being elongated and a bit pointy. His inability to digest meat he regards as a trifling problem. The people of Ganjshakar keep a vegetarian diet through most of the week, only slaughtering an animal for food on Friday so that they can celebrate the Sabbath with a larger and more elaborate meal. The imam simply avoids the biryani. Besides being the community's spiritual leader, he plays tablas with the qawwali humnawa, and works on one of the construction teams as a carpenter.

Qawwal: Abu Zaim Dabir bin Khalil Kasuriyyun

In Arabic, a qaul is a saying of the Prophet, and a qawwal is one who sings a qaul. Abu Zaim has the honor of being lead vocalist for Ganjshakar's humnawa. He organizes the Friday night sabbath celebration, gets the musicians together for rehearsal during the week, and consults with the imam on possible new music for the services, some of which he writes and some of which is adapted from other Sufi traditions. He also serves as muezzin for the community, five times a day ascending the two-story tower attached to the village's mosque to give the call to prayer. In between times, he maintains the village library, a small collection in a room at the back of the mosque, spending his time there answering questions, looking up the answers he doesn't know, recopying the old books and scrolls the settlers brought with them, and practicing the santoor. Besides leading the humnawa, Abu Zaim coaches the children's cricket team. Someday, Ganjshakar may have neighbors close enough for a match. Until then, the children divide up and play against each other.

Construction Foreman: Sceafa Myhill

Originally an iron smelter from Coalbrookdale in Shropshire, Sceafa left Fort Alice and moved to Ganjshakar after Looking Glass Fever turned him into a troll. He stands eight feet tall, has horns like a ram and tusks like a boar, and disdains shoes partly due to the bony deposits in his skin making them superfluous and partly because it would take an entire goat to make one boot for him. Given that the Anglican Church, or at least its representatives in Fort Alice, didn't have any of the answers he was looking for, his conversion to a faith that told him he still had a soul posed no problems – for him, anyway. His wife, Rivanon, still practices Anglican Christianity, with a few other people who, like her, came along to Ganjshakar with spouses or close family members. The imam shrugs, says that they are People of the Book, and leaves them alone. Sceafa and Rivanon have not yet come to an agreement as to which faith their two children should practice, but given that Sisilia is four and Derog is two, they've got time to work that out. They've had enough to deal with already, explaining to the children why Da doesn't look the same any more and why they've moved so far from what was supposed to have been their new home. Sceafa, meanwhile, has at least found a measure of peace, working with a construction team that appreciates his massive strength and whose members invite him and his family round for dinner at least once a week.

Herbalist: Umm Jaida Bahija bint Rabiah Kasuriyya

As the village herbalist, Umm Jaida holds a position similar to that of the high street chemist, a provider of medicines and personal care products. She grows and gathers her own supplies with the assistance of her daughters, does her own extractions and mixes her own compounds, and occasionally enlists help from other women for soapmaking and similar large-scale operations. Her workshop was the third one built, after the village kitchen and the carpenters' workshop. The front room serves as a combination of storefront, clinic, and preparation area, in an arrangement familiar to anyone who has ever visited an apothecary. There's only so many ways to arrange the tools of the trade, after all. The back room holds the larger equipment, where essential oils are distilled and other work too delicate or odorous for the front is done. It doubles as supply storage, with rows of shelves and cabinets. A wooden stairway out the back door leads up to the apartment that she shares with her husband, Abu Jaida Hanbal bin Shukri Kasuriyya (they have no sons), a mathematician who serves as the village's surveyor and architect, and their young daughters, Jaida bint Bahija and Mariyah bint Bahija. Umm Jaida does not give out her Ism, or personal name, preferring to be addressed by her Kunya, or parental honorific, partly for modesty but partly because magic has

obviously returned to the world, and knowing a name gives power. She also answers to her pre-marriage nickname of Sabina, meaning "clever".

Torgau Freistadt

Type: Civilian/Industrial
Form of Law: Administrative tribunal, Prussian law
Population: Town
Astral Rating: Open

If one wanted an example of how Prussians run on beer and clocks, one need only visit Torgau Freistadt. The Prussian government established its first settlement in the Gruv with the intent of having their own source of ironwork, locomotives, dressed stone, and so forth. With over three thousand people in its initial population, the settlement rapidly developed mining and heavy industry efforts, in less than a year going from orderly rows of identical tents to orderly rows of identical houses with a coal and iron mine at one end and a foundry at the other. Neatly terraced fields surround the town on both the up and down slope of the ridge, with crops and goats flourishing. Steam whistles sound throughout the day, announcing the opening and closing of the town gates at sunrise and sunset, the beginning and ending of work shifts at the mine and the foundry, the opening and closing of the stubes, and the hourly whistle from the steam clock next to the town hall site, which eventually will be in the hall's tower. There remains a vast amount of work to be done – the town hall is little more than an overgrown gazebo at present, the barns are slapdash ridgepole affairs, and the streets are mostly unpaved, but the brewery makes enough beer to keep both the stubes supplied. The Prussians work hard, but also play hard. Everyone goes to Der Lachende Adler or Die Volle Kanne after work, for beer, music, and social time. (There is no rivalry. People who live on the east side of the town hall go to Der Lachende Adler, people on the west side go to Die Volle Kanne. There's no rule or law about which stube people attend, but just like in Britain, people tend to go to their neighborhood pub rather than the one across town.)

No bells are heard. The town has no churches. Its people gave up organized religion years ago as a waste of time and effort. If God approves of their work, that will be enough. If God does not approve of their work, building a fancy hall and singing songs in it once a week will not change His mind. Anyone coming to Torgau Freistadt is welcome, of course, to spend their sabbath, whatever day of the week it falls upon, however they like, as long as their labor and social commitments are met. The one sin Prussians find unforgivable is failure to do one's part.

Adventure Hook: A Train Wreck Looking For A Place To Happen

A hostile force has launched a diversionary raid, a smash and grab or something similar intended to cause the local defenses to send for reinforcements. Fifty miles away, a raiding party has cut the telegraph lines at the switch point, and left a couple of freight cars on the track, loaded with explosives. They've smashed the signal lamps and poured out the paraffin so that the military train, bringing reinforcements, can't be warned, and will slam into the explosive-laden freight cars. Somehow, the train has to be stopped or the track cleared.

Visitors to the town should be prepared to spend their nights in a tent, unless they have friends who can put them up in their home. Torgau Freistadt has no inn, guesthouse, or other facility for housing transient civilian population. The police and military barracks can accommodate several platoons of visiting troops if need be, and officers are of course offered shelter in the homes of the town's officials.

Torgau Freistadt's defenses are formidable. The settlers brought in iron fencing from Earth, in sections four feet wide and twelve high. Using the new Prussian oxygen-acetylene torch, the settlers welded the fencing sections into a perimeter wall in three weeks. Anchored at the base by poured concrete, and topped with integral spikes, the iron wall has withstood assaults by some of the larger denizens of the wild. Steam cannon and electrical lances at the corner towers provide further incentive for would-be attackers to find an easier target.

Adventure Hook: A Bolt of Inspiration

Within the last two weeks, a series of strange incidents have occurred involving the town's electrical lances. These massive devices throw lightning bolts, which have a short range but can quickly switch targets, and thus are a key part of the town's defense. Four of the cannoneers, when performing the required tests of their lances on beginning their shift, have been struck by a discharge coming back up through the control panel. Three died. The fourth was in a coma for two days. On awakening, he showed substantially increased intelligence and learning capacity. He has been placed on detached duty from the artillery while the phenomenon is studied, and his new abilities are fully determined. The artillery engineers are at a loss to explain why the lances backfired, and why this has happened only once with four different lances. The town's doctors are at a loss to explain why surviving electrocution would result in increased brain function, when it normally leaves the victim badly damaged. The cannoneers are reluctant to take their stations, and have requested additional safety gear. The cause of both the lance backfires and the mental boost need to be known, and quickly, as the town must be able to rely upon its defenses.

Stube Keeper, Der Lachende Adler: Kaspar Reinmund Grumel

Reinmund (like many Prussians, he goes by his secular second name) does a great deal more than fill steins with the local beer. He organizes the darts league, supervises the kitchen, leads the occasional sing-along, takes inventory, schedules the menu, does the accounting, and generally runs the stube in both its business affairs and social events. A big, solid man who compensates for having

lost his hair by growing a massive bushy mustache, Reinmund can hoist a full beer barrel into the rack behind the bar by himself, despite having passed fifty on his most recent birthday. His only major frustration at this point in his life is that he's too busy to play with the band, and has gotten badly out of practice with his tuba. Reinmund's wife, Valtraud, works as hostess and supervises the barmaids. At least once a night, she manages to kiss her husband over the bar, and then rings the tip bell to thunderous applause.

Foundry Supervisor: Jakob Horst Hergenrother

A former junior cavalry officer in the Prussian military, Horst retired from his commission after a battlefield injury left him with a prosthetic left leg. He gets around just fine on foot, but can no longer ride a horse. His travels with the military took him far to the East, where he had a second life changing experience. He doesn't discuss it, saying only that it was intensely personal as religious experiences tend to be, but he abandoned the nominal Lutheranism of his youth and took up Buddhism. He maintains a shrine in the back room of his house, and has taught the basics of meditation to the foundry workers on his team. A few minutes of coordinated breathing and mindfulness exercise, and the shift goes more smoothly, the workers more in synch with each other, their minds focused on the task at hand. The foundry management team is considering adopting some form of the exercises for the rest of the shifts. Despite being still a relatively young man, with a good reputation and excellent career prospects, Horst has not married, nor does he seem to have any romantic interests.

Kapitan der Polizei: Maria Diederike Bernhoffer

Diederike Bernhoffer started off as an accountant in the Berlin city planner's office. After several years of increasing responsibility, she transferred to the Office of Domestic Order, which supervised the police, the fire brigades, and the hospitals. When her name was proposed for the captain of police of the first Prussian Gruv settlement, some opposed her appointment due to her having no background in the police department proper. Traditionally, officers rose from within the ranks, bringing with them a street-level knowledge of police work. The captain of police, however, is more of an administrative and strategic position than a tactical one. Dealing with budgets, staff assignments, and civilian relations requires brain, not brawn. As well, Frau Bernhoffer's background at Domestic Order included applying mapping to crime prevention and resolution, a tactic inspired by the success just two decades previously in London of using mapping to locate the source of a cholera outbreak. Frau Bernhoffer has thus far proven adept at keeping the town running smoothly. She had the town site re-surveyed by two teams, one civilian and one military, and coordinated the results. This resulted in several changes to the town's defenses and drainage systems, later credited with holding off invasive creatures that cost other settlements dearly in lives and property damage. Frau Bernhoffer is a stout, matronly woman who dresses conservatively off duty and deplores the flashiness of her uniform. For a Prussian, she is no more than customarily direct, disdaining the social niceties that the English and French spend so much time on and going directly to the matter at hand. She spends much of her spare time with her grandchildren, as her decision to take the position in Torgau Freistadt resulted in the next two generations of her family following her.

Zeitnehmer: Maria Siegfrieda Zoepfl

As a child, Siegfrieda showed a remarkable mechanical aptitude. In less enlightened nations, she might have been chastised for taking apart old clocks instead of holding tea parties with her

dolls. Being Prussian, her parents apprenticed her to a clockmaker. Achieving mastery in her early twenties, Siegfrieda came to the attention of the National Time Bureau, which offered her a position maintaining railroad clocks. A scant five years later, she found herself riding one of the trains through the Rabbit Hole. Still a young woman, just short of thirty, Siegfrieda holds the office of zeitnehmer, or timekeeper, the person responsible for keeping the clocks accurate throughout the town and making sure the whistles sound when they are supposed to. Her home is a signalman's apartment atop the foundry, but she's rarely there. Dressed in workman's trousers, a flannel shirt and a leather vest, with a heavy toolbelt slung round her hips and one of several brightly colored Turkish scarves tied over her hair, she's usually elbow-deep in one or another of the town's clocks or steam engines. It's said that the only time she holds still is right before the hour, when she pulls out her pocket watch, counts down the seconds, and listens for the whistles to make sure they sound in unison. Lately, she's been badgering the town council to get the town hall finished, so that she can move the town hall clock into the proposed tower. The shed where it currently resides was not meant to last more than a few months, and either the council must go ahead and build the tower or rebuild the shed before the clock is damaged by weather.

Far South: The Coast and Scrublands

On the far side of the Darlington Mountains from the central plain lies a region of lowlands, rocky and poorly vegetated, reaching down to the ocean. Some attempts at colonization have been made in this area, although its remoteness creates considerable difficulty in simply reaching the area, never mind establishing supply lines. Habitations on the southern coast tend to be very much independent, cut off from the rest of Grosvenor Land civilization, at least until the rail lines reach them, which may not be for another four or five years.

Kaushaldesa

Type: Civilian
Form of Law: Civilian tribunal, Hindu religious law
Population: Village
Astral Rating: Open

Drawing its initial population from the largely Hindu residents of the North-Western Provinces, Punjab, and Bengal, many of the residents of Kaushaldesa emigrated to the Gruv because of pressure, both political and financial, from the British Raj. The northern and north-eastern regions of India had never quite settled back down after the Sepoy Rebellion of 1857. In order to relieve some of the remaining tensions, the Raj began offering financial incentives to individuals and families willing to emigrate to the Gruv as soon as the new world was opened for colonization. Additional financial incentives were offered to local officials for making sure that known troublemakers were among the migrants, with an implied threat that their term in office might be cut short if there weren't enough potential revolutionaries shipped off to the Gruv. In some cases, the money was divided with the emigrees. In other cases, some of the money was used to buy land, and then force people off it, giving them no choice but to relocate. In a few cases, the local officials warned their friends that the British were onto them, and the friends either took advantage of the migration

opportunity, or disappeared into the jungle or across the border into neighboring countries less friendly to the Empire.

Kaushaldesa started as a small camp, a few families from a farming village in the Punjab, but quickly evolved into a gathering point for displaced Northern Indians. Little attention has been paid by British authorities in the Gruv, their view being that discontented Indians are only a problem in India. Trying to re-import their brand of malaise would require passing back through the Rabbit Hole, and that's simply not going to happen. Thus, the camp on the Agra, not quite really large enough to call a river properly but apparently close enough, has grown into a village, and is edging up toward town status in terms of population count. A few people initially suggested that the settlement could be called Ayodhya, but were dismissed with several arguments. Europeans give new places the names of old places, sometimes tacking the word "new" to the front end as if they were simply making a copy, and you cannot make a copy of a place. Calling the new village Ayodhya would also risk offending the Divine, by claiming that the frontier village in the new world was equal to one of the seven most sacred cities in the old world. Only time and great events and the blessing of the Divine can make a place sacred. However, you can name a person or place in honor of someone or some place that is no longer among the living, in the hope of the virtue of the one that is gone passing to the one receiving the name. Thus, Kaushaldesa, a name no longer used for a city that has become far more than the capital of a long-dead dynasty, could be given in the hopes that the new village would grow to become a great city like its namesake.

As with many Gruv settlements, Kaushaldesa has a perimeter wall, although at present it only stands two to three feet high for much of its length. With few trees in the region, the wall must be made of stone, and even with dry rubble construction, building a wall long enough to go around an entire village will take considerable time. Housing likewise has been slow to construct, with people still mostly living in British military surplus tents, decorated with whatever paint or ribbons or what-have-you they could lay hands to. The foundations have been laid for a temple, and the land sanctified, but the roof and the support beams are all that have been put up yet. Most of the colony's efforts have gone into getting crops into the ground and getting their livestock secured. Given the importance of ahimsa, or universal non-violence, to followers of the Hindu faith, defensive measures such as paddock walls and guard dogs have taken priority, where a British colony would have set lethal traps for predators and perhaps set out guards with rifles.

Adventure Hook: Collapsing New Building

Construction on the temple has been slow lately, and suffered a number of minor setbacks. Scaffolding and temporary supports have given way, resulting in damaged stone and injuries to the workers. Tools have gone missing during the night. The idea that someone in the community might intentionally damage the temple, or steal from its supplies, goes beyond shocking and approaches the unthinkable. Having passed through Fort Alice, the people of Kaushaldesa have heard of gremlins, but are not sure how to go about checking for their presence, much less getting rid of them, if in fact gremlins are the problem. Perhaps someone from outside the community might have ideas on how to approach the situation. Is this human intervention, and, if so, who would interfere with the temple's construction, and why? If it's not human in origin, what is attacking the temple, and why?

The people of Kaushaldesa have a deeper concern, that has created tension throughout the settlement, although many of the people are leaving the issue to the priests and elders. Strange bones were found during excavations for building foundations and root cellars. The priests say that the power of the Divine is stronger in Kaushaldesa than in the surrounding region, but that the results of attempting to channel that power are less predictable, possibly dangerously so. The Saurids of the southern coast avoid the area, and their shamans will not discuss the reason with humans. The leaders of Kaushaldesa are worried that the British will move in and displace them from their new land as casually as they were displaced from their homes in India, because of the potential strategic value. As a result, they're uncooperative with anyone trying to investigate the situation, and with outsiders in general, in the quiet way that people from India tend to use when they don't want to or can't do something but don't want to be rude about it.

Adventure Hook: Deep Voices

Thirteen of the people of Kaushaldesa claim to have heard voices coming from underground. Only these people seem to be able to hear the voices, despite their best efforts to draw the attention of their families and neighbors to the phenomenon. The voices seem to be heard at random times throughout the day and night, and at multiple locations throughout the settlement and its surrounding area. What they're saying is a mystery, as the people who hear the voices have not been able to identify the language, and say that they cannot hear the voices clearly enough to write down more than the occasional fragment. The priests would like to investigate this, but have their hands full with other issues. Also, they would like to get the opinion of the natives, as this may be due to local spirits that would be more receptive to communication with a Saurid shaman. Could the heroes please look into this, see if some kind of pattern can be mapped, and either have their shaman investigate or find a shaman who is willing to travel out here?

Priest and Vedic Scholar: Devasarasa Sangem

Many years ago, Devasarasa served in the East India Company's military, as befitted a member of the kshatriya caste, but the events of the rebellion and the downfall of the Company left him shaken. He carries an old wound to his left lower arm that he will not discuss, save to say that he came to a sudden realization that his duty was not what he had thought it was. He retreated to a monastery, but found that the life of a sanyasi was not for him. The world still called to him, and he needed to be active within it. Eventually achieving recognition as a scholar of the Vedas, he found a place as a priest at a temple on the upper Ganges. When the people who came to the temple to bathe in the sacred river began talking of the migration to the Gruv, Devasarasa understood that his dharma lay in another world, and received permission to leave his position at the temple. Devasarasa provides not only spiritual guidance to the people of Kaushaldesa, and performs the pujas that they do not have time for, but also serves as part of the legal council, advising on matters of law and Vedic precedent. He also teaches at the village ashram, ensuring that the children grow up literate and knowing the scriptures.

Field Manager: Radhe Jai

Radhe Jai's husband, Barathi, managed a large farm back in Punjab province, seeing to the planting, tending, and harvesting, and supervising the farmers and labourers who did the actual work. Sadly, he died of Looking Glass Fever during the crossing from Earth, his form distorting in ways not conducive to continued living. Radhe, who worked closely with her husband as a wife should, has taken up his dharma, and now holds the position he would have, supervising the western fields of the new settlement. Her three children, Adra, Disti, and Satya, support her in this, Adra accompanying her to the fields in case a man's voice is needed to motivate the workers, Disti seeing to the collection and storage of seed and helping her mother with the account books, and Satya taking care of the household, making sure that the collection of tents that comprise their home are kept clean and orderly and that meals are prepared. Radhe has already turned down offers of marriage from three men of good family, saying that while she is not ready for vanaprastha, the retirement stage of life, she is done with grihastha, and has satisfied her worldly needs. What remains to her is the satisfaction of the needs of the community.

Blacksmith: Shripati Cherukuri

As a child, Shripati lost his left eye in an accident. With only one eye, he has no depth perception, and must rely on conscious judgment of distances. While this does not significantly interfere with his work as a blacksmith, it has cost him his dream of playing professional cricket. Shripati follows the sport religiously, and is working to organize cricket teams in Kaushaldesa, one of adults and one or more of children. He hopes to one day coach a team that plays against the other settlements in the Gruv. In the meantime, he shoes horses, makes hinges, repairs plows, and does the other necessary metalwork to keep Kaushaldesa functioning. His shop is one of the few completed buildings, made partly from logs felled during the journey to the site from Fort Alice and brought along, stacked up with stone blocks at the corners so as to leave gaps between the logs for ventilation. Inside, one wall is decorated with cricket memorabilia, Shripati having used most of his personal luggage allowance to bring as much of his collection as he could.

Accountant and Clerk: Ajanta Kuram

Formerly a shopkeeper, with enough inventory that she had to keep written records, Ajanta was approached to take charge of the settlement's finances. While she's still learning how to handle such complex books, she suspects that someone is manipulating the local economy for their own

benefit, as the numbers just don't quite want to balance. As yet, she does not have the confidence, the evidence, or the standing to bring it to anyone's attention. Her family worries about her, as she obviously is under a great deal of stress, spending much of her free time in prayer or meditation, and not singing as she goes about her daily tasks like she used to. Thus far, they've left her alone about it, figuring that when she wants to talk about her problems, she will.

Beercrombie

Type: Civilian
Form of Law: Civilian tribunal, English common law
Population: Hamlet
Astral Rating: Open

Drawing its initial population from the Whitley Bay and South Shields regions on England's North Sea coastline, Beercrombie is part of the British Empire's long range planning for the Grosvenor Land. It's all well and good to farm and to herd, but Britain is a seafaring nation, and relies just as much upon fishing as on land-based production to feed itself. Intending to create a fishing village in the style of the North coast, the people of Beercrombie are working hard on building docks and a boatyard, and have already set out on the ocean in the half dozen small boats they were able to bring from England, the transport cost having been paid by the Crown to encourage development of a fishing industry.

Adventure Hook: The Midnight Skulker

Not far from the village, but well into the woods and in a region of hills and massive stones, the villagers found a crater. Thirty feet deep at the center and eighty yards across, more or less, it resembled a bomb crater, like those left by artillery shells, but from the growth of trees and shrubs within, it had to be over a hundred years old. Excavation at the bottom center looking for pieces of the shell found no such evidence, just a small collection of metallic stones with magnetic properties. These are now on display on a shelf in the village pub. Shortly after the crater was explored, something began visiting the village in the dead of night. On rare occasions, when the moons have set but the sun has not yet risen, something goes rampaging about the village, swinging a club at lamp posts, buildings that are closest to completion (the pub has lost its sign twice already), and the fishing boats. Whatever the intruder might be, it only takes two or three strokes and then runs off before anyone can respond, leaving large, splayed footprints that disappear into the woods. Thus far, it hasn't done any damage that couldn't be repaired in a few days, but if it manages to knock a hole in a boat hull, that would take the boat out of service until the drydock is finished. A few people have suggested putting the stones back in the crater where they were found, but the publican and the men who found the stones have roundly rejected the idea, calling on the constabulary to put an end to the depredations.

Unfortunately, several problems have arisen. First off, figuring out what's edible and what isn't has been a chancy business. Asking the Saurids hasn't always turned out well. Everyone knows about the splithee issue. Beercrombie desperately needs a chemist and a biologist. In the meantime, the villagers have been breeding domesticated rats, and testing out new species from the nets on them. If the rats survive for a week eating the new fish, then someone from the village fries up a bit and gives it a go. This has put the person in hospital on more than one occasion, as rats can survive on a lot of things that will sicken a human. Only once did someone suggest feeding the sample to the dogs first. A proper Englishman will take a bullet for his dog.

Keeping the larger ocean-going predators away from the boats, and competing with them for the schools of potentially edible fish, have resulted in considerable damage and two fatalities. In a small village, the loss of two experienced fishermen, both well known to the community, constitutes a grievous injury. Finding additional crew, however, has been difficult, as most fishermen along the British coastline either won't leave their homes, ships, and familiar waters, or aren't experienced enough to add significantly to Beercrombie's effort. Ranging abroad has been discussed. The possibility of bringing in fishermen from the southern coast of India, for example, has been broached, but the shift in the culture of the village would be large, and the result could be a population split in two by their origin.

Lack of manpower is also hurting the effort to get the boatyard and docks completed. Until the boatyard, with its planned drydock facility, is ready, repairs have to be made on the shore. Beaching a fishing boat causes damage to the underside of the hull and is not considered a best practice. Some repairs simply cannot be made without bringing the boat entirely ashore and careering it, tilting it over with bracing timbers to hold it steady. Without a proper dock, with piers for tie-up and offloading, bringing the catch ashore and securing the boats when not in use both remain tedious and chancy. Carpenters and unskilled laborers are easy enough to come by, but the journey all the way down to the coast, and the isolation of the village, still well beyond the end of the Alice and Gruv's rails, both reduce interest in relocation to Beercrombie.

There are some who say that the colonization effort has reached too far, too quickly, in trying to create a fishing industry on a world only recently opened. Others point to the terrific expense of importing food from Earth and distributing it to settlements that have not yet developed self-sufficiency, and the bounty known to be in the Gruv's oceans, ready for the taking. How this works out in the end is still anybody's guess.

Adventure Hook: We Are Such Tunes As Dreams Are Made Of

Life in Beercrombie, out past the end of the rails, is harder than in most settlements. Everyone in the village puts in a full day's labor and then some. Lately, those who've had a particularly exhausting day find their sleep, not exactly troubled, but strange. In their dreams, they hear music, and see visions of Earth, but of places in far off lands they've never visited. In talking about these dreams with their friends, they've discovered that everyone having these dreams is hearing the same tune. It sounds Asian, which itself is strange, as nobody in Beercrombie has any real experience with pentatonic music, and there's no Asian musicians in the village, so the question becomes where it came from. Some people are speculating that they're having someone else's dreams somehow. Others think they might be seeing through the void back to Earth, and maybe connecting psychically with people still living there. All

they really know is that the dreams aren't predictable. Having one of the vision dreams doesn't mean you ever will again, and not having had one yet doesn't mean you won't. The key seems to be exhaustion, but that's a common enough occurrence in the overstrained settlement, and not everybody who works themselves that hard during the day has vision dreams that night. Word of the dreams has reached Fort Alice in a letter from the village doctor, who would like someone to come out and investigate, just in case the dreams aren't as benign as they seem.

Fishing Captain: Neil Gambrill

Relatively young for a boat captain, Neil hails from Tynemouth, where he served as first mate aboard *Cluny*, a Bermuda-rigged schooner working the North Sea. With only three years' service, he wouldn't have been considered ready for a captaincy back in England; but in the Gruv, with a paucity of qualified crew, he was appointed to helm the *Nancy Finn*, one of Beercrombie's boats, by the village council. Thus far, he's done better than some of the other captains, having quickly learned to spot the wake of a dorsal fin and avoid the larger predators. He tends to let his nets out deeper than the other captains, which puts his boat at mild risk due to the weight and drag below the surface, but tends to bring in a full net most times. While his crew have suffered a few minor injuries, none have been worse than would normally be expected in the course of their work. While Captain Gambrill has gained a reputation as a successful fisherman, some concern exists about whether or not it will go to his head. A captain who gets cocky tends to lose crew, ship, or both soon after. There's also a good deal of speculation as to whether or not he will ask Bessie Trower, the daughter of the signal-fire keeper (the lighthouse is still under construction), to marry him before or after she turns up pregnant.

Boatyard Construction Supervisor: Heda Townsend

Some might be surprised to find a woman at the head of a construction team, but then Heda is no ordinary woman. Back in England, she'd worked her way up from pushing a barrow to carpenter's apprentice to lead carpenter at the South Shields docks, picking up a few scars on her knuckles and a reputation as a fearsome brawler. Anyone disparaging her ability to keep up with the men found themselves on the wrong end of her fist. Those who thought that she might be more of a man than a woman in other ways could readily find men who would attest that she was all woman, although she tended to leave bruises. Nobody was the least bit surprised when Looking Glass Fever turned her into a snark. She's a bit taller than she used to be, a good deal more muscular, and perhaps a little more hirsute, and her tusks get in the way of a good sloppy kiss, but Heda has kept right on going. She'll get the boatyard done by year's end if she has to build the entire damned thing herself. Everyone hopes that there's enough beer and sturdy men to keep her satisfied.

Chief Rat-breeder and Fish Tester: Araminty Freshwater

Two years ago, Araminty and her husband Isidor ran a chip shop on Howdon Road, and raised chickens out back to keep themselves in fresh eggs for the breakfast business. Offered a reasonable sum for their business and emigration, they set out for the Gruv and the southern coast. Isidor didn't make it. Halfway between the rail head and Beercrombie, the wagon train was attacked by a sabertooth pride. Isidor's throat was ripped out in the first rush. Without her husband,

Araminty wasn't certain she could open a new shop. As fortune, ever a derisive wit, would have it, an occupation found her. Her years of experience cleaning fish and sorting out the edible from the bad, and dealing with cage-bred animals, led to her working with the test rats. By the end of six months, she was running the operation, having reorganized things considerably and scaled up the work to nearly industrial levels. Araminty has worked out a system where new species are portioned out, each part tried on a different group of rats. Some portions are pickled in vinegar first, some are dried and salted, and every portion is tried both fresh and cooked. It's a tedious process, and requires a great deal of bookkeeping, but with three assistants to manage the scut work, Araminty is making progress. The last three samples that made it to human consumption worked out just fine and are now on the menu. It's still far too slow, though, and sometimes testing has to wait until more rats are born and mature enough to be useful. Araminty is a frequent and loud voice in the village council meetings, arguing for money to be found to bring in a proper biologist, as she's just a glorified fry cook, and Beercrombie needs a laboratory, not a chip shop.

Chief Constable: Silvan Hambley

Chief Constable Hambley very nearly retired a year ago, when he was in charge of the police in Gateshead. Not really his choice, but after coming up on the losing end in a political battle with the district, a row in which he took the populist side against the conservative budget, it began to look as if he would spend his remaining years sitting out at the end of a dock with a fishing pole. Then the emigration to found Beercrombie was announced, and Mr. Hambley found that while the district was willing to leave him hanging, the people of the area supported him well enough to not only lobby the council to appoint him to the new settlement, but to take up a collection to help defray his expenses in moving his family to the Gruv. Plans had to be changed a bit when Looking Glass Fever seized him on the train south from Fort Alice. Two weeks later, Silvan Hambley had gained three feet in height, nine stone in muscle and bone, and sprouted horns and tusks. His family's accommodations in Beercrombie had to be adjusted accordingly, as well as revising the plans for the police station. Very little concern was expressed over the incoming police chief having turned into a troll, the village already having its share of Boojums of various sorts, and knowing that the outer changes didn't change the man inside. Chief Constable Hambley's primary complaints now are that he can't fit into the village pub, that his fishing tackle is all too small for his massively enlarged hands, and that nobody has managed to build a swivel chair that will hold up under his weight, leaving him using a carved tree stump for an office chair. What his wife thinks about the situation has only been discussed with her closest female friends and with the village doctor. Hambley has gone back to doing foot patrols, taking a direct hand in policing the village, finding some amusement in the fact that the traditional "What's all this then?" becomes much more effective when a deep, gravelly voice rumbles it from well above the miscreant's head.

Hornblower's Hill

Type: Penal Colony
Form of Law: Governmental tribunal, English common law
Population: Town
Astral Rating: Tainted

The British government ceased transporting convicts to Australia in 1867, following a rising movement among Australia and New Zealand's free colonists opposing the practice. This left the

question of what to do with the ever-rising tide of convicted criminals. Dozens of prisons using the panopticon design had been built across the country, intended to keep each prisoner in a constantly-viewed solitary cell, but occupancy quickly went to double, triple, and quadruple. The Prison Commission, founded in 1877, inherited a hodgepodge of overcrowded and underfunded penitentiaries and a flood of incoming convicts from a court system still mired in pre-Industrial Revolution law, which demanded harsh sentences for the pettiest of offences.

And then the Rabbit Hole opened, and a solution suggested itself. The Gruv did not have sufficient population to raise an anti-transportation movement. Why, it had hardly any population at all. The land was harsh, and full of large carnivorous beasts. What better place to found a penal colony? Instead of four months' travel aboard a crowded sailing ship, and the perils of crossing two oceans and rounding one Cape or the other, two days' train ride with a layover in a military fortress and two days' forced march from the railhead to the coast would put the prisoners out on a rocky peninsula, with ocean on three sides and the Gruv on the fourth. The first few batches of prisoners themselves would provide the labor to build the penal colony. And thus Hornblower's Hill was created.

A year later, the prisoners still live mostly in surplus military pup tents, leaky canvas affairs with no floor that blow over in every storm. The guards, colony officials, and staff reside in wooden buildings put up by the prisoners. A mess hall and kitchen, a line of privies, a bathing hall, the chapel, and one cell block have been completed. Being housed in the cell block is something of a mixed blessing, as it has proper walls and a roof, but only the most intractable prisoners are sent there, and the guards treat them cruelly in order to break their spirits and make them manageable. Guard stations and a palisade wall have been erected across the north of the peninsula, cutting it off from the mainland, both to keep the prisoners in and to keep the larger denizens of the Gruv out. Very little effort is made to recapture prisoners who get past the palisade wall. After all, it's two days' hard slog to the railhead, and much further than that to the nearest bit of civilization. The gnawed remains that have been brought in twice by arriving prisoner coffles have been sufficient to discourage any but the most desperate.

Besides all the work of building a colony from scratch, the prisoners labor in the salt pools at the coastline. Salt, as ever, is a treasured commodity, and Hornblower's Hill has ready access to the ocean and a never-ending supply of brine. Ocean water is let into the pools at high tide, then left to evaporate over a few days. The minerals left behind are scraped up and carried to a boiler for refinement. In the last six months, every prisoner escort detail that has arrived at Hornblower's Hill has left with their pack animals loaded with bags of salt, helping defray the costs of maintaining the penal colony by a noteworthy margin.

Adventure Hook: Something In A Bottle

One of the prisoners working the salt pools stumbled across a sealed container, a cylinder roughly the size of a whiskey bottle, with markings he recognized from the newspapers as Samsut writing. Unable to open the cylinder, but able to tell from the shifting of its weight that something heavy was inside, he hid the cylinder in a small cave on the seashore, intending to retrieve it several years on when his tariff ended. He wrote a letter to an old girlfriend back in Glasgow, telling her he'd found something that could give him an honest start, and asking her to take the letter to a friend. The letter, intercepted at Fort Alice

by a random spot check, part of an ongoing investigation into smuggling, caught the attention of an intelligence officer. He found a coded message in the letter, describing the cylinder and its Samsut markings. Under most circumstances, the prisoner would be pulled out of the general population, interrogated for the location, and the cylinder retrieved by uniformed forces. In this case, a quiet retrieval has been ordered. If word gets out that there might be a Samsut artifact in Hornblower's Hill, a race for it would be on in a heartbeat. If the other prisoners find out about it, they might try to hold it hostage. If the Samsut find out about it, and who knows what sort of intelligence operations they have going, they might decide to flatten Hornblower's Hill with an artillery barrage rather than allow anything of theirs to fall into Terrestrial hands.

As with the Australian transports, prisoners at Hornblower's Hill convicted of non-violent offences will be given the option of settling in the Gruv or returning to England at the end of their sentence. Violent offenders will not be given the second option, but may earn it by serving out an enlistment in Her Majesty's Army. Prisoners on whole-life tariff, of course, would remain at Hornblower's Hill for their remainder of their existence, although no prisoner of such standing has yet been transported.

Governor of the Colony: Lt. Gen. Kenneth William Halding

Having served in the Raj for two decades with distinction, and before that in the Crimean War, Lt. Gen. Halding had few options left for the remaining years of his career. He'd grown too old for field command. He'd developed gout, although he credited the local cuisine in India for holding that at bay. Faced with either an administrative position in London, a sinecure position in diplomacy, or early retirement, Lt. Gen. Halding had taken three months' leave to spend time with his wife and discuss their future when the Grosvenor Portal opened. Seeing the opportunity, he met a few of his superiors at their clubs. When the time came to select a governor for the proposed penal colony, Halding's name appeared at the top of the list. He fully expects to retire in the Gruv, and possibly even be buried there. His household is by necessity small, consisting of his wife, three domestic servants, and his Indian cook, Jelabi Chalavadi, an elderly woman whom he treats with the utmost of respect. Taking to heart the lessons of Gen. Bourke of New South Wales, Lt. Gen. Halding has mandated humane treatment for the prisoners under his charge, and looks to Father Breakspear more than the penitentiary regulations for guidance. He knows that many of the convicts will become settlers in the Gruv upon their release, and wants to ensure that the men and women he turns loose into the civilian population will not cause further problems.

Chief Warden: Solomon Kelham

Charged not only with the security of the prisoners, but the security of the colony as a whole, Mr. Kelham would certainly be showing signs of stress in his countenance, had he not come to the position with a preternatural resemblance to a bloodhound. With his furrowed brow, drooping jowls, deep-set dark brown eyes, and liver spots, his resemblance to a breed of dog used for tracking escaped convicts simply puts out in public view the man's inner nature. His mournful personality merely finishes the portrait. A lifelong bachelor, Mr. Kelham enlisted in Her Majesty's Army at the age of seventeen to escape an overcrowded and unsanitary neighborhood in one of the more squalid ends of Manchester, and has never once looked back, communicating with the relatives he

left behind by correspondence. Upon leaving the military with the rank of Colour Sergeant and a Good Conduct medal, which as any enlisted man can tell you means twenty years of undetected crime, he could have applied to the Yeoman Warders for admission to their ranks, but spending the rest of his life as a ceremonial guard at the Tower of London had little appeal. Instead, he applied to the Prison Commission, and found a second career as a prison security administrator. The list of men qualified to take charge of the guards and physical security at the first penal colony in the Gruv was a short one, with most of the names marked as already occupied with the Andaman Islands. With no strong family connections, Mr. Kelham was the obvious selection. His approach tends toward the hands-on, with frequent casual inspections and the occasional formal inspection at irregular intervals. He likes to look in on his boys every so often. Keeps them on their toes. Not one to raise his voice unnecessarily, Mr. Kelham registers his disapproval with a doleful stare, followed by a shake of the head and the phrase "well, that just won't do", and leaves the shouting to be done by his subordinates.

Staff Physician: Laurence Grunsell, MD

Formerly a military surgeon, Dr. Grunsell had to retire after a bit of shrapnel robbed him of his left eye. After a few years of living on his pension, desultorily trying his hand at various semi-medical occupations and living in a cloud of despondency, he met up with Dr. Eusebius Smit. The Polish physician and engineer had gained a measure of fame, and a larger measure of notoriety, in his native land with his work in prosthetics. While he had made significant advances in the replacement of lost limbs and the accommodation of various injuries, he had done so by using his nation's large prison population as test subjects, and there were questions about his methods. Despite Dr. Smit's reputation, or perhaps because of it, the two men struck up a friendship, and then a professional relationship. Three years ago, Dr. Smit installed a replacement for Dr. Grunsell's lost eye. While the device is a bit large, resembling half of a pair of brass-rimmed goggles set into the doctor's skull, and makes a noticeable clicking sound when adjusting focus, it provides Dr. Grunsell with the sight he had lost, giving him back his depth perception, and going beyond in terms of magnification and distance. Dr. Grunsell approached the Prison Commission with a proposal they really couldn't refuse. He would pay his own way to the Gruv, and work without salary, if he could apply Dr. Smit's technologies to the prisoners who would inevitably be maimed by the dangers of the Gruv. Even with the rumors of Dr. Smit's activities in Poland, this was an opportunity that the Commission simply could not turn down. To date, eleven prisoners have received Dr. Smit's patented limb replacements.

With each installation, Dr. Grunsell, in correspondence with his partner back in London, improves the design. Once again, though, rumors are beginning to circulate. Two of the prisoners swear that their maiming was no accident, that they were deliberately put into harm's way. Three others initially stated something similar, but retracted their stories under questioning. Governor Halding has sent to Fort Alice to have a military surgeon assigned to the colony for his family and immediate staff. Dr. Grunsell brushes aside the allegations, and points out that he is working within the boundaries of his agreement with the Commission and for the betterment of science.

Adventure Hook: The Hot Rock

In the process of building the foundation for the new cell block, a vein of unusual stone was struck; a dark, friable rock easily mined with hand tools. Embedded within it, the prisoners on the excavation detail found a handful of rounded stones of a dull greyish hue, none larger than a tuppence and looking for all the world like they'd washed up on the seashore. Upon noting that the stones had a faint blue radiance about them, not visible in direct sunlight, the prisoners left the excavation and expressed an unwillingness to return. They were disciplined, and put to work elsewhere. One of the guards put the stones in his tobacco pouch and took them to the clinic, where Dr. Grunsell set them aside, intending to have a look at them later. That afternoon, three of the prisoners reported to the clinic with burns on their hands, and complaining of an overall lassitude and malaise. By evening, they were bleeding from their gums and suffering from a bloody flux. The guard collapsed at his post. Dr. Grunsell quickly made the connection and put the tobacco pouch in the clinic safe, not knowing exactly how the stones had sickened the men but taking what precautions he could. Over the next few days, the remaining prisoners in the detail and the guards who had stood watch on that part of the excavation also came down ill. Two of the first three died, along with the guard, after developing open sores, substantial edema in the hands and lower arms, and rapid hair loss. The third suffered horribly, but survived, albeit in a vegetative state. The rest developed the same symptoms to varying degrees, none of them anywhere near as severe, and eventually started on the road to recovery. Dr. Grunsell has sent notification to Fort Alice, requesting a scientific investigation team, and has quarantined the excavation site. He has also sent one of the stones, wrapped up in several layers of silk and enclosed in a wooden box lined with tin foil, to Dr. Smit by secret courier, with a letter describing the effects. He has changed his records to list the count of the stones as one less than were actually brought to him.

Chaplain: Fr. Oswald Breakspear

Originally from the North, up near the Scottish border, Father Breakspear has gone where the Church has needed him, serving in Canada, Singapore, India, and the Canary Islands before being asked to minister to the prisoners at Hornblower's Hill. A quiet, introspective man who doesn't say half of what he's thinking, but doesn't miss anything, Father Breakspear has maintained his physique through hard labor, putting his faith into action ministering to peoples' bodies as well as their souls. He has helped build retaining walls along the ocean, run a soup kitchen, dug trenches for the draining of swamps, and joined a rescue team to dig through rubble after an earthquake collapsed a slum. While not a physician, he knows how to splint a broken bone, disinfect, stitch and bandage a wound, and ease the passage of the dying through the use of pressure points, a trick he learned from

a Chinese physician in Malaysia. His knowledge of Anglican theology is just as practical. Given a situation, he can usually come up with a Bible verse or a quote from a renowned theologian or philosopher that applies. Father Breakspear is well aware of the role he plays as Governor Halding's externalized conscience, and prays daily for the wisdom to provide the guidance the governor needs, and the grace to deliver it in words that the governor won't mind hearing.

West: The Temperate Forest

Representing the far boundary of the frontier for Earthly expansion, the western temperate forest presents an entirely new set of natural hazards. As well, the forest Egalitarian culture of the Saurids makes its home there. While the forest tribes are generally peaceful, they do not tolerate encroachment on their lands any more than might be expected of any native people. Thus far, only the most determined colonists and industrial efforts have met with any degree of success in colonizing the west, and "success" may be too strong a word given the situation.

New Wigan

Type: Civilian
Form of Law: Civilian tribunal, English common law
Population: Hamlet
Astral Rating: Tainted

In the early days of the Gruv, settlers from Lancashire brought their expertise in mining, textiles, and porcelain to the forest west of Fort Alice. They founded a village and named it New Wigan, in honor of the mill town that was the county seat back home. They built a ten foot palisade wall around their village, and hung a sign on the gate: New Wigan – Forever Loyal. They set about doing a bit of mining, growing some crops, and raising a few sheep.

Then the giant fleas came.

Once a year, *Introvector Wiganii* hits its reproductive surge, and shifts from a dangerous solitary predator to a devouring wave that rolls over anything in its path. The swarm hit New Wigan like a volcanic eruption: sudden, violent, and lethal. The settlers barely had time to barricade their women and children in the church and pick up rifles from the village's small armory. They fought to the last man, but had no chance at all.

A few days later, a military patrol came by on routine rounds, checking up on settlements that didn't have telegraph wires strung yet. They made it as far as the church and the mine entrance before the remaining *I. Wiganii* set upon them. There were no survivors.

When the patrol failed to check in, a reconnaissance in force was sent. A company of fusiliers marched into New Wigan, every fifth man armed with a Chinese dragon, the rest carrying heavy rifles and plenty of ammunition. Four cannon and two Gatling guns brought up the rear. This time, when the nest guardians attacked, they were met with streams of liquid fire from the Chinese dragons, providing screening for the troops to fall back out of the way of the artillery. The Gatlings were brought to bear, the cannons were loaded with canister, and the battle was over in minutes.

The cleanup effort took many days longer. The commanding officer had his men set the church ablaze, he and the chaplain agreeing that a mass funeral pyre was better than trying to sort out the jumbled and partly dismembered dead inside. Several more buildings were lost to fire as egg sacs were discovered and the soldiers turned their Chinese dragons on the potential threat. Finally, New Wigan was declared cleansed. Then came the hardest part: rebuilding and recolonizing.

The old ten foot palisade wall was augmented, and is now twenty feet high with steel mesh netting reaching another eight feet above. Talks are under way with the Prussians about electrifying the netting. A new church has been built and sanctified. A monument to the settlers and soldiers now stands at the location of the previous church. The shallow-draft mine flooded from the beam engine being left idle for so long. A full year passed before the beam engine was restarted, to allow any *I. Wiganii* eggs in the mine to hatch and the larvae to subsequently drown. An imperial observation post stands outside the village wall, itself a small fortress, with a detachment of soldiers, a row of cannon, and a team of scientists working to find a way to re-route an *I. Wiganii* swarm.

Putting the buildings and the mine back to rights was relatively easy. Finding people willing to live in the rebuilt village was quite another effort entirely. Nearly half of the current residents are former soldiers who took the option to settle in the Gruv when they mustered out, and were given land in New Wigan. This has resulted in considerable resentment against the military in general, and the office of land grants specifically. The rest are a mix of opportunists willing to risk being eaten, new settlers from Earth who accepted a ten sovereign bonus to be part of the repopulation effort, or convicts who were given a choice between New Wigan and the penal colony at Hornblower's Hill. It's said that there's plenty of gold in New Wigan, but what they really need is steel and lead.

Adventure Hook: A Very Late Delivery

A research team located an old egg sac amid the wreckage cleared away during the rebuilding and dumped in the forest. Given that it was a year old, they brought it in for study, assuming the eggs were nonviable. When they opened the tailgate of their wagon at the observation station, a flood of larvae poured out. Not all of them have been accounted for. The observation post's trash heap and stable dung pile have been taken away and burned, the privies have been filled in and new ones dug, and soldiers with Chinese dragons and pitchforks continue to scour the area, but if the egg count is correct, and they've been recounted by three people, there's five larvae still missing. By now, they may have pupated, and could hatch out into adults any day. Professional assistance in locating the missing larvae would be most greatly appreciated.

New Wigan Mayor: Clairmonte Burgess

Born in the Crown Colony of British Honduras in the West Indies, Clairmonte rose from clerk at a sugar plantation to civil service to political office with surprising speed. He and his family emigrated to London when he was offered a position in Her Majesty's Home Office, one of the first of his race and origin to achieve such. An efficient organizer, good at motivating people under his authority, and stereotypically cheerful, Clairmonte was on the short list when it came time to appoint a new Mayor for the resettlement. Up before dawn, Mayor Burgess spends as little time in his office at the town hall as possible, preferring to work directly with people at the site of the problem. He spends his evenings with his son and daughter out at one of the streams that run

through the forest around New Wigan, telling them stories, fishing, and teaching them about how to live in the world and not just behind a wall. As a side note, Clairmonte's expertise as an angler has brought in three previously unidentified species of fish, two of which are edible.

Head of Research, New Wigan Observation Post: Hippolyta Bratcher, DSc, FRS

Dr. Bratcher has not so much aged as weathered. Well tanned, her iron grey hair cut unfashionably short, lean and agile, she stops frequently on field expeditions to make sure she hasn't outpaced the rest of her team. Gruff and plain spoken, she has no use for academic politics, having come to the Gruv to get some real work done away from all the tea parties and parlor snakes. Her doctoral thesis at Cambridge, *Galvanic Response in Animal Tissue Induced by Magnetism at a Distance*, led directly to her being offered a research fellowship in the Gruv, and to her being requested to head up research into the New Wigan problem. She believes that the proper apparatus, deployed along the line of approach to the colony, could fend off an *I. Wiganii* swarm. Thus far, she's still working on the prototype. Her last few field tests have been promising, but the apparatus is delicate and bulky and not easily transported. Bringing adult *I. Wiganii* to the observation post for testing is, of course, out of the question.

Commander of Defense, New Wigan Observation Post:

Lachlan Darroch MacFarlane, Captain

Born in Cullen on the North Sea coast, Captain MacFarlane still speaks with a noticeable northern Scots accent, and strongly dislikes the heat of the Gruv's lowlands. Given his preferences, he'd be somewhere up the mountains, high enough to look down on the clouds. Having been given command of the New Wigan outpost, he'll make the best of it. As the reproductive surge draws closer, Captain MacFarlane drills his men frequently, at all hours, turning them out without notice to draw up defensive lines and secure the village. Not one flea will cross the line on his watch. He and Dr. Bratcher do not get along well. Part of it is her having barred him from the laboratories. He insists that it's not his fault. He's a graceful, skilled swordsman, and an agile horseman. The glassware just leaps out in front of him.

Village Doctor: Terrance Aylwin, DSc, MD

Dr. Aylwin and Dr. Bratcher maintain a relatively friendly rivalry, with him reminding her that not everyone can get into Oxford, and her retorting that some people prize academic freedom over stuffy tradition. Given that they're close to the same age, and both are single (Dr. Aylwin broke off an engagement many years ago and never took an interest again, and Dr. Bratcher's husband died while she was still researching her thesis), there's a betting pool as to when they might start courting. Besides being New Wigan's chief physician, tending to the injuries, aches, and illnesses of the residents, Dr. Aylwin is also a botanist and pharmacological researcher. A small group of children have gathered around him, learning about plants and bringing him specimens from the forest. Two of those have resulted in new medications, a toadstool whose spores can be stewed down into a topical pain reliever good for burns and muscle aches, and a flower that distills into a cough suppressant. Dr. Aylwin named the first Lionel's Decoction and the second Megan's Elixir, after the children who brought him the specimens.

Adventure Hook: Running On Empty

One of the other discoveries Dr. Aylwin has made is that the venom of a snake native to the region can be fractioned, removing the neurotoxicity, leaving a substance with peculiar properties. Due to an accident with a bit of glassware, he found that, if taken directly into the bloodstream, the substance massively boosts creativity for a short time. He experienced visions of great artworks that had not yet been created, while seeing a number of connections in his field of study that could lead to major breakthroughs. Fortunately, he wrote down much of the pharmacological visions, as they faded away within hours, leaving him bereft for days afterward. In his journal, he described the experience as having all of his mental creative powers accumulated into a short span, with the result that he was drained and took over a week to recover. Last night, someone broke into his laboratory, and stole his research notes on the snake venom, along with the remaining few drops of the creativity elixir that he had processed. Dr. Aylwin is concerned that anyone attempting to use the elixir may permanently damage their brain, as he was exposed only to a tiny bit that clung to the broken glass, but there's no telling how much the thief might inject into himself.

Pinking Swinbourne

Type: Industrial
Form of Law: Civilian tribunal, British Empire law
Population: Village
Astral Rating: Tainted

While any settlement located near a forest can readily provide its own raw lumber for building, fencing, and furniture making, more exacting standards and lengthier preparation are required for the lumber used in making railway carriages, Giffard gondolas, and military wagons. As well, not every town or village wants to invest its time and people in setting up a lumber mill and operating it, much less the effort required for producing kiln-dried timber. With that in mind, a consortium of lumber producers in the south of England was formed, the New World Timber Company. The company advertised for colonists for an industrial settlement, and sent them off to the Gruv with equipment and experts. A bit over a year later, the village of Pinking Swinburne has resulted, taking its name from the surnames of the two principle investors.

Pinking Swinburne established itself in the usual manner of Gruv settlements – first a collection of tents, then a few central buildings and a palisade wall, then housing and shops and heavy industry. As planned, the primary work of the village involves the felling, cutting, and preparation of high grade lumber. Out in the forest, teams of men, women, and draft horses locate the proper trees, bring them down with crosscut saws and axes, then drag them back to the village with horse and chains. At the lumber mill, the trees are graded, then sawed into beams and boards. The bark and scrap goes off to a furnace, to be turned into charcoal and pitch. The new-sawn wood moves on to the kiln, a long, barn-like building, where it's stacked in weighted racks to keep it from warping, then dried at high heat to produce properly seasoned wood in a short time. The finished products then go off to the rail depot to be shipped to customers all over the Gruv.

Adventure Hook: Dyspepsia on a Grand Scale

Dr. Eusebius Holloway has been touring the settlements in a brightly painted wagon, selling a tonic that among his other claims both prevents and cures Looking Glass Fever. He's done quite well for himself these last few months, and is coming to the end of his tour. Unfortunately, his plans to sell his medicine-show wagon and take his proceeds back to London have hit upon a rather large snag. Her name is Mathilda, and she's a troll. She stands nearly nine feet tall, has horns like a ram, and would like a word or two with the good doctor. It seems that not only was Mathilda not cured after downing several bottles of the tonic, but her physical changes progressed rapidly and markedly. The local authorities seem somewhat uncertain about the situation, considering that Mathilda opened her remarks by picking up one of the doctor's draft horses and snapping its back across her knee like a stick. Would anyone else like to have a go at sorting the situation before Mathilda sorts the doctor?

Around three months into the project, three of the settlers began to develop pain in their teeth and jaws. At first, this was thought to be due to poor diet and lack of proper hygiene. As time went by, however, more people turned up with the same symptoms, and the first sufferers began losing teeth to rotted-out roots and abscesses. A physician was brought in from Fort Alice, and diagnosed the problem as phossy jaw, a rotting away of the jaw bone due to extended exposure to white phosphorus. Where the phosphorus was coming from, however, was something of a mystery. Pinking Swinburne had no match makers. The streams were tested, and found to have no more phosphorus than any other in the western region. Samples of the local fruits and vegetables were sent off for analysis, and came back negative. In the meantime, two of the early patients had to have their jaws removed surgically, and half a dozen more were abscessed and disfigured so badly that they could no longer work. The company, already heavily invested in the site, could not afford to relocate several hundred people and start over. The investigation continues, with one or two new cases turning up each month. So far, the only difference that has been found between Pinking Swinburne and any other western village is the field of old bones out to the north, an area of eroded fossils protruding from the rock measuring nearly a hundred yards across and almost two hundred in length, as if an entire species had long ago gone there to die. Hardly anyone goes out there, though, as the rocky ground is unsuitable for lumber production.

Adventure Hook: A Bit Larger Than Moles Don't You Think?

In the process of digging a trench from a stream to the village, in order to lay pipe to bring in water, a surveying error was made. The trench ran too close to a warren of storsventoks. Now the storsventoks have incorporated the trench into their warren, and are digging toward the village. They're large enough that their tunnels could undermine the buildings. They're also large enough to put up a serious fight. Someone has to go into the tunnels and hold off the storsventoks long enough for the village's construction crew to pour concrete and make a permanent barrier. Any on the wrong side of the barricade will have to be hunted down and either trapped or killed. As an additional complication, the beasties tend to steal anything with a wooden handle – tools, guns, you name it – and chew up the wooden bits, not so much for nutrition as for something to gnaw on to keep their teeth worn down.

Mayor and Company Chief Representative: Reginald Pinking

Reginald inherited not only his name and position from his father, but his business sense and charisma. The elder Pinking, Theodore, remained on Earth, and sent his son into the field to take command of the enterprise, as befitted an older, wealthy businessman and his scion. Of average height and a touch portly, Reginald cultivates an elaborate set of side whiskers that are his one great indulgence. He pays close attention to the accounting, knows everyone in the village of any importance by name, and sees to it that his father's investment and confidence both pay off. Reginald will not let his family or the company down, and has taken to reading medical books in his spare time, and pestering Dr. Colcroft with questions, many of which are derived from an incomplete understanding of the subject.

Lumber Mill Foreman: William "Bill" Roper

In his late sixties, but still spry, Bill has worked at a lumber mill since he was fourteen, with the exception of eight years he spent in Her Majesty's Army. He knows the trade better than anyone else in Pinking Swinburne. He can hear the difference in tone when the sawmill blade starts to dig into a knot in the wood, and call for the advance to be slowed so as not to dull or break the blade. He's trained more apprentices and journeymen than he can remember, but he knows it's enough to staff the entire facility. When steam replaced water power, Bill spent many long hours with the driver and the mechanic, and got to know the engine and boiler well enough he could operate or repair either one. He still has most of his own teeth, and hasn't yet developed phossy jaw symptoms, which he credits to his thrice daily nip of Scottish whiskey and to his never having taken up tobacco, filthy American habit. Sooner or later, Bill is going to retire, and finding someone who could take his place may be a substantial challenge.

Stationmaster: Mirabel Pritchett

Mirabel's former husband died of mushroom poisoning in between her being offered a position with the Alice and Gruv and her emigrating from England. Given that he'd picked the mushrooms himself that morning, the inquest ruled it as accidental. Nobody would ever give voice to the idea that Mrs. Pritchett found him inconvenient. Why, the very idea that the dour, stern, rail-thin stationmaster would have married him in the first place if he hadn't been the model of efficiency is ludicrous. That a few things Mrs. Pritchett found inconvenient about the Pinking Swinburne

railway station or its attached freight depot came to a swift end is most assuredly coincidental. The railyard and station workers live in terror of her pocket watch and her acerbic tongue, but everyone admits that she keeps everything running briskly and efficiently. Pinking Swinburne has not had a missed shipment, a delay that wasn't immediately identifiable as a natural disaster or other unavoidable incident, or a late tea at the passenger depot since Mrs. Pritchett took office.

Town Physician: Nuallan Colcroft, MD

Born in Kinvara, County Galway, just as the sea-port village was starting to recover from the Great Famine, and everyone who could move away was doing so, Nuallan Colcroft learned at an early age to work hard and make do with what was available in order to survive. He impressed the parish priest sufficiently to be sent off to boarding school at the church's expense. Instead of going on to seminary though, Nuallan wrote to the landed gentry until he found a patron to fund his attendance at Queen's College Cork. There, he excelled in his studies, winning his way into the medical school ahead of many students of higher birth by being better than them academically. He made few friends, won many fights against those who were offended by his presence, and became part of the second class to graduate from the newly-built school of medicine. Dr. Colcroft served as parish physician in County Galway for many years, tending to people in small villages and in rural areas. When the emigration to the Gruv began, he signed on, taking with him only a few boxes of books and personal belongings, his camera equipment, and his Connemara pony, Aislinn. Someone, after all, would need to take care of the settlers in the new land, someone who knew how to make do with what was ready to hand. The short, scrappy doctor settled in Pinking Swinburne partly because it was out at the edge of the frontier at the time, and partly because of the phossy jaw pandemic. He has discovered that some of the local fungus will expose photographic plates on their own, producing ghostly images, if placed close or in contact. While he has no explanation for this, and has kept the discovery to himself for fear of ridicule, he believes that the phossy jaw pandemic may be somehow linked.

Zion

Type: Civilian
Form of Law: Civilian religious tribunal, Old Testament Christian law
Population: Hamlet
Astral Rating: Safe

After the Reformation, some groups of Protestants held that the Anglican Church still hewed too closely to Papist practices. A few of these emigrated to the American Colonies, founding settlements based on their interpretation of Christian practice. Two hundred years later, dissatisfaction still remained. The Promised Land had not been found. Thus, when the Gruv was opened for colonization, those that could afford a second emigration decided to try again in yet another new world.

The Fellowship of Friends in Christ came mostly from the northern United States, where they had been farmers, abolitionists, and temperance activists, working diligently to push the American culture in a more righteous direction. Concerned that their efforts to lead by example were being largely ignored, and convinced that the recent War of Secession had proven that the United States had gone past the point where a single group of devout believers could bring it to redemption, they

gathered their resources, sold their land, and joined with a smaller group of like-minded souls in Britain for the trip through the Rabbit Hole. Thus the village of Zion was founded.

Where some colonies built their palisade wall first, and others their communal kitchen, in Zion, the first building to go up was the church. A simple building of heavy log construction, Zion's church consists of a single hall, two stories high, large enough to contain the population of the entire village. Two doors provide entrance at the front, one for men and one for women. A wide aisle down the center separates the pews into the men's and women's sections. Children under the age of ten are allowed to sit with their mothers, regardless of gender, but after their tenth birthday, boys must sit with the men. At the front is a lectern for the preacher, and behind it on the wall a large, plain wooden cross. There is no altar or railing or any other such Papist trapping, not even a decorative cloth laid over the lectern. The windows are oiled paper for the most part, although as the village can afford it, they're being replaced with clear glass.

Adventure Hook: Tiny Wasteland

Seven months ago, Isaac Hunsberger, the nine year old son of Aaron and Marah Hunsberger, wandered further into the woods than he was supposed to, and found a rocky outcropping with a small cave. Inside, he discovered a small device like nothing he had ever seen before and, in playing with it, managed to switch it on. The portable life-force harvesting device killed him within seconds. Two of the adults in the search party that went looking for Isaac never returned, and the search was called off as too dangerous. The device, being a portable unit, only has a range of an eighth of a mile, but has created a small desert within that range. Anyone or anything going into the device's area of effect will be drained, possibly too quickly to have a chance of escape. Due to Zion's isolationism, they have not sent for help to Fort Alice or any other secular authorities. To add to the problem, the malfunctioning device will soon overload its storage capacity. The resulting explosion could easily level several square miles, including Zion.

Surrounding the church in concentric squares are homes and workshops, some buildings containing both, but no stores, inns, taverns, or anything even vaguely similar, with the exception of the general store two streets away to the east. There, the villagers may obtain those things that Zion does not or cannot produce for itself: metalwork, fine cloth for undergarments, preserved foods and spices, and other necessities of life on the frontier. Goods produced in the village are distributed on a rationing system from the workshops. For example, once every two weeks any woman representing her household may go to the soapmaker and be given a bar of general cleaning soap, used for dishes and housecleaning, and a milder bar of personal soap for bathing. Larger families receive larger supply rations as agreed upon by the village council. Money is only used for external trade, normally only by the general store's shopkeeper and the furniture trader. Most of the villagers barter with the shopkeeper, trading goods that can be sold outside the village for goods brought in from outside.

T'would be lovely if th'railway actually ran t'Zion as th'map shows, but it don't. Long road in and out o'there with a wagon and a garnickey.

– *Hyrum Pledger, traveling merchant*

We sent over the reference maps clearly marked as preliminary survey and planning. It's not our fault that the cartographer misread them.

– *Deryn Quenell, Surveying Office, Alice and Gruv*

Zion has a lumber mill and kiln, and sells some raw and kiln-dried lumber, but their primary export is wooden furniture, mostly for the workhouse barracks. Different from the furnishings made for homes in the village only by the lack of any decorative carving, these beds, tables, chairs, dressers, and storage chests are solid and well-made, using pegged construction instead of metal nails. The carpenters of Zion turn out a wagonload each month, which the village's furniture trader then sells to the workhouse settlements by contracted arrangement, bringing in coin that the shopkeeper can then use to purchase inventory for the general store. While they have sheep, and do some textile work, all the yarn and cloth they produce goes for their own clothing, with not enough produced to have any left over for export.

Adventure Hook: The Girl Who Cried Wolf

Josiah and Seraphina Hershberger's teenage daughter Esther tends to part of Zion's communally held flock of sheep. Each morning, she takes around thirty (the number fluctuates based on whether the lambs have weaned yet or not) animals out to the edge of the forest to graze, and brings them back each evening. Last night, when she rounded up her flock to bring them back, she found she was missing a lamb. Setting her dog to guard the sheep and keep them contained, she went off into the woods in search of the lamb. Just a few yards in, however, she found a saber-tooth cat eating the missing lamb. When the cat glanced up at her approach, and snarled, Esther did something she'd never done before. She sent a cry for help to her parents, in the form of a tiny ball of light that carried her voice. Help arrived in time to chase off the saber-tooth and keep Esther from becoming its next meal. Now, though, the elders of Zion must decide how to handle the situation. Was this a miracle? If so, then Esther has been touched by God and must be treated with more respect. Was this witchcraft? If so, then Esther and her family must be shunned, excluded from all contact with the faithful, and requested to leave the community. Was it something else entirely? Peculiar stories circulate in the Gruv, some of which have been heard in Zion, of military officers hurling lightning bolts, and Saurid priests conversing with the spirits of trees. This is a different world, and God may have a different plan for it. The elders are willing to listen to whatever experts may present themselves. Esther's family, meanwhile, could use some explanations of their own, and Esther, poor girl, needs a shoulder to cry on and someone who can explain what she did.

Zion's defenses closely resemble those of any other frontier settlement. A palisade wall surrounds the village. Boys are taught bow hunting and knife fighting as soon as they turn ten, and receive their first lessons with a gun at fifteen. The village council maintains an armory of heavy rifles for emergencies. Every household has a hunting rifle, often an older model that has been in the family for several generations. Women receive training in basic medicine, how to stitch a wound and roll bandages. Girls begin helping with preparation of medications from local plants as soon as they're old enough to work at the stove. If the outer wall fails, the villagers fall back to the church, closing heavy wooden shutters over the windows from the inside to create a redoubt.

Preacher: Hiram Schlappach

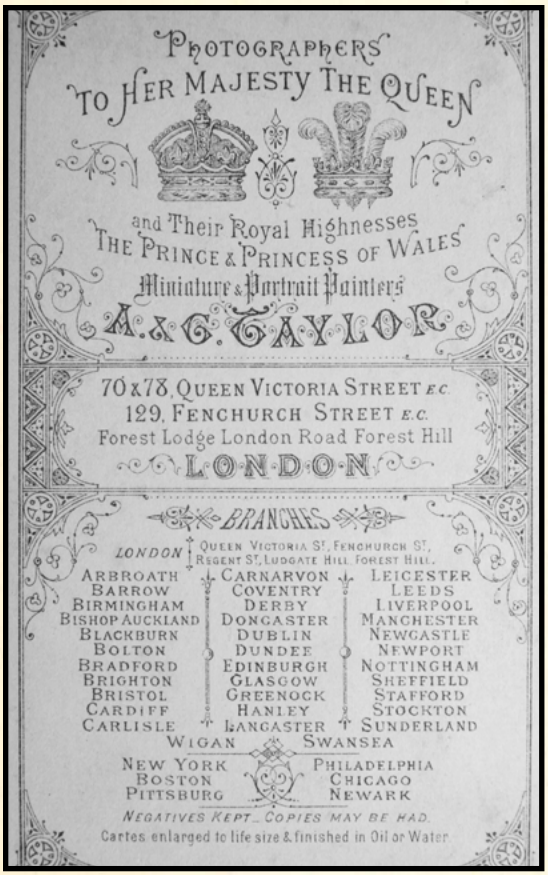
Brother Schlappach was ordained by the Fellowship forty-three years ago, and has slowed down considerably since then. His large frame no longer carries the muscle that made him a leader in barn raisings in his youth, and his dark, plain suit hangs on him like a jacket on a coatrack. His beard has gone snow white, and he wears it halfway down to his waist instead of close-cropped for safety like a workman. His mind remains sharp, though, and he can recite chapter and verse of Scripture for most occasions. His sermons tend to be short and to the point, not so much for the benefit of his congregation's attention span as for his feet, which have gone badly arthritic, limiting the time he can stand behind the lectern. Since coming to the Gruv, Brother Schlappach has been working with the village council to find his replacement so that he can retire, but Fellowship preachers with the proper experience usually already have a congregation. The village may have to settle for a younger, less experienced preacher, perhaps even one fresh from his ordination. In the meantime his wife, Esther, has a patch of meadowsweet growing by her kitchen door, and makes tea from it when her husband's pain gets a little more than he can bear.

Furniture Trader: Josiah Brenneman

As a child, Josiah's parents knew that he was destined to be a salesman. A born talespinner, Josiah invented stories at the drop of a hat, organized his friends into cooperative make-believe sessions, and charmed adults with his inventiveness. When Zion was founded, and the village council needed someone to represent its products to the world, Josiah was at the top of a very short list. In his early thirties, Josiah remains energetic, outgoing, and clever. He regards every potential business contact as a challenge, going in smiling and more often than not leaving with everyone convinced that they're all on the same team, and with a lucrative contract in his pocket. With all of that, he remains scrupulously honest, keeping faith with his fundamentalist Protestant beliefs. Josiah has never lied about his wares and never made a deal that was less than honest. Where other sales representatives cover up the shortcomings of their products, make promises that couldn't possibly be true, and fiddle the figures to put a larger commission into their pockets. Josiah gets through on charisma and believing in his product line. His wife Rebekah and their three children see him off each time he drives his wagon full of furniture away, certain that he will do them proud and return with enough honestly-made coin to support Zion for another month. In his off time, Josiah acts as coach for the settlement's children, organizing them into teams and teaching them cricket, football, and the American sport of baseball.

General Store Shopkeeper: Zedekiah Lambright

Formerly a greengrocer in Milwaukee, where they were members of a Mennonite community, Zedekiah, his wife Hannah, and their four children spent serious time considering the call to found



Zion in the Gruv before selling their business and most of their belongings and joining the migration. Zedekiah built a few connections fairly quickly, establishing the Zion general store and its supply contracts within the first few weeks of the settlement's existence. Lately, however, he's been concerned with finding new resources for the colony, as the initial contracts just aren't keeping up with the demand. Zion is producing more goods for trade than the buyers are purchasing, and the colonists are asking for more than the general store can currently obtain. Seeking new sources of supply for his store by mail goes so very slowly, and trust is better established in person, looking someone in the eye and shaking their hand. While Zedekiah is loathe to leave Zion for any length of time, he knows that Hannah can run the store without him, and someone must go to the other towns and forts to seek out additional suppliers. His greatest concern remains the Rabbit Hole. If seeking new contracts requires travel to London, and passage through the Rabbit Hole, there's a chance that he could be changed, or even lost. If he could find someone with greater understanding of the portal, and gain some reassurance as to his chances, that would relieve a great deal of his current anxiety.

Weaver: Peninnah Guengerich

Mrs. Guengerich keeps largely to herself since coming to Zion. Her children, grown and with lives of their own, stayed behind on Earth, and none of her relatives joined the Zion community. Her husband died of Looking Glass Fever in the crossing from Earth, She still wears black, and so the people of Zion do not intrude, and give her the space that she seems to want for her grieving. The isolation suits her well, if the truth were to be known, as it allows her to practice her abilities in secret. Since coming to the Gruv, Peninnah has been able to work small miracles. She dreams of dressing her loom, and wakes to find it set up and ready to weave. She can change the color of yarn by passing her hand over it and praying. She can tell good plants from bad when gathering herbs in the forest by touching them to her tongue. Some in the community might call it witchcraft, and shun her, were they to know what she can do. Others might see it as she does, the Hand of God having been laid upon her, perhaps granting her something in compensation for the loss of her husband. Sometime soon, she will have to tell someone else in Zion about her miracles. The question is who, and how, and then what will happen.

The Land Bridges: Realms of War

The northern, central, and southern land bridges connect the Grosvenor Land with the Edeesmatu, the Samsut homeland. They also play host to the ongoing conflict between Terrestrial and Samsut forces. Given the ongoing and entrenched warfare in the region, it's no great surprise that little effort has been put forth to either colonize the region or exploit its resources.

New Capetown

Type: Military/Support
Form of Law: Military tribunal, English military law
Population: Town
Astral Rating: Open

The exigencies of war force changes on everything and everyone. Located on the southern coast, New Capetown was meant to be the site of the first seaport in the new world, an honor which has since fallen to Beercrombie. One of the earliest civilian settlements in the Gruv, New Capetown's location, at the foot of the land bridge connecting the British territory with an obviously larger land mass, was chosen for strategic reasons. The mountains visible in the far distance would have great mineral wealth, as mountains always do, and a large industrial town would be needed to exploit those resources. The mining colonies would require logistical support, not only in transportation and processing of ore, but in cultivation of food crops, raising of livestock, and a large rail depot capable of acting as a way station for the goods flowing to the mines and the wealth flowing back.

The intended direction changed sharply on 4th January, 1879, when a delegation from Earth met with senior officials of the Samsut. Nearly two months had passed since the initial encounter between scouting parties, during which arrangements had been made for the meeting, and language barriers addressed, but not entirely overcome. This last proved to be the undoing. If better and more rapid translation had been available, or if one side had learned enough of the other's speech, the New Capetown Incident might never have happened.

But the moving finger, having writ, has moved on. The Samsut made a request for the British dead as payment for use of the land. An undead servant was displayed. Shocked at the desecration, some of the British troops, without orders, opened fire. The Samsut senior official was hit, whether by stray rounds or directed fire will never be known. No apologies could recover the situation. War ensued.

New Capetown took the brunt of the first wave of attacks. Weeks passed before the British Army worked out tactics that would bring success against a foe whose infantry felt neither pain nor fear. Months went by in a haze of gunpowder and gore. The palisade wall, sufficient to hold back the larger carnivores, tumbled down like matchsticks under fire from Samsut artillery. More troops arrived, the vital rail link back to Fort Alice having been defended at tremendous cost, and eventually the Samsut were pushed back. Stone walls rose where wooden had fallen. Settlers returned, unwilling to give up their homes and their investment. New settlers arrived, knowing full well that they would be living in a war zone, but fiercely determined that the British flag should continue to fly over the territory.

Adventure Hook: Hey, McCloud! Get Off My Ewe!

In one of the early Samsut raids, some of the outlying livestock barns were damaged or destroyed, and the shepherds had to bring the sheep in abruptly. The flocks got mixed up, and sorting them out has been a problem. Unfortunately, one of the flock record books got left behind, and without the documentation, it's going to be one man's word against another's as to who the sheep belong to. The military has flatly refused permission for the shepherds to go out to the distant field barns and look for the record book, as there's still Samsut forces that occasionally slip through the front lines and get far too close to New Capetown. A professional team, however, could perhaps go take a butcher's and possibly locate the flock book. There's not a lot of money or renown to be had in the situation, but Colonel Wolnoth would be very grateful to anyone who could get these angry shepherds out of his hair.

Half military base, half frontier town, with flocks and fields on one side, battlements and bombardment on the other, New Capetown soldiers on, a testament to British determination. The planners laid New Capetown out with straight avenues and a green space at the center, the government buildings placed around the square in neat procession. Now the streets run higgledy-piggledy, routing around old craters and burned-out wreckage. Where the park was to have been stands a hospital. Instead of warehouses by the railroad station, there are barracks. But shops still line the high street, the church still rings its bell on Sunday morning to call the faithful to services, and shepherds still bring the flocks in every evening. The flag still flies over New Capetown.

Commander, New Capetown Combined Arms Defensive Battalion:

Colonel Archibald Wolnoth

Colonel Wolnoth probably would have made the general's list several years ago if it hadn't been for his prodigious drinking habit. Being passed over for promotion brought him up sharply. Now a recovering alcoholic who has taken the pledge, Col. Wolnoth has a photograph of Sir Wilfrid Lawson, MP, on his wall, to the left of the obligatory portrait of the Queen. When he received his posting to the Gruv, he made arrangements with his bank to pay his dues to the London chapter of Sir Wilfrid's United Kingdom Alliance, a temperance and lobbying organization, and remains a member in good standing. A former Tory who's now a Whig, Col. Wolnoth supports women's suffrage, equal rights for all races, and a more progressive approach to religion, holding that Anglicanism is still too Catholic. He has fallen off the wagon a few times, most notably recently when a respiratory illness forced him to take a course of chlorodine. The alcohol in the syrup triggered his cravings, and he went through two bottles of brandy in three days before the need to adjust the bookkeeping to renew his supply brought him to his senses. The chloroform, opium, and cannabis in the chlorodine might also have had something to do with it. As a military commander, he takes a hands-on approach, making frequent and regular inspections of New Capetown's defenses, and parading the troops in review every Saturday unless active fighting pre-empts. Col. Wolnoth will by God prove himself a capable senior officer, and work his way back into the good graces of the high command, or die trying.

Commander, New Capetown Artillery Battery: Captain Auriel Fairbrass

One of the few female field officers in the British military, Captain Fairbrass won her posting through mathematical brilliance, determination, and sheer bloody-mindedness. Officers who didn't think a short, slender woman could keep up with the men found themselves outrun by her on the track. Regulations don't say that shells must be lifted with bare hands, leaving then-Lieutenant Fairbrass to remove her uniform's leather bandoliers and use them as a lifting harness, allowing her to load a shell just as quickly as any man, despite tearing a leg muscle during the exercise. She's rumoured to have an analytical engine instead of a brain, as she does her calculations for trajectory and charge loading in her head faster than most people can manage on paper. Her greatest difficulty has been maintaining a respectful attitude toward superior officers, as at the first challenge her chin comes up, her jaw sets, and she digs in her figurative heels, refusing to back down. The one man at New Capetown who flatly wouldn't take orders from a woman, and challenged her right to her uniform, discovered when he tried to lay a hand on her that she has four older brothers who, instead of constantly protecting her, taught her how to win her own battles. Once he got out of hospital, he had no further problems following her orders. Captain Fairbrass pushes herself much harder than any person under her command. As she will readily tell anyone who asks, it's not enough for a woman to be as good as the men. To succeed, she has to be better.

High Street Chemist: Bertram Radnage

Mr. Radnage turned up in answer to a newspaper advertisement seeking professional tradesmen for the high street in Grosvenor Land settlements. He had good references, a diploma from a Prussian university (always good for a chemist as British universities, even in these enlightened times, still put far too much emphasis on classical education), and a chemist's license, duly notarized. What was not immediately obvious was that every last scrap of these documents was forged. Now that he's set up in a chemist's shop on the high street in New Capetown, and making a nice living selling medications and household products, it's unlikely that anyone will ever look into his past. Was he running from something? Did he just not want to go through the usual process of becoming a chemist through years of apprenticeship? What are the secrets of his previous existence? The only clue might be in his backroom business. Like many chemists, he sells the more embarrassing items privately – condoms, white mercury pills to cure the French pox, pile cream, the sort of thing that, while it's legal to have it on offer, nobody wants to purchase in public view. Like many chemists, Mr. Radnage goes out into the forest and the grasslands on a regular basis to gather the raw materials for his preparations. Perhaps he's bringing in more than the herbs needed to make headache pills. Perhaps he has things available in the back room, if one knows to ask for them, that the authorities might frown upon. A patrol recently found a small stand of splithee that someone had been tending and harvesting, just a small patch, not enough to support any sort of regular trade, which raises questions as to why someone would maintain it, and whether there might be more patches hidden in the area around New Capetown.

Publican: Parthenope Tsirimokos

A first-generation immigrant, Parthenope came to England with her family when she was twelve. Her father worked in a warehouse for a wine importer, starting out on the loading dock and making his way up to distributor before his retirement. The middle of the market, he would tell his children, that's where you want to be, the man who collects from both ends. Parthenope, who was more interested in music than in selling wine, tried for a career in the music halls and theaters,

but a woman who played the saz and sang in Greek just wasn't a big draw. She fell back on her knowledge of the wine market and her mother's recipes, opening a Greek-style taverna in Soho at just the right moment. Thirty years later, she's come to the Gruv to open something similar, leaving her children in London and Manchester and Dublin to run the three tavernas she and her husband Kyriako own. She still plays the saz, and still sings on Friday and Saturday nights. She also owns the only place in the Gruv to get proper baklava. A short, heavy-set woman with curly grey hair, who wears maybe a little too much jewelry and perfume, she's everybody's grandmother, who thinks you should relax and eat a bit more, you're too thin.

Adventure Hook: The Play's The Thing

A traveling group of players en route to New Capetown, being brought in to raise morale among the civilian population, was ambushed by a Samsut patrol. Their eldest actor, a Shakespearean thespian of minor renown, who'd wandered a bit too far in pursuit of fresh fruit when the wagons halted to rest the oxen, has been captured. Colonel Wolnoth feels bad for the man, but he cannot justify a military raid against a mobile and hostile enemy for the sake of one person of dubious strategic importance. Parthenope has raised a bit of coin, some from her own purse, some from the community, to hire someone to rescue the actor. The show must go on.

Bourne's Hill / Maksuddum-matam

Type: Former Civilian Settlement, now Samsut Armed Camp
Form of Law: Samsut law
Population: Town
Astral Rating: Tainted

With New Capetown established as the railhead, supply depot, and processing center, the next logical step was to establish a series of mining villages. There, the work force that would extract the expected mineral wealth from the mountains would reside, in close proximity to the mines themselves. Families from Wales and Cornwall, who had been living in similar villages back on Earth, were brought in to create these labor settlements. Their numbers were supplemented with workers from northern India, and an uneasy period of cultural accommodation ensued. Then the war began, and differences in dress, language, religion, and diet paled to insignificance.

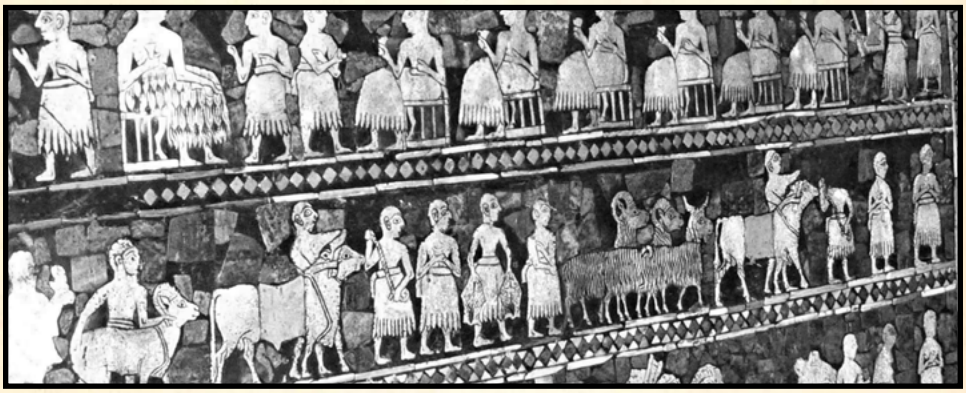
A year after the Samsut and the British Empire collided, some of the villages still exist as such. Others have been converted into armed camps or outlying fortifications. Bourne's Hill, captured on 12 March, 1879, remains in the hands of the Samsut, who have renamed it Maksuddum-matam, "we conquered this land", and have made it their forward base. Thus far, efforts to dislodge the Samsut by force or starve them out through siege have failed, and discussion of tactics has now turned from recovery of the former settlement to its destruction.

Adventure Hook: Talkin' 'bout a Resurrection

The Samsut remain perplexed as to why the British reacted so badly to the idea of abd-salamtu. It's not as if the person's spirit has been captured – that flew off when the person died. Only the great and powerful deserve to have their remains enshrined. A team has been assigned to investigate this, and figure out what the problem is. The team may be Samsut gods-chosen who have been left to their own devices as to how to find the answer, or they may be an Empire team that has been approached by the Samsut while out in the field, well away from the battle lines. In either case, a difficult decision must be made with incomplete information as to how to make the initial approach and perhaps open a dialogue. The customary parley indicator of a weapon held out reversed, the business end pointing to the ground (spear point or bayonet) would be a good start, if the other party recognizes it as such. If the contact mission goes well, it may contribute to resolving the conflict between the Samsut and the Empire. If it goes badly, one team or the other may end up dead, and the conflict could be made much worse.

The original wooden palisade wall was quickly replaced with drystone, massive blocks levered into place with contra-gravity lifters and squads of undead workers. The British remain uncertain as to how so much stone was cut so quickly and so well that the wall required no mortar and went up in less than a month, but assume that the tirelessness of a zombie workforce had something to do with it. Railgun and ballista emplacements atop the wall, sheltered behind crenellations, preclude any sort of frontal assault. Attempts at sapping have run afoul of buried stinkers, undead troops deliberately placed in the foundations and left as traps for anyone attempting to tunnel. The gates, made primarily of iron, weigh so much that they cannot be moved without teams of oxen and contra-gravity devices, the latter of which are removed and locked away in the guardhouses when the gates are closed. The sally ports are of course too small to bring an invading force through, but do quite nicely for letting out defenders who enjoy the protection of covering fire from the top of the wall.

Within, the fortress has been divided into three areas, each controlled by a different city-state. Ur rules the northern half. The city of war provides most of the military presence, and holds the larger part of the fortress by necessity. The southeastern quarter belongs to Lagash, whose miners came to continue the work begun by the British. Eridu controls the southwestern quarter, and sees to the management of the surrounding forest and fields. The dividing line between Lagash and Eridu's portions has been a source of contention since the occupation. One of the settlement's wells lies directly on the border, and both sides constantly accuse the other of taking more than their share of water from it. Countless other disputes, some more petty than others, keep the officers and fort commander busy resolving an endless series of diplomatic crises. Rab Birti Nitocris has expressed her dismay over the internecine conflict numerous times in her reports to her superiors back in Ur, but has been told that both Lagash and Eridu have an important part to play, and that she should use her best judgment to keep them focused on their tasks. Following the ancient Samsut tradition of using war games to settle disputes, the Rab Birti has scheduled regular bouts of individual and small-group combat between the two rivals. One match per bout uses live weaponry and goes to first blood, with the resolution of the latest high-priority dispute riding on it. The rest of the matches use blunted practice weapons, and may or may not be used to settle lesser issues. The bouts have created a lively economy within Maksuddum-matam through wagering on the match outcomes.



Some of the British-constructed buildings remain, having been either relatively undamaged in the takeover or readily repaired, and suitable for Samsut purposes. Others have been demolished, some because they were too badly damaged from the battle, some because they did not meet the Samsuts' needs. Several barracks, storehouses, armories, and undead troop containment buildings have been erected. The town hall has been extensively remodeled to convert it into the military headquarters, providing not only offices and meeting rooms but quarters for the senior officers, their staff, and their servants. The stables have also been remodeled to render them suitable for the beasts of burden and cavalry mounts used by the Samsut, some of which require quite different facilities from the oxen and horses used by the British. Very little effort has been put into decoration with one noteworthy exception. The town's Anglican church, repurposed into a temple for the Babylonian deities, has had the cross removed from the steeple, as well as all of the stained glass, and has been redecorated by the priests and acolytes into a proper temple in the Akkadian style. If nothing else speaks of the Samsut determination to hold the land, the effort put into establishing a presence for their faith certainly does.

Fort Commander: Rab Birti Abum Nitocris

A Mushkenite from the city-state of Ur, Nitocris followed her family tradition into military service at a young age, achieving officer's rank in the Ningul regiment in a suitable amount of time, not too quickly but not too slowly either. Her career has been marked by political caution. If she had been more ambitious, and more willing to take risks, she might have reached her current rank years ago – or perhaps been cast down to the Ardites. Abum Nitocris is an ideal choice for the position of Rab Birti, or fort commander, at Maksuddum-matam, a careful, thoughtful officer who will not take unnecessary risks, one who can be relied on to choose the best defensive strategy and maintain the foothold. She is also unlikely to seriously offend either of the other two city-states represented, and could be relied upon if diplomacy with the enemy were to be required. Her cautious nature leads her to maintain her physical condition and fighting skills at peak effectiveness, and to make all the appropriate offerings to the gods and goddesses to ensure she stays in their good graces.

Priest: Burnaburiash

Born to an Ardite fisherman's family in Babylon, Burnaburiash followed his father into work on the Great Inland Sea. At the age of twelve, though, his life took a sharp turn. Something large

rose up under his father's boat, and with massive tentacles dragged him overboard and under. The next morning, he was found on the shore miles away, eyes wide, staring at the sky, great angry circular welts across his forehead and down his arms and legs. His mind had gone very far away. The priests examined him and proclaimed that he had been marked by Dagan, the god of water and fishing, and claimed for the priesthood. Burnaburiash was taken away that very day by the priests, elevated to the Mushkenites, and housed in the temple. A year passed before his mind came back, and when it did, he remembered nothing of his time underwater, except for a great man with a long beard. Thirty years later, Burnaburiash, now a priest of high rank in his own right, still carrying the Mark of Dagan on his forehead, three circular scars straight across above his eyebrows, has come to Maksuddum-matam, personally escorting the idols of Dumuzi, Inanna, and Gestinanna from Nippur to the new fortification's temple. At night, he walks out on the western wall, and stares off into the distance. The ocean is close, he knows this, and it sings to him. Something buried deep in his mind is stirring. Could it have something to do with the old canvas pouch he still carries, the one that was on his belt when he was seized from his father's boat, the one with the seal on its cord that the priests forbade anyone to break?

Overseer of Lagash: Jotape

While Jotape is an Amelite, she is not the Amelite whose name she carries. Before leaving the Samsut homelands, the woman calling herself Jotape convinced a few members of the nobility of Lagash that she should be allowed to trade identities with their kinswoman. Her staff and retainers all belong to the noblewoman whose identity she has assumed, and have been ordered to address her and treat her as their true mistress, even in the most private of circumstances. Who she really is, what noble house she was born into, even what city she comes from, all are closely guarded secrets. The few who know of the substitution were shown proof that Eridu, or people from Eridu, had been acting not only against the interests of Lagash, but against the Balance as well. The new Jotape has promised them that Eridu will suffer greatly from the consequence of their actions, and that Lagash will indirectly profit in a way that will reflect well on the city, and on the noble house that has loaned her an identity. She intends to leave Eridu blamed for a betrayal of the Samsut to the British. This of course requires somehow allowing British agents to gain an advantage, one that will not harm the Samsut as a whole, but that will badly embarrass Eridu. Oh, yes, the Samsut have their own version of the Great Game.

Adventure Hook: ||-| Marks The Spot

Miners from Lagash found a container buried deep within the ground, made of incorruptible metal and decorated with the sigils of the Anunnaki. They brought it to Jotape, who took it to Burnaburiash, who opened it in the presence of all three of the political leaders. Inside, they found a map drawn on folding metal and labeled with Anunnaki symbols. Burnaburiash believes that it points to a cache of Anunnaki technology. The problem is that the cache is located well within British-held territory. The usual recovery team cannot be sent, as the British would notice a caravan of wagons escorted by soldiers. A small team of gods-chosen, able to move quietly and without being detected, might have a chance at finding it and bringing it back.

Overseer of Eridu: Ditanu

Born a Mushkenite into a family of wood merchants, Ditanu proved himself capable enough as a supervisor in the lumber mills to win life extension. As he rose to prominence, he implemented small ideas here and there that added up to more wood for less effort. A slight redesign of the chimneys reduced fuel costs for the drying kilns. Overlapping the shift changes kept the machinery running without halt while workers arrived and departed. On paper, Ditanu looks to be efficient, productive, and clever. While those are the end results, they all proceed from his basic laziness, and the ability to always find someone else to blame for his mistakes. Ditanu spends considerable time thinking of ways to avoid work, to create more time to indulge his somewhat immature interests. His innovations have largely been driven by a desire to have the people under his authority work on their own without disturbing him. By implementing processes that keep him out of the direct line of authority, at a level removed once or twice from the actual work being performed, Ditanu has been able to avoid responsibility for many of the problems he has caused. While he has climbed to the top, his feet have traveled across the shoulders and heads of his fellow Mushkenites, some of whom have been cast down to the Ardites after being spurned under his heel. What exactly he has planned for Eridu's forestry operations around Maksuddum-matam, he has thus far not shared with anyone. The simple fact that such a lazy, petulant man, addicted to his pleasures, has journeyed this far from his homeland, and into the midst of a war, suggests that his plan would not be approved, or perhaps even allowed, back home.

Fort Wellington

Type: Military/Fort
Form of Law: Military tribunal, English military law
Population: Town
Astral Rating: Tainted

The problem with building a military base in a war zone is that the enemy knows exactly where you are. With the advent of modern artillery, castles became useless. Battles became mobile. Troops, however, still need a place to rest, to recover from their wounds, and to reload their supplies. The further that stable point is from the battle lines, the longer the supply and support line is stretched, and the easier it becomes for the enemy to cut it. Striking a balance between the need to have a resupply point near the front and the cost of attempting to maintain a stronghold in the face of modern assault weaponry keeps senior officers awake at night.

> Who the bloody Hell approved calling the lake nearby the fort Lake Napoleon? All the British heroes in the world to name the lake after, and they choose the d—ed Frenchman?
> – *Colonel Hiram MacTavish*

Adventure Hook: Saint Anthony's Sleep

The latest ration shipment arrived with an unexpected addition: half the flour barrels have been contaminated with an unknown drug or similar substance. The drug remains inactive until heated, at which point it emits a vapor that causes fatigue and malaise. Half the kitchen staff were affected before the source of the symptoms was discovered. Eating anything baked from the flour results in loss of muscle tone, extreme fatigue, and intermittent blindness, all of which may last from a few hours to several days depending upon how much was consumed. In two extreme cases, where soldiers stole loaves of bread from the kitchen, death resulted. Enemy action is assumed. How the Samsut managed to contaminate the shipment remains unknown. So does the contaminant. Three tasks must be completed, and quickly. First, a new shipment of rations must be escorted to Fort Wellington before the troops starve. Soldiers will not be sufficient. The escort must include people trained in spycraft and subterfuge. Second, the contaminant must be identified, and a method of readily detecting it developed. If possible, a means of removing it from the spoiled flour should be determined. Again, outside help will be required, as the fort does not have chemists on hand of such advanced skill. Third, a spy mission against the Samsut must be undertaken. The Empire needs to know if the Samsut are in fact responsible for the contamination. If they are not, who is? If they are, they will know what the contaminant is and whether or not it can be removed.

Fort Wellington has two concentric palisade walls, with fifty yards of empty space between, the inner of which is being replaced with stone as time and resources permit. Most of the buildings are either under construction or under repair. A series of outlying bulwarks and cannon emplacements provide some degree of protection from Samsut assaults, but very little can be done about long-range artillery using indirect fire, or grenades dropped from high altitude by airborne enemies. Contra-gravity makes Samsut artillery pieces more mobile than the Empire's, able to cross terrain that would bog down a cannon, and to be relocated quickly after firing just a few rounds, before an assault force can reach their location. While units of airborne cavalry are training with the Saurids, breeding enough of the flying mounts and training soldiers of Her Majesty's military to ride them has not yet reached the point where these units are ready for combat. The few Saurid flying cavalry that are available have found themselves outmatched in terms of numbers and firepower by the Samsut flying chariots.

Very few civilians reside at Fort Wellington, and those only because they hold vital posts in the war effort. Fort Wellington is a military base in hostile territory and not a place for anyone without the training and experience to handle the environment. Facilities are restricted to barracks for the soldiers, minimalist housing for the officers, stables for the animals, an armory, scattered supply bunkers so that a direct hit from an artillery shell won't take out everything in one go, and a hospital. This last holds most of the civilians, including the nursing staff and the base's Catholic priest. (The base chaplain is a proper Anglican.) Plans have been proposed for an airship dock, but until either a refueling station can be designed that won't destroy the entire fort if it takes an artillery hit, or high command overrides Col. Orrick, no such facility will be constructed.

Adventure Hook: Zombie-Off

A somewhat eccentric chemist has come up with a solution, you should pardon the pun, for the stinkers. He has synthesized the active ingredients in carrion beetle saliva. In the laboratory, applying the compound to deceased tissues causes a sudden and rapid breakdown, massively accelerating the normal process of decay. His request to the military for a captured stinker upon which to try the compound was summarily rejected. Attempts to secure field testing have likewise met with resistance, as the officers are simply not willing to risk their men on a chemical weapon of unknown effectiveness. Desperate to prove himself right, the chemist has offered to pay one hundred pounds to any person or persons completing a set of trials with the compound. Considering that one must approach a stinker within arm's reach to deploy the spray, and that the trials require a minimum of three separate uses with photographic proof of the effectiveness, no one has yet collected, although there have been attempts.

Fort Wellington has no civilian facilities nearby. The usual clutter of bars, brothels, and gambling dens has not been allowed. The last group of prostitutes that tried to set up shop in a tent out in the woods were sent packing for their own safety. Two of them didn't make it, picked off by Samsut sharpshooters as they rode away.

Fort Commander: Colonel Malcolm Orrick

Colonel Orrick had to be refitted for, well, pretty much everything after his transit through the Rabbit Hole turned him elven. He specifically directed his tailor to give his new uniforms a more severe cut to avoid the tendency of his fellow elven Boojums to play the dandy. A dour Northerner from a line with strong Calvinist tendencies, Col. Orrick believes in the virtue of hard work. He drills the cavalry units under his command himself, in rotation, so that each gets his personal attention once per week. Upon seeing a few of his junior officers display remarkable abilities in battle, he has learned of the existence of the Order of Britannia Victorious. Col. Orrick has directed the members of the Order under his command to find a way to make their magical defenses permanent. They can shield themselves from enemy fire. There must be a way they can shield the fort from Samsut artillery. As he said to Lt. Dowsett: "Coming here turned me into an elf. What makes you think I'd have any problem believing in magic? You're not Merlin, but you're all we've bloody got. Figure it out."

Catholic Chaplain: Father Crescentino Manucci, S.J.

The aforementioned Catholic priest, Father Manucci received his posting from the Vatican as a twofold mission. He ministers to the occasional Catholic in the regiments, and he makes what observations he can of the Samsut and their religious practices. These are, after all, a people who were separated from Earth long before the coming of Christ. The spiritual status of those who died before the Gospel of Christ was first proclaimed has long since been a settled argument within the halls of the Vatican. The status of these people, however, descended from pre-Christian forebears in a world where Christ did not appear (as far as can be determined), requires investigation. Performing such investigation, of a hostile people in the midst of a war, requires someone of unquestioning dedication to their faith, willing to take whatever risk the Church may deem necessary, and well

trained in theology and history. Thus Father Manucci, a Jesuit with experience in most of the central European wars of the last twenty years, was selected. Colonel Orrick has notified him that, as a civilian, he cannot be forbidden from wandering off into the forest whenever he feels the need, but that if his research runs him afoul of the Samsut, he must understand that no rescue will be forthcoming unless a unit is already in the area with the intent to engage.

Cavalry, OBV Mage: Lt. Valda Dowsett

A champion hunter-jumper, Valda was expected to be the next rising star on the European tour. Instead, she utterly shocked her family by applying for a commission in Her Majesty's armed forces. Even more shockingly, she won a place in the Seventh Queen's Own Hussars, and took her place as a new junior lieutenant in the deployment to the Grosvenor Land. If she'd told her family about her nascent magical abilities, they'd have disowned her on the spot, instead of gamely putting her portrait up on the mantel next to all the men in uniform. The Order of Britannia Victorious orchestrated Lt. Dowsett's regimental placement and posting, sending her to a front-line unit where her rather startling effectiveness with casting fire from her saber could be put to good use. Lt. Dowsett continues to explore her expanding powers, working with the earth as she feels a connection there she hasn't quite figured out yet. Col. Orrick has detached her from her regular duties, placing her in command of a task force comprised of anyone with magical potential, or the appearance of such, the Colonel could lay hands to. Lt. Dowsett has endured the ribbing of her fellow officers with good nature, getting used to being called Lt. Dowser. Her Fire Brigade, as the unit has unofficially been nicknamed, has proven useful a few times already, sweeping in on skeleton or stinker units and raining flame upon the enemy during a fast charge.

Chief Nurse: Anissa Fowkes

As a nurse, Miss Fowkes is a competent administrator. She keeps her staff ruthlessly well organized, files her reports in a timely manner, and generally runs a tight ship. One would think, given her air of authority, that she had graduated at the top of her class, but this is not so. She placed firmly in the middle of the ranking. One might assume, given her habit of peering at works of art and medical records alike through her lorgnette, then asking others their opinion in a confident tone, that she already understood what there was to see and simply wanted to confirm that others saw the same. One would be incorrect. Miss Fowkes' scholarly airs are mere pretension, fluffery to cover her academic shortcomings and give her the appearance of being more knowledgeable than she really is. Oh, she knows the proper catch phrases, the trendy analyses of literature and music, and enough about medicine to sound quite competent. However, the shallowness of her pharmacological understanding nearly cost the life of a patient recently, due to a drug interaction that a more well-read nurse would have spotted before the injection was carried out. The doctor who wrote the order has been chastised, but the nursing staff should be the safety net, and Miss Fowkes was out of position. In civilian life, she could be left to safely shuffle papers and make schedules and tyrannize her staff, but in a front line military hospital, every hand must be turned to the task, and Miss Fowkes may yet be found sadly lacking, her pretense of knowledge not sufficient in the pinch. No one who has come to know her is surprised that she remains a spinster.

Dhamara

Type: Civilian
Form of Law: Civilian religious tribunal, modified Sharia law
Population: Village
Astral Rating: Safe

Three years ago, Mirza Ghulam Ahmad revealed himself to the Muslims of northern India as the Mujaddid, the divine reformer who would bring about the day of judgment and the triumph of Islam. His teachings focused on two key points, the first reinforcing the idea that Islam is the final revelation of God, and the second a need to restore Islam to its original form, which had been overlaid with considerable baggage from each culture it passed through over the centuries since its origin. His followers, gathered from Odisha, Punjab, Sindh, and the United Provinces, calling themselves Ahmadis or the Ahmadiyya, believe that Ahmad has been sent to end religious wars, bring an end to bloodshed, and institute a new era of morality, justice, and peace. While Ahmadis can be called fundamentalists, as they seek to return to the essential teachings of the Prophet, they work toward their objectives through peaceful means, holding that one cannot set things to right through wrong action.

The Ahmadiyya immediately met with strong opposition from their fellow Muslims, some of whom denied that the Ahmadiyya were Muslims at all. (This has to do with differences in religious belief that are well beyond the scope of this document.) Marginalized, persecuted, and oppressed, one of the largest groups of the Ahmadiyya gave up their community in Odisha and began a migration. Intending originally to settle in Britain, where they would be just one more minority faith amid many, their path instead took them on through the Rabbit Hole and down to the southern coast, where they founded a settlement on the shore of the ocean, at the northernmost end of the land bridge. Warned repeatedly of the war with the Samsut that made the area unsuitable for habitation, the Ahmadiyya responded that the hostilities demanded their presence, and that by settling in the war zone, they might be able to bring peace to the region.

Before the Ahmadiyya can accomplish such a Herculean task, however, they must first deal with an internal issue. One of their number vanished from the train as it passed through the Rabbit Hole, to turn up again three months later aboard another train, transformed into a Boojum of the elf sort. Nazafarin Khani had visions during her absence, the relating of which has caused tremendous strife within the community, as they're decidedly Hindu in nature and symbolism. Some of the Ahmadiyya regard her as a heretic. Others see her visions as being explanations of why the Eschaton did not follow the revelations of Ahmad, that God had given Ahmad only part of the message. A third group insists that God's message was perfect within the Q'uran, that Mohammed was the last prophet, and that the woman's visions are sent by evil spirits to lead the faithful astray. It's resulted in massive argument, and driven the Ahmadis perilously close to violence. Nazafarin, meanwhile, has disclaimed any position as a leader or prophet. She had these visions, she remembers them with crystal clarity, and she is obviously meant to tell others about them, but she does not know why. She was not told to be a prophet or to carry a new revelation. She has no clear instructions from the source of the visions. Correspondence with Mirza Gulam Ahmad, still residing in northern India, takes months for a single exchange, as the correspondence must be hand carried for considerable distances at each end of the journey, pass through the Rabbit Hole, and travel thousands of miles by rail. This has thus far precluded interpretation of the visions by the Mujaddid.

In the meantime, the Ahmadiyya have built a village on the seashore, and done their best to get on with their lives. They have no palisade wall. They have few weapons, and only use them in self-defense when all other options have been exhausted. Somehow, they survive. They tend their livestock, cultivate their fields, attend to their five daily prayers, and do what they can to develop peaceful relationships with everyone, including the Samsut. Ahmadiyya emissaries travel to other settlements across the Gruv, quietly preaching the message of Ahmad, the need to return to the basics of the faith and to seek peace within the self and with others.

Adventure Hook: Lunacy

When both the small moons are full, Jalel Nassiri, one of Dhamara's fishermen, goes insane from moonrise to moonset. During this time, he does not speak, but laughs maniacally, as if at some unpleasant joke that he finds both amusing and disgusting. If he happens across anything with writing on it, he uses the most readily available method to try and destroy it. Thus far he has set fire to a house whose walls were decorated with verses from the Q'uran, and taken his fishing knife to a book of poetry that his wife had left laying out. When both moons have set, as soon as the last fingernail's width disappears below the horizon, Jalel falls unconscious, and does not awaken until the next sunrise, at which point he remembers nothing of what he did. He has asked his friends to tie him up the next time the moons are full, terrified at what he might do while his mind is gone. Neither Dr. Razmara nor Imam Javadi have been able to find the source of Jalel's affliction, nor prevent the madness from seizing him. They both would appreciate whatever help they can get, as Jalel is a good and faithful man, a hard worker, and a loving husband and father to his family.

Scholar: Fazlullah Sorush Radji

Fazlullah Radji received degrees in History and Classical Languages from the University of Madras in 1864. making him one of the first dual-degree graduates of the new institution. He went on to a career in politics, working as a legal documents translator to Sir William Denison, Governor of Madras under the Raj, and subsequently to Lord Napier. When Lord Napier stepped down in 1872 however, rather than continue under the temporary auspices of Sir Alexander Arbuthnot, Mr. Radji left government service for scholarly work, translating a number of scrolls found during the reconstruction of the Thirumalai Nayakkar Mahal palace from Telugu into both Arabic and Sanskrit, as their content held considerable historic value for both Hindus and Muslims. This pursuit brought Mr. Radji into contact with a wider number of scholars of both faiths, which in turn led to his learning of Mirza Ahmad's revelation very early in the formation of the movement. Already a Muslim by birth, Mr. Radji found the tenets of Ahmadiyya Islam highly attractive, and quickly cast his lot in with the Ahmadis. When he and his family relocated to the Gruv, he used the larger portion of his personal baggage allotment for reference material, and is currently working to translate the Q'uran into Samsut Akkadian. This effort has led him into contact with a few of the Samsut, a risky business, as the Empire would regard such pursuits as consorting with the enemy. Thus far, though, Mr. Radji has done nothing to attract the attention of the British military, and plans to keep his research contacts very quiet.

Adventure Hook: Silenced

Over the last two months, and not at the same time, five people have lost their voices. They can no longer make any sound louder than a whisper, and seem to be having trouble getting their thoughts into spoken words. Two fishermen, an older woman who is a weaver, a young woman who was a shepherd, and a boy not yet old enough to have a formal position, one of three children of a family of farmers, have been afflicted. The weaver, who is literate, can still read and write without any trouble. The others have very little way to communicate. The fishermen cannot go out to sea, and the shepherdess cannot tend her flock, as they have no way to call for help or coordinate their work with others. The boy has gotten so frustrated over it that he has started setting fires. The villagers have heard that the Saurids far to the west have among them those they call the Voiceless, Saurids who cannot speak but have some sort of position within the tribe. Someone with experience in traveling in the Gruv is needed, to escort one or two of Dhamara's voiceless to the Saurids, and find out if what is happening in Dhamara is the same thing that happens in the Saurid lands. Perhaps the Saurids can help Dhamara's people regain their voices. If not, at least they might be able to explain what is happening, and help Dhamara's silenced adjust to their condition.

Imam: Kourosh Javadi

Long a proponent of the idea of jihad as internal struggle, Imam Javadi found the message of the Ahmadi movement closer to the truth he saw in the Q'uran than that preached by other imams in his district. Once a scholar, always a scholar; Imam Javadi is still exploring the meaning of the Ahmadiyya reforms, working through differentiating between cultural tradition and the Q'uran and hadith. He corresponds with the Mujaddid as best he can, sending a lengthy missive each month detailing his own thoughts, events in the village, and the ongoing larger discussions. Besides attending to his religious duties and studies, Imam Javadi does some of the bookkeeping for the village, helping to keep track of supplies, crops, livestock, and the fish caught and preserved. His wife L'dooz is an entomologist, specializing in agricultural pests and beneficials. Her knowledge of terrestrial insects has been less useful since coming to the Gruv, but her skills have been just as applicable, and she is rapidly learning about the Gruv's smaller insects.

Physician: Sarvenaz Razmara, BAMS, MD

Dr. Razmara trained in ayurvedic medicine, naturopathy, and yoga, achieving her Bachelor of Ayurveda, Medicine and Surgery degree and her postgraduate Medical Doctor degree and certification at the University of Bombay. She traveled to Iran (which the Europeans still call Persia, after the manner of the Greeks) and spent several years there studying the Book of Healing and the Canon of Medicine of ibn Sina, and working out how to integrate ibn Sina's medicine with ayurveda and the Western allopathic tradition that had made its way into India with the arrival of the British. She spent many years after her return to India seeking a publisher for the book she had written on the subject. Having run afoul of cultural prejudices against a woman practicing medicine many times over the years, she was delighted to hear of a reform movement that sought to discard such cultural baggage and reaffirm the equality of women with men, as stated in the Q'uran and as originally implemented in the early reforms of Islam. Her practice in Dhamara is rooted more in prevention than in cure, seeing to the nutrition, physical condition, and general well being of the village. However, those who see her as a diet and exercise counselor sorely underestimate her abilities, as she is perfectly capable of performing delicate surgery, or setting a dislocated hip with clever use of leverage. Her book, sadly, had a print run of only three hundred copies, and languishes in obscurity.

Fisher: Anusheh Kazemi

Anusheh, the teenaged daughter of Mani and Katayoun Kazemi, lost her sight from a fever as a child. The same day that she passed through the Rabbit Hole, she began to hear the voice of her qarin, her assigned jinn companion. She tried to keep this to herself, but her unseen companion's guidance became obvious as it compensated for her blindness. Several consultations with Imam Javadi and considerable research on the subject followed. In the meantime, after arriving at Dhamara, Anusheh's qarin led her to the shore, and into the ocean, where it revealed that it could grant her the ability to breathe underwater. Again initially trying to keep this a secret, Anusheh's long submergences eventually made it obvious. She now works with the village fishermen, tending their nets from below and herding fish into them. The imam has said that the Prophet himself, peace be unto him, acknowledged that he had a qarin, and that his qarin had submitted to Allah and assisted only with the doing of good works. Anusheh's qarin assists her in ways that are beneficial to her and to the village as a whole. She remains observant and says that her qarin is observant also, reminding her to go back to the shore for her prayers. For now, Imam Javadi says, we will accept this, but we should remember that only the Prophet's qarin became a Muslim, and not the qarin of any of the Companions. As well, the spirit that speaks to Anusheh may not be her qarin, but a jinn that has taken an interest in her for some unknown purpose. Given its affinity with water, the imam has ruled out the possibility that the spirit could be an ifrit. This may yet turn out to be a situation both physically and spiritually dangerous.

The Samsut Lands

The Samsut call their homeland the Edeesmatu, meaning either the New Land or the Renewed Land, depending on context. They regard the Grosvenor world as a second chance, granted to them by the Anunnaki, their gods, when Babylon fell and their enemies threatened to destroy them utterly.

They tell legends about the migration, but no living Samsut remembers that time, thousands of years ago. Their ruling caste did not achieve immortality until hundreds of years after the Samsut had settled in the Gruv and the portal back to Earth had closed once and for all. Some explanation of their history will help make their culture and the organization of their lands more understandable. Substantially more detail can be found in the *1879 Miniatures Wargame Samsut Forcebook* and the *1879 RPG Samsut Sourcebook*.

The Discovery

After arrival in the new world, the first several decades were spent building the foundations needed to sustain life: crops and livestock for food, homes for shelter, and plants and animals for clothing. The Samsut adapted to their new home with a combination of cunning and perseverance. Seeds from Earth, wheat, barley, chickpeas, lentils, onions, garlic, lettuce, mustard, and dates were all successfully cultivated, and new edible plants were discovered to add to their diet. Cattle, goats, and pigs were brought through as food animals, with oxen and donkeys serving as beasts of burden.

Life was difficult, especially dealing with the deadly local fauna, but the Samsut thrived, spreading out from the initial colonization area. The Samsut were well-established by the fiftieth anniversary of their arrival, so well that exploration became a primary activity. Ruins near the Portal site, previously ignored in favor of the necessities, now became a site of intense interest. Some thought this world was the land of the gods, called by the ancient name of the Anunnaki, and the ruins might be heavenly domains.

Exploration of the ruins turned up strange artifacts of inexplicable purpose and design. The ruins themselves were enormous, at least the size of Babylon. The real discovery, though the significance would not be realized for centuries, was found at the center of the city ruins. A large, tower-like device was found in the ruins of a huge building at the heart of the city. Standing over thirty-five cubits (sixty feet) high, the device was also sunk some distance below ground level. It had many moving parts, strange symbols, and metal plates and pins, whose purpose was a complete mystery. As the Samsut ranged farther from their arrival point, more city ruins were discovered, all having the same device at the exact center of the city. Centuries were spent studying the devices, often by descendants of the men who first started the process. After over three centuries of study and a few accidents of activation, the nature of the device was understood. It drained living things of their life energy and stored it, releasing it to provide a variety of benefits.

The discovery was a major turning point in Samsut culture. The device, which became known as the Naptam-napishtu, the Key to the Breath of Life, or more simply the Life-Giver, could be used to power smaller artifacts found around the city ruins, heal injuries, cure disease, and even extend life. It led to arguments over who deserved the benefits and who, if anyone, should provide the life energy to do so. Arguments led to factionalism, which led to splits over moral and ethical differences, and eventually people gravitated to the city that best exemplified the ideals they held. Cities became city-states. Some allied together while others stood alone.

More discoveries were made, including the one that would forever shape the Samsut: the creation of undead. Armies of the city-states marched against each other, and the living and dead both littered battlefields. City-states pulled more and more power from their Life-Givers to fuel their wars, not realizing they were a hand-span from dooming themselves.

After decades of open warfare, the land suffered. What began as mysterious plant blights and animal diseases spread across the land. Both Earthly crops and native plants began to die off

in huge areas. The ground itself would no longer support plants of any kind. Animals moved away as the land could no longer support them. When the effect finally became apparent to the leaders of the city-states, it was almost too late. The devastation spread out from each city-state in an almost perfect circle. The scholars realized that the Naptam-napishtaram themselves were the cause. Pulling life energy not just from sacrificial people and animals, but from the earth itself, was killing everything around them. Greed and the desire to rule had nearly led the Samsut to destroy the land that sustained them. After a few months, all the leaders saw the truth, but the damage was done. Land for hundreds of miles around many of the cities had been devastated, creating the em-kissubis, barren zones where little or nothing would grow. What were once forests and fertile plains were now desert, and the Samsut had to learn again how to live in a land where things would not grow easily. Some city-states had not siphoned as much life energy from the land and were better off, such as the lumber-rich regions surrounding Eridu. Other lands near sources of water revived over time, as the water brought life back. Irrigation techniques, long unused, became common again. Slowly, the Samsut pulled themselves back from the brink of extinction or forced migration.

Samsut Culture

After the Samsut society's near-death experience, the leaders of the city-states came together and drafted a strict set of laws to govern their use of the Naptam-napishtaram. These laws, called the Balance, created the Samsut three-level caste society that still governs them today.

The top tier caste are called the Amelites, humans rendered effectively immortal by an initial treatment at maturity, the Ikriybaram-dayrutu, and regular infusions of life energy, the Ikriybaram-balaytu, from the Naptam-napishtaram at the core of each city-state. In turn, the Amelites control the Naptam-napishtaram, granting them absolute authority over life and death within the Samsut lands. While they can die by violence, the treatments grant them considerable resilience, making them quite a bit tougher than the average person. Amelites also gain resistance to disease and poison, although clever people have found poisons that will get around the protection of the ikriybaram-dayrutu. They are the ruling class, making all laws and significant decisions for the populace. They provide military commanders from the young and ambitious, young in this case being anywhere from decades to a century old, since most of those older than a century are not willing to risk actual death. Amelites enjoy an aristocratic lifestyle with the benefits of use of harvested life energy, which appears much like magic to people from Earth. The Amelites do not have children often, either out of practicality or as a side effect of the technology. New members can be elevated from the middle caste, the Mushkenites, but this is not a common occurrence. Only one or two Mushkenites every few years are elevated to the ranks of Amelites.

No Amelite remembers the original emigration to the new world. By the time the immortality process was discovered, all of the original refugees were dead. However, the priests of Ea kept very thorough records, which were transcribed from cuneiform bricks onto papyrus when later refugees brought that technology. The dry air of the Samsut lands and the lack of local insects who eat the processed papyrus keep these records mostly intact.

The middle tier are called the Mushkenites. They are the civil servants, engineers, and others that perform the skilled labor that makes Samsut society work. Mushkenites are the most educated of all the Samsut. The most favored receive ikriybaram-balaytaram that extend their lives to nearly a century, and can be promoted to the Amelite caste if they spend that lifetime truly excelling at their

duties, putting the city-state and Amelite leaders' well-being ahead of their own. This caste provides both military leaders and elite units to the Samsut forces.

The Mushkenites have children like normal humans, but older parents (60+) are common, and their population count is limited by resources and the dictates of the Amelites. The Mushkenite standard of living varies between a low middle that lives little better than those in the slums of London and an upper middle enjoying life comparable to a successful London shopkeeper.

The lowest tier are called the Ardites. At the bottom of the caste are the skeletons, then the zombies, then live humans born into the caste, and finally demoted Mushkenites at the top.

The abd-salamtum, the slave-undead, are human corpses and skeletons, harvested of their life energy, fitted with arcane technology and animated by the Naptam-napishtu. Skeletons can follow simple directions and perform tasks by rote, continuing until destroyed. Zombies must be controlled at all times or they simply mill about. Both are used as expendable troops. In peacetime, skeletons are put to work doing routine tasks like cleaning streets. Zombies are used on the big plantations to plant and water crops. Only a zombie crew commanded by an exceptional Mushkenite tarayshlamtu, or corpse director, is trusted with harvesting.

Living Ardites are not only allowed to have children, but are encouraged and rewarded for it. City-states always need Ardite troops, and they are usually recruited from the live humans of this caste. Any casualties left behind in battles between the city-states show up as troops for the other side in the next battle.

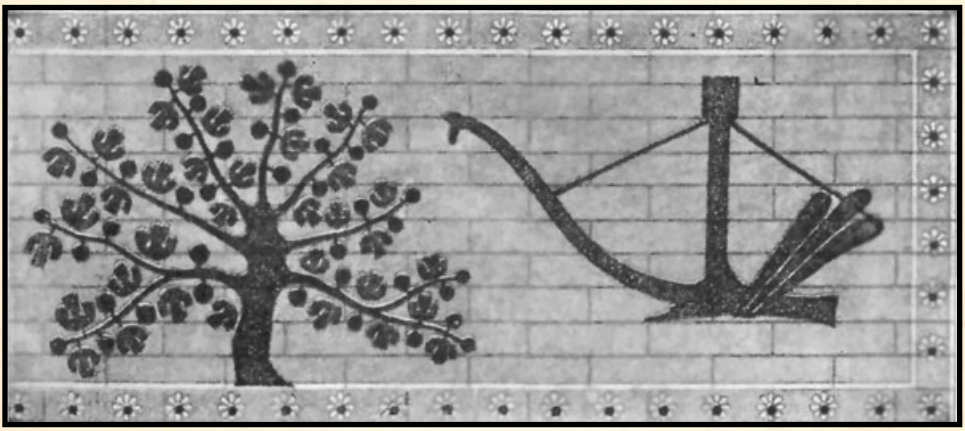
In peacetime, Ardites are the craftsmen, skilled workmen, and personal servants of the higher classes. At harvest time, they are all drafted to harvest the fields, leaving the cities almost deserted for several weeks. Under the rules of the Great Game, only undead troops are used for combat during harvest time. Ardites in personal service to higher castes, or possessed of skills critical to the continuation of Samsut society such as cooks and religious icon sculptors are considered too valuable to send to the fields.

Governance

The Samsut have a city-state society. Each city-state is ruled by an individual or a council of the Amelite caste. City-states all have one shared goal: survival. Early abuse of the Naptam-napishtu turned once-fertile land to desert. The city-states formed a league to monitor the effects on the land, and are now careful to ensure that the limited resources of their territories are not abused. They would rather unite against an upstart to maintain their current situation instead of aggressively pushing their boundaries.

In ancient times, over-harvesting of life energy of all living things created the em-kisubbis, the deserts where nothing will grow. The enclaves that remain are balanced between harvesting more life energy for more power and longevity, and the cost of reclaiming barren ground. Each city-state is tied to its Naptam-napishtu to collect and dispense life energy. The creation of new Naptam-napishtaram is possible, but requires such an enormous investment in time and resources that it has only been done six times over the past two thousand years. The Samsut began with seven cities, but have expanded to thirteen over the centuries. The newest city, Borsippa, is still considered new even though it's over a hundred years old.

To settle disputes without killing everyone or razing the land, the city-states engage in ritual war games. They also do this to measure themselves against each other. Each battle is scheduled in advance with limits on the technology and troop count stipulated prior to battle. Two city-states



can battle with all types of available tech and any set number of troops, including limits on the quality of troops. Compliance with the agreed terms is monitored by representatives of the league.

The league may unite to meet an enemy outside force, but it may take time as they do not tend to consider an enemy force to be a threat, but rather a potential ally, a curiosity, or a movable resource. The Amelite leaders do not believe it possible to lose a city-state to an invader, as they have never had opposition besides the Saurids, who lacked the strength to pose a real threat. The nature of the Naptam-napishtu makes it very difficult to take a city-state center. The closer one gets to a Naptam-napishtu, the easier it is for the artifact's Amelite controllers to raise more troops from the battlefield. Any force assaulting a Samsut city-state will see its own fallen raised in place to attack their former comrades.

The Samsut Point of View

"It's been thousands of years since our fathers came to this land. It's been thousands of years since we discovered the secret of life and created our cities. But at the same time the way home was lost, and now this land is our home. It's been two thousand years since the greedy among us almost destroyed us. The land still shows the ruin of wanting too much. It's been two thousand years since we learned of and enforced the Balance. Life is good. We have what we need. We can create what we want within the Balance. We measure ourselves against each other in the Great Game and in the creation of new life.

But there is word of newcomers to this land. They come from outside the Valley. They bring different and sometimes terrible things with them. They know nothing of Life and nothing of the Balance. These Halayqirim, these ravagers and exploiters, have no respect for the limited resources of the world. I am afraid they bring a second time of ruin. I do not want to live through that time again. We must do everything we can to prevent that from happening."

The City-States and Their Environs

The Edeesmatu, the Samsut homeland, comprises thirteen city-states surrounding a large inland sea, the Rabaiytantu, in the center of the continent. The Kippliwiytshadu, or Ringwall mountain range, surrounds the Edeesmatu and provides it with natural defenses, as well as demarcating the limits of Samsut interest. Alliances and rivalries between the city-states tend to last for centuries, as the Amelites who rule the city-states tend to have long memories when it comes to friendships and grudges.

Babylon

Babylon, the Samsut center of law and culture, takes its name from the old Earth city. It stands as the oldest and greatest of the city-states. At its center lies the site of the portal that brought the Samsut from Earth, long since closed but still marked. Babylon's proximity to the Rabaiytantu makes fishing and agriculture its primary industries. Its farms grow staple grains and legumes such as barley, wheat, chickpeas, and lentils, as well as onions, garlic, lettuce, mustard, and dates.

Allies: Borsippa, Eridu, Sippar, Lagash, Ur
Rivals: Shuruppak, Eshnunna, Uruk
Emblem: A bull in front of the sun

Shuruppak

Shuruppak holds the most fertile lands in the Edeesmatu, making it the agricultural powerhouse of the city-states. Their crops, sold to the other city-states, maintain a large portion of the population. They specialize in grain storage and distribution, boasting more silos than any other city.

Allies: Eshnunna, Lagash, Sippar, Eridu
Rivals: Babylon, Borsippa, Ur
Emblem: A sheaf of barley

Nippur

Nippur is home to the great temple of Enlil, the only deity who may speak to the heavens. The priests of Enlil travel throughout the lands for blessings. For this reason, Nippur has no formal rivals. Nippur produces much of the paper used for writing, the Samsut having progressed beyond clay tablets centuries ago.

Emblem: A mattock, upraised to strike

Eshnunna

Eshnunna, located at a nexus of trade routes, makes its profit from shipping and distribution. The merchants of Eshnunna are among the most canny of the Samsut, and drive a hard bargain.

Allies: Shuruppak, Larsa, Uruk, Lagash
Rivals: Babylon, Borsippa
Emblem: A double-headed axe over crossed lightning bolts

Sippar

Sippar has extensive stone quarries, providing cut and dressed stone to the other city-states.
Allies: Babylon, Shuruppak, Borsippa
Rivals: Ur, Larsa, Lagash
Emblem: A winged sun

Cuthah

Cuthah has the honor of tending the necropolis for Amelites who have died due to battle, accident, or suicide. Cuthah refuses to ally with or against anyone, preferring to remain neutral as the guardian of the dead.
Emblem: A lion holding an upraised mace

Isin

Isin's life techs, the sipir asu-nikilti, know far more about healing injury and illness than those from other city-states. Like Nippur and Cuthah, Isin has no formal rivals due to their primary occupation. Isin, on the shore of the Rabaiytantu, is a city of canals, with small boats being the most common transport. As a result, their troops are at an advantage when fighting on or near water.
Emblem: A robed woman

Uruk

The original Uruk, back on Earth, was renowned as the city of Gilgamesh, hero of the epic. Modern Uruk's fame relies on its artisans, craftsmen, and engineers, a city-state on the forefront of Samsut technology. Other city-states can gain access to Uruk's weaponry and machinery for the right price.
Allies: Eshnunna, Lagash
Rivals: Babylon, Ur, Borsippa
Emblem: A bearded man standing next to a lion

Eridu

Eridu was founded on the edge of a vast forest. It has since has become the primary source of wood and finished wooden goods.
Allies: Babylon, Shuruppak, Borsippa
Rivals: Lagash, Larsa
Emblem: Three fish over waves

Lagash

Lagash sits at the foot of the northern mountains, with ready access to substantial lodes of metal ores. This made Lagash the primary source of iron, copper, and silver, but also a dirty, gritty city-state, forever enshrouded in the smoke and fly ash of its smelters.
Allies: Babylon, Eshnunna, Uruk, Shuruppak
Rivals: Eridu, Sippar
Emblem: A winged lion wielding a bow

Ur

Ur has made war its primary industry. The city-state's troops train constantly, and regularly participate in the Great Game, sometimes representing their home, sometimes as mercenaries fighting in another city-state's name. Ur's tacticians are highly sought after by all other city-states. Since the opening of the Rabbit Hole, Ur's generals and strategists have gained considerable position, organizing the war against the Halayqirim.

Allies: Larsa, Babylon
Rivals: Sippar, Uruk, Shuruppak
Emblem: A crescent moon

Larsa

Larsa's location was chosen because of its proximity to a series of salt domes, with brine springs bubbling up through the rock of the mountains. This gives Larsa the advantage of being the primary supplier of salt to the other city-states, for use as a food additive and preservative and industrial chemical. It puts Larsa at the mercy of other city-states for their water supply, which must be brought in via aqueducts, as the amount obtained from evaporation from the salt ponds is simply not sufficient to maintain the city-state's population. Crops likewise are difficult to grow in the heavily saline ground, and so Larsa must trade its salt for food in order to survive.

Allies: Ur, Eshnunna
Rivals: Eridu, Sippar
Emblem: A helmet with bull's horns

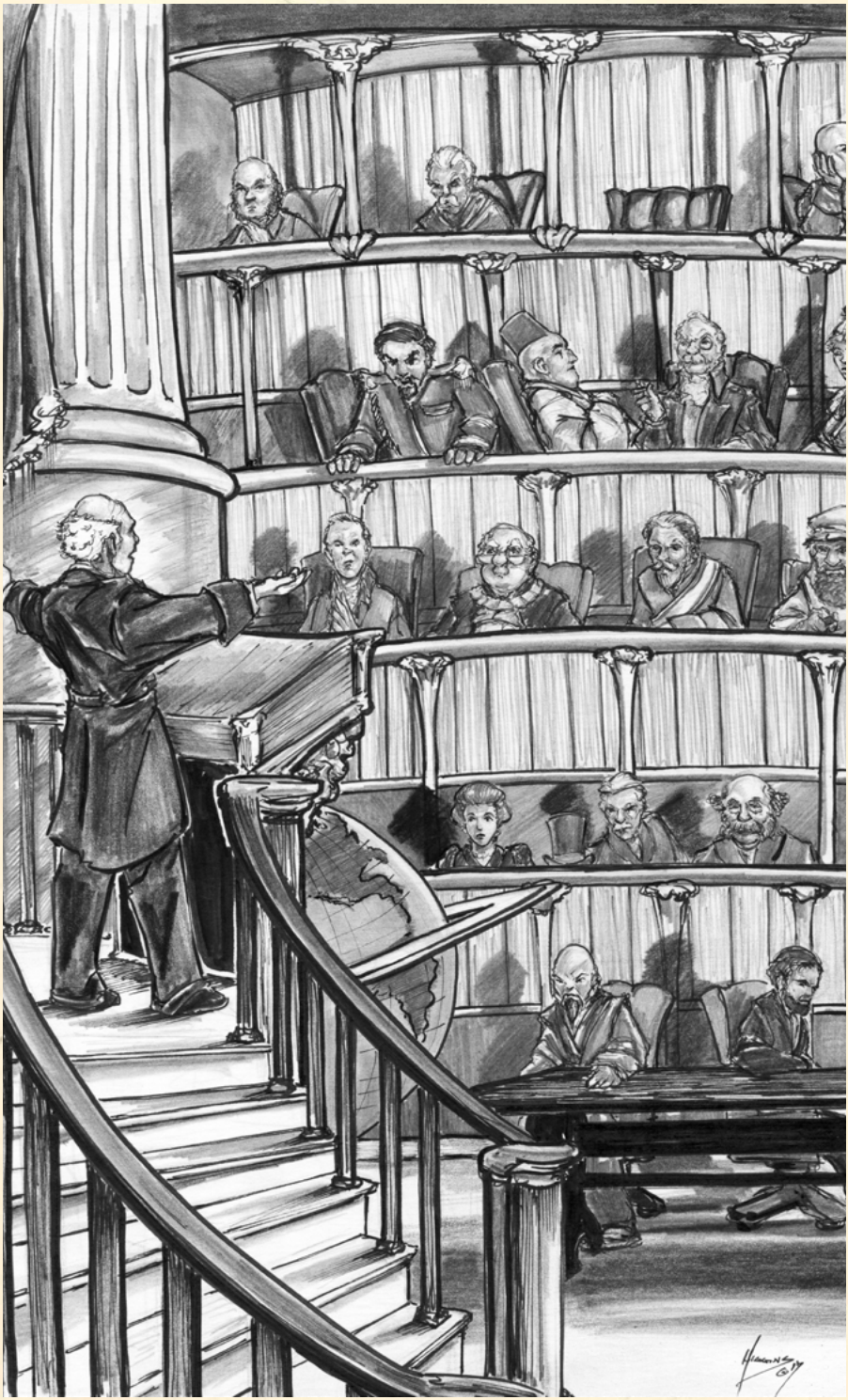
Borsippa

Borsippa, barely over a hundred years old, is still regarded as the "new city". In form, function, and allegiance, Borsippa mirrors Babylon. Its location grants it access to fertile land for agriculture, as well as new fishing areas.

Allies: Babylon, Eridu, Sippar
Rivals: Eshnunna, Shuruppak, Uruk
Emblem: A writing tablet and stylus

The Saurid Continent

The Saurid Continent covers an area roughly equivalent to the Edeesmatu, with tropical beaches and jungle along its southern coast, and alpine mountains and tundra taking up the northern interior. Multiple nations of Saurids reside on this continent. Some have cultures similar to the patriarchs, matriarchs, and egalitarians of the Grosvenor peninsula. Others are markedly different, with their own social structures, religions, and languages. Future sourcebooks will add seafaring capabilities for the Terrestrials, provide details on the aquatic Saurids that guard the straits between the Grosvenor Land and the Saurid Continent, and explore the Saurid Continent in detail. For now, spread whatever rumors seem to be appropriate at the time. They may prove true or false later, as rumors are notoriously unreliable. The Saurids may or may not want to tell the Terrestrials the truth about their homeland.



1879 GAMEMASTER'S GUIDE

A Guide to Earth

The complete report, assembled at the request of the Diplomatic Office, runs to several volumes. While this makes for good reference material, it is not what one could truthfully call light reading, nor concise enough for the purposes of this committee. Following is a precis for each region, summarizing the information to be found in the full report. While not being a substitute for an in-depth analysis, it will do for the purposes of quick reference.
– Ewan Harper, Her Majesty's Foreign Service

Europe

While Europe is vast, and comprised of many powers, we shall concern ourselves only with the greater. Such lesser lights as Serbia, Montenegro, and Romania may be safely glossed over as politically less important. We shall consider the greater powers in order of population and geographic size, both of which contribute substantially to their importance on the world stage.

The UK, including Wales, Ireland, and Scotland

There's very little to be said about our native isle that every school child has not already learned, or that cannot be known from picking up a broad-sheet. Her Majesty Victoria, long may she reign, commands the loyalty of subjects in England proper, and in the United Kingdom countries of Scotland, Wales, and Ireland.

It is worth noting that, while Scotland contributes mightily in the field of engineering and in service to the Empire both foreign and domestic, and Wales as it always has keeps its eyes down and its hands to the plow and the coal-shovel, Ireland's chief export these days seems to be political unrest. While the Emancipation Act did resolve some tensions in allowing Catholics (and other non-Anglican Christians) to take seats in Parliament, it created new tensions by the very same. Sadly, the Irish don't seem to be able to restrict themselves to incendiary speeches and bills introduced regarding home rule. Far too many Irish fleeing their nation during the Famine, or driven from it during the Clearances, ended up in America, where they learned military skills in that nation's recent Civil War. May Almighty Providence grant that the Clerkenwell Outrage be the last detonation set off by the Fenians, and that the rioters do not resort to firearms. Let us all, of whatever faith, pray that the Irish determination to govern themselves, as they are proving ungovernable by anyone else, does not require the intervention of Her Majesty's military.

As Empress of India, the Queen holds authority through the Raj. Although no titles confer with the lands, our gracious Queen also wields suzerainty over much of southern Africa, including the Zulu protectorate and the disputed lands in the Transvaal region, more about which in the section on Africa. Likewise with the Chinese, British holdings in the Orient will be addressed elsewhere, but it is worth noting here that the Treaties of Nanking and Tientsin grant Her Majesty's diplomatic and mercantile interests rights to land and trade, including the island of Hong Kong, giving the British fleet a much-needed port in the Far East. Through Her Majesty's Diplomatic and Foreign Services, the British presence is seen throughout the world.

While the sun actually does set on the British flag, the Laws of Nature not yielding to the patriotic fervor of the common saying, it rises on the flag at the same moment in another part of the globe. Thus, the Empire's moment in the sun becomes unending. God save the Queen!

Russian Empire

Whether its founder is referred to as Peter the Great or Peter the Mad, the Russian Empire (or Rossiskaya Imperiya, as the natives would have it) grew from his vision: that of a modern Slavic state, evolved from peasants ruled by the whim of the local boyars toward a centralized authority and a planned economy. A succession of tsars leading up to Alexander II, the current holder of the throne, have steered an unsteady course along this route. While the serfs were emancipated in 1861, their freedom came with no support for a new way of living, and a demand from the landowners for residency fees and new taxes, sending many of the peasants straight from slavery to indentured servitude. The failed coup attempt of the Decembrists in 1825 reawakened the paranoia of the tsars, last seen in full flower during the reign of Ivan IV, leading to censorship and police spies and repression of thought, across the largest empire in the world by acreage and the third largest population after China and the British Empire. While judicial reforms have been enacted in recent years, bringing proper courts with jury trials, corruption still runs rampant and the privileges of the nobility put many of them above the law. Attempts to implement central banking and stabilize the economy have been stymied by the self-same nobles blocking true reform to protect their privilege, and by the incessant gnawing of corrupt minor officials at the foundations. Holding together such a vast empire in the face of all these destructive forces requires a constant juggling act on the part of the tsar, playing the regional councils against each other with no strong Parliament to support him.

Despite all of this, the Russians have proved themselves stalwart in war, although not always successful. Deprived of ports on the Black Sea following the Treaty of Paris at the end of the

Crimean War, Russian forces pushed eastward. Taking advantage of a weakened China in the wake of the Second Opium War, Russia won a port at Vladivostok, giving the Empire access to the Pacific Ocean. Selling off its holdings in North America to the United States seemed like a poor decision to many at the time, giving up a foothold on another continent and cutting off a program of expansion, but the funding thus secured turned out to be vital when the Russians went to war yet again with the Ottomans. Unfortunately, ready coin turned out to be no substitute for advanced technology, and, while the Russians were able to free Serbia and Bulgaria from the Turks, the Ottoman war machines held off the Russian infantry and cavalry, fighting to a standstill well away from the Russian goal of seizing Constantinople and forcing an Ottoman surrender. Given the refusal of Austro-Hungary and the Prussian Empire to involve themselves in the conflict on either side, Russia had no choice but to accept a stalemate on the battlefield and be satisfied with the territorial gains.

And thus we come to the current day, with the Russian Empire restless and unsatisfied in so many ways. The peasantry still live in grinding poverty. The nobility still flaunt their privileges. The tsar still battles uphill to reform a nation stinking with corruption and mired in the traditions of centuries past. The military aches to prove itself in a war that won't be ended by diplomats and negotiation, but by the total annihilation of the enemy. This last could be useful to Her Majesty. Turning loose the Cossacks against the Samsut would solve two problems at once.

Prussian Empire

There's not much in the way of individual freedom in Prussia, but there's not much discontent either. Every person has a place in society, and keeps to it unless there's an advantage to society of them moving. It's very difficult to become wealthy, and people will look at you with suspicion, wondering about your greed. Then again, there's no real poverty to speak of. The economy has been flattened out with ruthless Prussian efficiency. The Prussians have sacrificed individualism for the success of society, given up personal liberty for long-term safety and security. There's something of the ant-hill about the place. Everyone bustles about, intent on their part in the societal whole, and they can spot an intruder in their midst from a distance just by the scent on the breeze.

– George Herbert, Fifth Earl of Carnarvon, Her Majesty's Ambassador to the Prussian Empire

The locals renamed it the Deutsches Reich, or German Empire, just a few years ago, but Prussia so dominates culturally, financially, and in terms of government, that Prussia and Germany are for all practical purposes interchangeable terms. Thus, the older name persists in the English-speaking world.

The most rigidly unified empire in the world, the Prussians owe their cultural and governmental structure to two men: Frederick II and Ferdinand Lassalle. Frederick II was the king of Prussia in the mid 1700s. In 1763, he made the Volksschule educational system compulsory for all children from the age of five through their thirteenth year. This public schooling not only taught literacy and basic mathematics, but indoctrinated the children in the Prussian concepts of duty, discipline, and obedience. Children emerging from the Volksschule system were ready for either factory work in a rapidly industrializing Prussia, or if from affluent families secondary education and a career in politics, management, or military leadership. At the end of the century, all schools and universities through the Prussian Empire were nationalized, the state taking over all aspects of education of the populace. Ferdinand Lassalle, a left-leaning political activist roundly criticized by Marx and Engels as not being a true Communist, had a substantial reputation as an agitator and political philosopher. In 1863, he gained the ear of Otto von Bismarck, the recently-appointed Minister President of Prussia. Socialism had become the hobgoblin of European monarchs and their appointed ministers, looming large in everyone's minds since the revolutions of 1848. Lassalle, a staunch nationalist who believed that a Socialist state was an end unto itself, rather than the stepping-stone to the utopian classless communistic society preached by Marx and Engels, began arguing Bismarck round to a new way of thinking. By 1864, Lassalle was meeting regularly with von Bismarck in talks lasting for hours, as the two men worked out how Socialism and a monarchy could co-exist.

All of this might have come to naught if a nobleman's pistol hadn't misfired. Early in the summer of 1864, Lassalle met the daughter of a Bavarian diplomat, Helene von Donniges, and the two decided to marry. Unfortunately, Count Bajor von Racowitza, a Wallachian nobleman, decided to make Helene his own for political reasons. The Count imprisoned Helene in her own room, and coerced her to renounce Ferdinand. Upon receiving the renunciation, Lassalle issued a formal challenge to duel. He and the Count met in the early hours of August 28th. Ferdinand's second had tried to convince Lassalle to stand down the challenge, as the Count was well known as a crack marksman. Lassalle, no stranger to the defense of the honor of women, having previously battled through thirty-six courtrooms on behalf of the Countess Sophie von Hatzfeldt, would not retreat.

The pistols were loaded, the two men paced off the distance, and the handkerchief was dropped. The count, first to raise his pistol, suffered a misfire, and Lassalle calmly shot him down.

With marriage to Helene, Lassalle gained entry into a higher level of the diplomatic world and a measure of political legitimacy. Von Bismarck's companions eased their criticisms of the Minister President's long meetings with a leftist. Over the next few years, Lassalle provided a structure that von Bismarck implemented piece by piece. All adult men were given the vote. The wage structure was regulated. Two attempts by radicals to assassinate Kaiser Wilhelm were headed off by the newly-formed Stadtswache, or State Watch, an idea of Lassalle's to protect the ideological purity of the Empire. Preußische Sozialismus, Prussian Socialism, changed the Prussian Empire from a collection of fractious states, united by war under the iron fist of von Bismarck, into a well-oiled machine under the iron spanner of the engineers, its economy ticking over like a steam turbine, and the Germanic tendency toward order and conformity being taken to something of an extreme. The pervasive government directs everything, from shop hours to education to career choices. Simultaneously, every citizen is effectively part of the government, through their local councils which take care of local matters, the representatives they send to regional councils, and the upward cascade to the Minister President himself. Operating both bottom-up and top-down, there is no aspect of Prussian life that is not monitored, regulated, or overseen by an official at some level of the government, and no citizen who does not participate in the government to some degree.

This efficiency, at the cost of individualism, is both Prussia's greatest threat to the British Empire and Prussia's greatest weakness. Subjects of the Crown look to Prussia and see no poverty, no great wealth being flaunted, the ideals of the Levellers fully implemented. The attraction of such ideas may well lead Britain's own left away from Marxist purity, which leaves a bad taste in many mens' mouths, and toward a Socialism that a larger part of the population would find palatable. As was seen with the repeated rebirth of the Levellers, one cannot extinguish an idea by hanging those espousing it. On the other hand, the Prussians lack for initiative and inventiveness on the individual scale. Everything gets accomplished by committee, and any Englishman who has ever served in governance knows how that works, or does not as the case may be. Their military operates like a clockwork, set on a particular course and not able to deviate without a good deal of tinkering. Predictability on the battlefield does not lead to victory. Force of arms will be sufficient to hold the Prussians at bay in the physical world. It is in the rarified atmosphere of the intellect where the true war shall be fought.

Austro-Hungarian Empire

Creating a constitutional monarchy out of the wreckage of the Austrian Empire is rather like cobbling together a locomotive out of the bits and pieces of two other engines that have collided. The result may work for a short time, but will be ugly, inefficient, and difficult to operate. It will not hold up under serious pressure, possibly exploding catastrophically while trying to haul more of a load than its impaired capacity will allow. And everyone looking on will know it for a bodge-up by its appearance.

– Lord Odo Russell, Baron Ampthill, British Ambassador to the German Empire, in a letter to Sir Andrew Buchanan, Ambassador Extraordinary to Russia on his being named Ambassador to Austro-Hungary

Following Austria's defeat at the hands of the Prussian Empire in 1866, the loss of Venetia and Mantovano to Italy, and rising internal turmoil secondary to the adoption of a Constitution in 1861 that granted nothing but half-measures to a populace very nearly in open revolt, the House of Habsburg implemented a desperate compromise. Hungary, its people, and its ancillary lands were granted equal status to Austria. Parallel governments, each with their own parliament, were set up in Austria and Hungary. Franz Joseph I, Emperor of Austria, was crowned King of Hungary, and ruled over both parliaments. The resultant Austro-Hungarian Empire took its place, or places, on the world stage, with no one, including its Emperor and King, quite sure of whether it was one land or two.

While Austro-Hungary is the second largest nation in Europe by acreage, and the third largest in terms of population, its fractious politics keep it from being effective in the realms of diplomacy and military action. Its machine industry supports its economy, the lands having plentiful rivers for hydraulic power, and the population, in a region only suited for subsistence farming and mining, having plenty of hands to operate the factories. The only real threat this fractured semi-empire represents to the United Kingdom is its accumulating wealth, and its tendency to supply machinery and armament to any other nation with ready coin. The possibility of British soldiers equipped with Austro-Hungarian weaponry facing off against an enemy likewise outfitted must be reduced as nearly to zero as our diplomats and foreign operatives can manage.

France

Which Empire is this again? The damned French change Empires nearly as often as I change my socks.

– William Cowley, Viscount Dangan, son of the previous French ambassador, to Lord Lyons, current Ambassador

The frequent convulsions of the French make it difficult to keep track of who's really in charge. A revolution in 1789 led to constitutional monarchy, but that only lasted a few years before the Reign of Terror began, with Frenchman slaughtering each other by the hundreds of thousands to see whether republicans or monarchists would hold power. In the end, both did, as Napoleon Bonaparte was elected as First Consul but then ruled as Emperor. The less said here about the Napoleonic Wars, the better for our purpose of being concise. Suffice it to say that the French Empire expanded, then contracted, then fell, with the Bourbon monarchy taking the reins. A scant fifteen years later, another revolution, another constitution, and the Second Empire was declared. Napoleon III

actually managed to keep both his seat and his head, an amazing feat for a French monarch, from 1852 until 1870 when, in a dazzling display of bravado, he picked a fight with the Prussians. By then, the Prussian Socialists had unified all of the Germanic states, and the French met a much more cohesive force than perhaps they expected. The war cost France its emperor, its Empire, and the territories of Alsace and Lorraine. After the next several years were spent trying to figure out which deposed royal house ought to sit the throne, the Third Empire finally admitted that the transitional government was the best France was going to get. (Adolphe Thiers, the first President of this transitional government, said that republicanism was "the form of government that divides France least".) They gave up on having a constitutional monarchy, and settled for a President and a bicameral parliament. Ostensibly, the primary duty of the President is to figure out who the monarch should be, but most Frenchmen have dismissed kings and emperors as a bad idea.

Making sense of modern-day France requires navigating several forms of government, an uneasy coexistence of ancient and modern ways of life, and as many forms of spoken French as there are of English, except that Frenchmen react rather badly to an accent different than their own. Try speaking Provençal French in Paris and the waiter will spit in your soup right at the table. France is an Empire, but is ruled by a President. Local villages may be communes or feudal aristocracies, depending upon whether the left or the right holds the region. All men have the vote, and the Chamber of Deputies functions much like our House of Commons, although with less civility. Where the United Kingdom has a House of Lords, though, the French have a Senate whose members are appointed for life by the regional councils, and so it's not surprising to find a rabid Marxist seated next to a titled aristocrat.

Paris haphazardly places cast iron next to stone, with ancient landmarks such as the Louvre standing next to modern buildings rising from the vacant lots the multiple revolutions and wars created. Buildings cannot go over a few stories high for fear of collapsing into the catacombs and abandoned mining works underneath the city, so Paris sprawls outward rather than climbs upward. Beyond Paris, French architecture, like French politics, is a hodge podge of the old and new. Ancient villages with fieldstone walls have poured-concrete edifices rising in their midst. One never knows quite what to expect, although some vague semblance of city planning would be nice to encounter.

Some French welcome technological advances. Others reject them out of hand, declaring that what was good enough for grand-père is good enough for them. Some greet foreign business opportunities with open hands and ready wallets. Others will spit at your feet, call you several names in French, refuse to understand the Queen's English while wearing an Eton tie, and won't even show you the door, leaving you to find your own way out. Is France a threat to the United Kingdom, or a potential ally? Who can tell?

Italy

Good food. Nice music. Terrible people.

– Telegram from Sir Walter Francis Bishop to his business partners in Shropshire, upon his arrival in Florence

Only recently unified as a proper nation-state, Italy seems to still be working on deciding what it wants to be. The Statuto Albertino, the Italian constitution, started as a desperation measure by King Charles Albert to head off a revolution in Sardinia. After multiple wars, including two Italian Wars of Independence and the Expedition of the Thousand, and the influence of the Carbonari,

a revolutionary underground that the authorities totally failed to stamp out, Victor Emmanuel II of the House of Savoy rose to the top of the heap, proclaimed king of the united Italy in 1861. Interestingly, the Parliament that anointed King Victor also proclaimed Rome to be the capitol of Italy, even though it was held by Papal forces and not actually part of the newly-formed kingdom. More wars followed, but Rome eluded the Italians, and Victor ruled from Florence. Not until Napoleon III was captured by the Prussians during the Franco-Prussian War of 1870 did the Italian Army finally march on Rome, only to be faced with the hopelessly outmanned and outgunned Vatican troops of Pope Pius IX. Attempts to negotiate with the pontiff failed utterly, Pius IX refusing to admit that his temporal power was at an end. After a short battle, in which less than a hundred died, the Italian army marched into Rome. The pontiff barricaded himself in the Vatican. The people of Rome held a vote and annexed themselves to the kingdom of Italy. The current pope, Leo XIII, continues the tradition of papish intransigence, refusing to leave the Vatican, and refusing to appear at either Saint Peter's Square or the balcony overlooking it. Given that Saint Peter's Square is still full of Italian troops, whose failure to grasp the basics of personal hygiene is legendary, perhaps that last is a bit more understandable.

In the meantime, the king has become nothing more than a figurehead, and a succession of Prime Ministers have led Italy in lurches to the right and left that have utterly disorganized the nation. Agostino Depretis, the current Prime Minister, avows himself a Socialist, although not a Prussian sort, but not exactly a Marxist either, in the dissembling style far too typical of Italian politicians. Openly corrupt and stacking the cabinet with his cronies, Depretis has mismanaged Italy's agricultural lands, pushed the North into industrialization willy-nilly while ignoring the South, and generally made a hash of things. Italy's current largest export is people, its citizens emigrating by the millions.

Theoretically, Italy is a colonial power, holding a bit of land in the north of Africa, but these supposed colonies seem more like dumping grounds for excess population than any sort of attempt to develop sources of income beyond the nation's own borders. While Italy may represent an annoyance in northern Africa, obstructing British expansionism, it certainly does not represent a threat to the British Empire, in economy, in diplomacy, or in the military arena.

Asia

This section shall concern itself with the lands beyond Europe eastward to the Orient.

India

Properly, India refers collectively to British India, the Princely States, and all other territories governed by Her Majesty through the Governor-General of India (more commonly called the Viceroy) and his subordinates, a political structure known as the Raj. In actual use, most people intend the name India to refer to British India by itself, the land formerly ruled by the British East India Company. As a side note, this originally included Lower Burma, but that territory was merged with Upper Burma just last year, and now the Province of Burma is under separate governance within the Raj. A look at how this territory came under the authority of the British Crown is in order.

The East India Company was granted its charter in 1600 by Queen Elizabeth. By 1757, the Company had multiple private armies and a system of political administration throughout the territory from which it derived its profits. After the Nawab of Bengal was defeated at Plassey, and his French allies sent packing, the Company took over rule in earnest, collecting taxes, passing laws, and acting as a government in all but name.

Sadly, what the Company lacked most was diplomacy. Considering that the purpose of a chartered company is to turn a profit, with all else falling by the wayside, this dearth is not in retrospect surprising. Exotic goods and money rolled back to Britain by the shipload, and nobody really cared if the natives were overworked. After all, this was the England of the workhouse, where the poor were chastised for allowing themselves to fall into such dire financial straits, and put to hard labor for the good of their souls. Why should foreigners, who weren't even Christian and didn't speak the Queen's English, be treated any better? Thus, the Company officials felt themselves justified in ignoring local customs and turning a blind eye to the excesses of their private military. As long as the books balanced and the profits continued, why worry?

But tensions among both the civilian population and the sepoys, natives recruited into the Company military, continued to rise. Ancient traditions had been swept aside by Company policy. Land reforms that gave property as rewards to Company allies left an entire class of formerly landed nobility out on the street, their estates divided up among peasant farmers beholden to the Company and members of lower castes who had profited by turning against their countrymen. Promotions tended to skip over the sepoys, and go to men of British origin with less experience but the proper birth.

In 1853, the sepoys nearly mutinied over their ammunition supply. The new Enfield rifle required a pre-greased cartridge opened, like other cartridges, by biting off the end. Enfield cartridges made in England were greased with tallow, which usually meant a mix of beef and pork fat. Upon hearing of the impending shipment of Enfield rifles to India, the sepoys, a mix of Muslims and Hindus, raised a terrific protest. In a flash of common sense that later earned him a commendation, Colonel Richard Birch, the Military Secretary, refused to allow the manufacture of tallow cartridges at Calcutta, not out of respect for the religions of the sepoys, but out of fear of operational disruptions. This touched off a brief power struggle within the East India Company, and between the Company and Her Majesty's government, with direct appeals to the shareholders and to the Crown by both sides. The crisis was resolved by ordering production of a "Calcutta Special" cartridge greased with ghee, or clarified butter. The Calcutta Special cartridges were clearly marked with a red stamp on the end, and the factory was blessed by both an imam of the Muslim faith and a priest of the Hindus.

Addressing a single issue, however, did not pacify the sepoys. They continued to grumble about preferential treatment and other insults. The last stroke came in 1856, when a new regulation discontinued the payment of pensions. The one thing that will rouse a soldier to anger faster than an insult to his mother is trifling with his pay. While the rule applied only to soldiers recruited after the date of issuance, rumor spread that it applied to all sepoys. Within days, the Muslim and Hindu units had joined with the displaced former landowners and anyone else with a grievance, marched to Delhi, and placed themselves under the command of the Mughal Emperor. The war that followed took months to resolve. British regular troops had to be brought in from distant lands, stretching manpower thin across the Empire. The Canadians went so far as to form a new regiment specifically for the war. Much of central and northern India went up in flames. By late 1857, Crown troops had restored order, but at terrific cost. The British government, aghast at the disaster, revoked the

Company's charter, nationalized its assets, and brought India under direct Crown rule, installing the first Governor-General, later to be known as the Viceroy.

Since then, relations between the British and Indian populations have improved. Policies of the Raj encourage the British to associate with the Indians socially, not just in official capacities. An expert council in London, formed of men who have resided in India for at least ten years, advises the Secretary of State for India, who in turn dictates policy to the Viceroy. Exports now include people as well as products. In Manchester, a thriving community of expatriate Indians supplies hot meals to the roustabouts and textile factory workers. Indeed, looking at the Curry Mile, the street that leads from the docks to the textile works lined with one Indian eatery after another, one might think that India has colonized England.

The Ottoman Empire

Modern-day Istanbul resembles Paris by way of the souk, the hubble-bubble pipe having been replaced by the cigarette, the caftan by the suit and tie, but the fez and that hellish black sludge the Turks call coffee persisting. The average shopkeeper is literate, and probably knows the works of more poets than you do, although he'll disdain Milton for some Turkish warrior who wrote his verses while in the saddle. The smoke in the lounges is thicker than a London particular, making it hard to tell who's talking, although it's a safe bet at least three people are holding forth all at once. Turks argue very fast and very loud, and nobody listens to anyone else, with the end result being nothing ever gets settled. And yet somehow they manage to run an efficient government, field a military that can stop a Cossack, and put back together an Empire that everyone else was sure was on its last legs. Maybe it's that damned coffee.

– Lord Henry Cormor, Cultural Attache' to Her Majesty's Embassy in Istanbul

In the native Turkish, the Ottoman Empire is called Devlet-i 'Aliyye-yi 'osmâniyye, but very few non-Turks can fit that in their mouths. Given the tremendous influence of the Ottomans, especially in recent years, it seems only fitting to refer, in proper English, to the lands controlled by the Turks as the Ottoman Empire.

In 1867, while Sultan Abdulaziz Bahtsiz, better known as Abdul the Unfortunate, was in Britain, being made a Knight of the Order of the Garter, the Young Ottomans seized power, placing their patron Mustafa Bahgat 'Ali Fazl Pasha on the throne, where he reigned as Suleiman III. Abdulaziz lived out the rest of his days in exile in Cornwall, despite several attempts to put him back on the throne. Suleiman III, during his own years of self-imposed exile in Paris, had made sufficient alliances with Prussia, Austro-Hungary, and France that any power backing a restoration of Abdulaziz would risk triggering a Europe-wide war over the succession.

Suleiman III died in November of 1875, having brought constitutional monarchy to the Ottoman Empire, and started it on a rapid program of modernization in many spheres, pushing the concept of tanzimat, or reform, in entirely new directions. His second son Ibrahim succeeded him, his first son Muhammed Mustafa having died in a fall from his horse during military exercises in 1872. Ibrahim took the throne as Sultan Mahmud III, and continued his father's reforms, focusing heavily on technological advancement and a separation of religion from the state. Both contributed to the stalemate that ended the Russo-Turkish War in 1877. Ottoman military technology held back the numerically superior Russian forces. Tanzimat-granted religious and ethnic freedoms settled much

of the discontent in Bulgaria, Serbia, Romania, and Montenegro, heading off local insurrections, relieving the pressure on Ottoman military forces trying to maintain control within the Empire, and depriving the Russians of both the pretext for their assault and popular support from the regions they were ostensibly protecting. The Treaty of Berlin in 1877 formally recognized the independence of Serbia, Romania, and Montenegro, although they had been semi-autonomous vassal states of the Ottoman Empire for some time. Bulgaria was reorganized as a vassal state of the Ottoman Empire, with its capital at Sofia, much to the chagrin of the Russians and Austro-Hungary, who had both agitated for Bulgaria to be reconstituted as an independent principality. Both Russia and Austro-Hungary left the table with nothing more than crumbs to show for their recent aggression, and the Ottoman Empire shed its reputation as the Sick Man of Europe.

At the same time that Mahmud III was continuing the reform of the military, the law, and the economy, his sister Nazli Fazl reformed the culture. Princess Nazli organized the first literary salon in Istanbul, hosting a wide variety of poets, scholars, musicians, and foreign visitors. She arranged for the works of Turkish writers to be translated into French, making them available to Western Europe, and even paid for a few of the more prominent to be tutored in French, so that they could see to the accessibility of their work themselves. Princess Nazli popularized many aspects of Western civilization in the Ottoman Empire, including photographs, cigarettes, and the pianola.

Mahmud III's clever leadership, investment in technological advancement, and stern insistence on maintaining a secular state while still supporting the faith of the Prophet, peace be upon him, has led to a strong, vibrant Empire. While religious zealots do pop up from time to time, shouting condemnation of the West and demanding adoption of harsh cultural traditions from further south in the Mohammedan lands, most people just shake their heads and move on, secure in the rulings of the caliphate that they are already living in accordance with their God. The British Empire must concern itself with Turkish competition in shipping and the spice trade, and Turkish strength in arms. The Mohammedan faith represents no threat to the United Kingdom, despite what some more radical members of the Anglican communion might believe.

China

Opening China for trade has been rather like dining on lobster. Cracking the shell takes careful effort and cannot be done without making something of a mess, but the reward is delectable.

– Lord Palmerston

The Ch'ing dynasty, and the Ming before it, actively discouraged foreign trade under Confucian principles, claiming that it created disorder. The Chinese word they used for disorder also means "ripples in a pond", and generally denotes the sort that leads to civil unrest and eventually to revolution and the toppling of a dynasty. Li Zheng explained it thusly: Imagine a group of children. Each of them has a wooden toy, carved by the toymaker in their village. They are content, and will play together with good manners, as each has no more than the other. Now bring in a merchant from a far off place. He has only one toy to sell, made of shining metal and with moving parts and great attention to detail. The parents of one of the children purchase the foreign toy. They must sell far more than they can truly afford to part with in order to do so, and will face long months of hunger and hardship as a result. They restrict how their child may play with the rare and precious toy – it cannot be taken out of the house, it cannot be loaned to another child, it must be put away

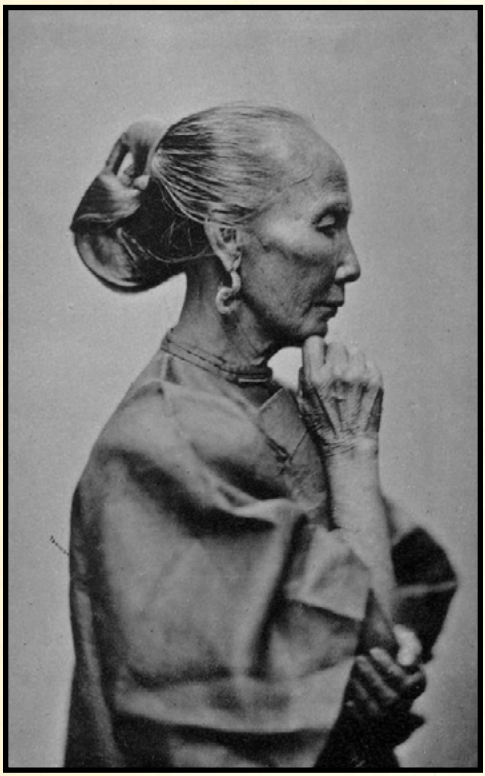
in a safe place each night. Their child is thus taught greed, and selfishness, and comes to think of himself as better than the other children because of his possession. Fights start over the precious toy, and soon the other children find somewhere else to play, learning bitterness and resentment. Families draw apart, the community is broken, the reputation of family lines is damaged, and bad feelings will last for generations. Foreign trade brings with it unique items not otherwise obtainable, and those bring with them disorder, unrest, and bad sentiments. It is better to be content with what one already has.

That sort of isolationism simply isn't functional in today's world. The British Empire has taken the role of Peter the Great, dragging China into the Nineteenth Century if it must go kicking and screaming. One must, in that comparison, remember, however, that in the Ottoman Empire, the tsar is remembered as Peter the Mad, and his accomplishments are not cherished there. Very few people are grateful for anything that is done against their will for their own good, no matter whether they profit from it or not.

While it would be proper to thank the East India Company for opening China to British trade, the simple fact of the matter is that, like in India, the Company made a complete dog's breakfast of the matter, requiring yet more military and diplomatic intervention, and leaving the Crown holding the bag at the end of it all. Some of the unpleasantness might have been avoided if the Chinese had been willing to trade goods for goods at market value, like a proper market economy, or even to accept gold for their wares. Chinese insistence on silver as the only acceptable medium for obtaining Chinese goods created headaches for British merchants. The Empire had been on the gold standard for decades, so obtaining silver coin or bullion required purchasing it on the open market, incurring additional overhead, and complicating the process. That having been said, a great deal more unpleasantness might have been avoided if the East India Company hadn't decided to balance its trade with opium. Having access to the poppy fields of India, and thus a ready supply of the drug, the Company began sending it to China in vast quantities, despite opium being illegal in China as a recreational substance since 1729, and its import restricted to small quantities for specifically medicinal purposes.

Thus it should not have been surprising to anyone when, in 1839, the new commissioner for trade in Canton, the main port of entry for British trade with China, put his foot down. Lin Tse-hsu demanded that his country's laws prohibiting opium be enforced, and that the British merchants surrender their stocks of the drug. The Superintendent of Trade, Charles Elliot, besieged in the factories along with everyone else and facing a dwindling supply of food, made a deal with the merchants to pay for their opium with Crown funds. Over a thousand tons of opium, nearly a year's worth of imports, were given to Lin, who promptly had it all dumped into the ocean. This left Elliot with a rather large problem, as the Crown certainly wasn't going to pay for a drug that was illegal back in England. The tension between the merchants, deprived of their source of funding, and the Crown, and the Chinese government continued to rise until, in 1840, a contingent of the British Navy and the British Indian Army (at the time the private troops of the East India Company) arrived and began the First Opium War.

Two years later, their coastline devastated, their tax barges seized, their troops outgunned, and their navy outmaneuvered, the Chinese surrendered. The Treaty of Nanking required the Chinese to pay for the seized opium, opened five ports to British trade, and handed over Hong Kong to Britain as a Crown colony. This really should have been the end of the business, but the Chinese, smarting over their defeat and still hostile to the idea of foreign trade, did their level best to interfere with British mercantile operations. Things came to a head again with the seizure of the *Arrow*.



Chinese authorities seized the ship and its crew for smuggling and piracy, and claimed it was not flying the British flag at the time. Ship and crew were both of Chinese origin, and were in Chinese waters. The British representation in Canton, however, insisted that the ship was registered in Hong Kong and had been flying the British ensign, and so the boarding constituted an insult to the flag. The sailors were handed over to the British with an overly formal letter promising that more care would be taken in the future. As it turned out, the ship's registration had expired, and so if it had been flying the British ensign, it would have been under false colors, but this fact only came to light after open hostilities had begun. To avenge the insult, British forces attacked Canton and its outlying forts. Four sets of forts and twenty-three Chinese ships were taken or destroyed. Everything between the Canton city wall and the sea was pulled down or burned, to clear the way for naval guns, and the city was bombarded, launching the Second Opium War.

Instead of a continuous war, though, this one was fought in fits and starts. A Chinese baker attempted to poison the British Superintendent of Trade and his family, but only succeeded in making them ill. The military exacted a massive revenge, and the Chinese resistance regrouped and attacked with renewed motivation. France, the United States, and Russia all became involved, responding with substantial military force to attacks on noteworthy individuals of their respective nations. After two years of assassination and reprisal, the Treaties of Tientsin of 1858 brought a brief end to the hostilities, with Britain, France, Russia, and the U.S.A. opening embassies in Peking, ten more ports being opened to foreign trade, foreign ships being given navigation rights on the Yangtze, foreigners allowed to travel within China proper, and a war indemnity to be paid to Britain and France. (By this point, the East India Company had been dis-chartered for its incompetence in India, and so the issue of opium didn't arise.) While the Ch'ing emperor reluctantly signed these Treaties, however, his court did not agree with the terms, and war was to break out again less than a year later.

In the summer of 1859, the naval convoy carrying the new British and French envoys destined for Peking ran afoul of Chinese forces at the mouth of the Hai River, who refused to let them pass. Fighting erupted between the British fleet and the Chinese fort, and after a day and a night of little progress and substantial carnage, the British fleet withdrew under cover of fire from an American battle group. The following summer, a much larger joint British and French task force sailed from Hong Kong, captured two port cities, then turned its attention to the intransigent fort, which fell after a three week siege. With British troops marching on the imperial capital, the Emperor sent representatives ostensibly to negotiate, but instead had the British delegation arrested and tortured to

death in a particularly grisly and barbaric fashion. British forces took Peking in October, bringing heavy artillery to bear against both the city and the elite Mongolian cavalry that defended it. With the cavalry annihilated, the city in British hands, and two of the Summer Palaces looted and burned to the ground, the Emperor fled the city, leaving his younger brother to sign whatever the European forces demanded.

Thus the Treaty of Tsientsin brought the war to an end, and brought China to its knees. With Kowloon ceded to Britain, yet more trading ports opened, opium and freedom of religion both legalised, and the war indemnity massively increased, the East was conquered. China in its majority remains backward, hidebound, and parochial to this day. Only in the port cities can Chinese be found who understand that the world has changed, that the ways of their ancestors simply do not work any longer, and that they must adapt. The West gave up feudal obligations, the guild system, and the unquestioned authority of religion long ago. The Chinese will eventually come to realize that they must give up Confucianism, isolationism, and the passive non-cooperation that so characterizes the intransigent character of the nation and its people.

Africa

If Nature here wishes to make a mountain, she runs a range for five hundred miles; if a plain, she levels eighty; if a rock, she tilts five thousand feet of strata on end; our skies are higher and more intensely blue; our waves larger than others; our rivers fiercer. There is nothing measured, small nor petty in South Africa.

– Olive Schreiner

To understand the British position in Africa, one has to go back quite a ways and examine its origins. Once the foundation is understood, one can then work forward to the present day. Part of the problem in doing this is that Africa is not a country, but a continent. Trying to assess an entire continent in one report is rather like being served a dish that's larger than one's head. Deciding where to put the fork in requires some study. Attempting to devour the entire beastly thing by oneself would be foolhardy, and bad manners besides. As any gentleman knows, proper manners count for quite a lot, and part of the problem of Africa is that there have been so many gaffes and misunderstandings that achieving a gentlemen's agreement at this point has about as much chance of success as trying to organize a waltz in an Irish brothel.

Shamefully, our history on the African continent as a power in residence begins with the trans-Atlantic slave trade. Britain established several ports on the western coast specifically for this purpose. While we still hold James Island and the fortress at Accra, they no longer serve such a foul purpose, after the abolition of British involvement in the slave trade some seventy years ago.

Colonization for more noble purposes began with Napoleon. When French forces invaded the Netherlands in 1795, the Dutch, long our rivals in South Africa and the West Indies, handed over the Cape Colony to Britain so that the French could not claim it as spoils of war. By the end of the Napoleonic Wars in 1815, Britain had the Cape Colony firmly enough in hand that the Treaty of Nantes formally ceded the colony. This upset the Boers, farmers of Dutch descent who comprised much of the Colony's population, partly because they didn't want to be ruled by Britain and forced to learn English, and partly because Britain had outlawed slavery entirely throughout the Empire.

Many of the Boers left the Cape Colony during the Great Trek period, founding the colonies, later nations, of the Transvaal Republic and the Orange Free State, recognized by Britain in 1852 and 1854 respectively. This created a situation that, twenty years on, would turn potentially explosive.

In the same year that the Transvaal received recognition, Mpande, king of the Zulus, invaded Swaziland. King Mswati II appealed to the British Empire for aid. Faced with the arrival of British forces, Mpande retreated back across the border. In the process, his son Mbuyazi was captured, and later ransomed back to his father. During his captivity, Mbuyazi met with British military commanders and diplomats, and the groundwork was laid for a possible alliance. Shortly after Mbuyazi's return to the Zulu Kingdom, he clashed with his brother Cetshwayo over the succession. Arguments led to fights, which led to open warfare between the factions. At the Battle of Ndondakusuka in 1856, Cetshwayo's forces pinned down Mbuyazi's, and all hope seemed lost, when British reinforcements arrived. Cetshwayo's forces, caught between the British and the rallying troops of Mbuyazi, were slaughtered in a day and a night of intense and savage fighting. Mbuyazi returned home with his brother's head on the end of a spear, deposed his father, and took the throne. Mbuyazi then signed a treaty of mutual support with the British Empire, based on the standard pacts used in Europe. While the treaty was broken a few times by renegade Zulus who disagreed with their king about standing beside the white men, each time Mbuyazi tracked down the men responsible, and either executed them himself or handed them over to the British for trial and execution. Mbuyazi also extended the custom of the blood price to white victims of Zulu slaughter, although the widows of the soldiers would have been nonplussed to receive the bales of skins and piles of ivory Mbuyazi originally provided instead of the pounds that the military sold them for.

Maintaining a hold over a people as proud and independent as the Zulus proved difficult. Mbuyazi died in 1869, prematurely aged by the stress of his position. His second son Nbomani took the throne, but given the instability of his nation, signed a treaty of protection in 1870, bringing in British troops and administrators to help hold his people in check. Even with British guidance, outbreaks of rebellion still occur, a notable example being the Battle of Isandlwana earlier this year, where over a thousand British soldiers died in a single day defending against a massive raid. The British military has nonetheless profited from the treaty, organizing regiments of Zulu auxiliaries for border enforcement and maintenance of order in the Zulu Protectorate, and recruiting the best of these auxiliaries into British ranks. Anyone who has ever dealt with the Zulus knows that it is much better to have them filling out your own ranks than facing you from across the field.

In a somewhat Pyrrhic diplomatic victory, Moshoeshoe, "The Razor", the Great Chief of the Basotho, one of the more important Sotho-speaking tribes, signed a treaty with Britain in 1868, making Basutoland a British protectorate and ending threats from the Zulus and the Boers. This also put an end to a source of embarrassment for Britain, which had lost battles with the Basotho in 1851 and again in 1852. As a British protectorate, Basutoland could not be invaded by the Zulus under the terms of the mutual support treaty with the British Empire. The Boers had fought several wars with the Basotho and recently captured the western lowlands of Basutoland. The Treaty of Aliwal, signed between the British and the Boers in 1869, defined the borders of Basutoland, leaving the Lost Territory west of the Caledon River in Boer hands and effectively halving the Basotho's range. Moshoeshoe died in 1870, and the following year Basutoland was annexed to the Cape Colony, a move that has not gone well. Moorosi, one of the southern chiefs, rose in revolt earlier this year, and when he was killed in battle, the rest of the southern chiefs fell to fighting amongst themselves over the division of Moorosi's lands. Currently, the British military is attempting to

disarm the Basotho under the auspices of the Cape Peace Preservation Act of 1878, but that effort is not meeting with much in the way of success.

To further complicate matters, diamonds were discovered at Kimberley in 1867, touching off a rush. By 1872, Kimberley counted its population at fifty thousand. Britain annexed the lands, triggering another diplomatic incident between the British and the Boers. As a side note, the annexation was really just a formality, as Cecil Rhodes, a British entrepeneur, backed by Rothschild money, had already bought most of the smaller mining concerns in the area, and the larger De Beers claim. Rhodes and his partner C.D. Rudd had also brought in engineers to solve the problem of pumping water out of the mines, so that any mine Rhodes didn't own was under contract to the pair for water clearance.

The efforts of the Colonial Secretary to organize a federation between the British territories in Africa, the Orange Free State, and the Transvaal Republic failed in 1875, partly because the Boers were still smarting over the loss of Kimberley. In 1877, Britain attempted to annex the Transvaal by a special warrant, based on the threat posed to the Transvaal by the Zulu Kingdom. If the Transvaal became a British possession, it would be off limits to Zulu encroachment under the treaty between Britain and the Zulus. The Transvaal Boers objected strenuously to this, but have yet to put up a fight about it, resorting to some very strong name-calling and visits to London by Paul Kruger, their leader. Diplomatically speaking, the Boers are boxed in. If they obviate the warrant, or take up arms against the British, the Zulus will sweep in and obliterate them. If they don't oppose the British, they'll end up like Cape Colony, thoroughly Anglicized, their cultural inheritance washed down the river to the sea. The region is a powder-keg; all that is needed is a spark.

Offering the Boers lands in the New World might relieve some of the pressure, but the Boers are unlikely to believe that they will be left alone in the New World, given that Britain has repeatedly claimed or reclaimed Boer lands in South Africa. Also, releasing Voortrekkers into the New World could easily incite conflict with the Samsut or the Saurids. Perhaps the Voortrekkers could be released on the third continent that the Saurids have told us of.

The Americas

This section covers the North American continent. The Southern American continent simply does not have sufficient British presence at this time to justify its inclusion in this short-form report.

Canada

Properly the Dominion of Canada under the Constitution Act of 1867, but often referred to incorrectly as the Canadian Confederation (actually the process of unification rather than the result), Canada comprises all land in the North American continent north of the 49th Parallel, including territorial waters thereof, with the exception of the Alaska Territory and the New England states of the Union. While a possession of the British Empire, and under the rule of the Queen, Canada has its own Parliament and its own Prime Minister, a necessity given both the vast size of the Confederation and its distance from Britain proper.

Much of the Confederation consists of wilderness, inhabited by widely scattered frontier villages and townships, and a broadly diverse indigenous population whose cultures range from nomadic

hunter-gatherers up to primitive settlements. The natural resources of this land are substantial, and have been invaluable in both the exploitation and expansion of the Confederation. The remoteness of the territory has been conducive to its use for large-scale experimentation, for example in the adaptation of Confederate airship designs to the hybrid of British microsteam and Prussian electrical power systems now in use throughout the Empire.

Canada's origins as parallel French and British colonies are still evident in the officially bilingual nation, with both French and English the languages of government, and a continuing row over which language shall be predominant, if either. In the British-founded provinces of Nova Scotia, New Brunswick, and Newfoundland, most of the inhabitants speak English and some French, usually in the form of loan words. In French-origin Quebec, on the other hand, French is the more common language, and one may encounter the occasional Francophone radical who refuses to understand English under any circumstances.

The linguistic tension mirrors the political nightmares that both preceded and followed the Constitution Act. The Rebellions of 1837 very nearly sent Upper and Lower Canada into civil war. The 1840 Act of Union merged the two into a united province, but did not unite the people. In a way, the great tragedies of Europe in the next few years, the Napoleonic Wars, the Highland Clearances, and the Irish Famine, saved Canada from itself. The flood of Scots, Irish, Ukrainians, and other refugees swelled the Canadian population by nearly a million souls. Assimilating that many new inhabitants took so much effort that there simply wasn't anything left for conflict.

Modern Canada thus is a polyglot, polycultural assemblage of civilized and wilderness territories, managed only with a light and careful touch. The East, comprised of the predominantly British provinces of Newfoundland, Labrador, Prince Edward Island, Nova Scotia, and New Brunswick, and the predominantly French provinces of Saint Pierre / Miquelon, Quebec, and Ontario, holds most of the industry and the seat of Parliament. The West, comprised of British Columbia and the island of Vancouver, still has much of the frontier about it, and inhabitants who are proud of their hardiness and ability to survive in such remote environs. Between the two lie the massive wildernesses of the North-West Territories and the District of Keewatin, with the island of civilization that is Manitoba huddled against the southern border. The indigenous natives, grouped by languages into the Algonquian, the Iroquois, the Na-Dene, the Salishan, the Athabaskan, the Haida, and the Inuit, divide themselves further into dozens of tribes, and number in uncountable multitudes. Some are friendly to those of European descent, some are hostile, and some simply want to be left alone. The British subject leaving the comforts of eastern Canada is advised to be quite certain that he is well supplied, able to endure hardship and rigor, and willing to learn a new way of life.

Mexihco (Los Estados Unidos de Mexihco, the EUM)

Mexihco has gained and kept a reputation as a land of scorching heat with fiery tempers to match, where a single misspoken word can result in gunfire, and where the simplest gestures of charity can win the hearts and minds of thousands and the enmity of the rich and powerful in a single stroke. Its beginnings lie in the bloody Spanish conquest of the Aztecs. Its turbulent birth as a nation led to a series of internal rebellions and wars, occupation by France and eventual re-liberation. Current-day Mexihco finds economic, artistic, and scientific achievements living cheek by jowl with widespread poverty, endemic political corruption, and savage repression of its dissidents.

Herman Cortes was not the first Spaniard to land a small army in the New World, but he was the first to conquer the lands that eventually would bear the name of Mexihco, originally the name given to the central province of the Aztec Empire. Cortes, in his quest for gold, brought the Aztecs something from Europe that they simply were not prepared for: smallpox. Within just a few years, there weren't enough Aztec warriors left alive to put up a defense of their dying empire. Catholic missionaries followed the conquistadores, and colonists followed the missionaries. By the late 1500s, New Spain was a Christian nation under the rule of the Spanish Empire. Only in remote areas did any of the native population and their culture survive, descended from the lucky few who were resistant to the European disease and survived the plague.

While a great deal occurred in the next hundred or so years, the next critical event in the history of Mexihco was the rebellion of Father Hidalgo. Miguel Hidalgo y Costilla, a Catholic priest dispatched to the town of Dolores, found the name of the town, meaning "pain", to be far too apt. The people lived in crushing poverty. Father Hidalgo's attempts to teach the locals how to grow olives and grapes for both sustenance and cash crops were suppressed by the Spanish government, as competing with Spanish imports. Father Hidalgo, together with his brother Mauricio Hidalgo, army captain Ignacio Allende, and the wealthy independence activist Mariano Abasolo, raised an army of peasants and led a rebellion against the Spaniards. Predictably, this did not end well, but it set events in motion. Following Father Hidalgo's death by firing squad at the hands of the Spaniards, Father Jose Maria Morelos, a mestizo or person of mixed Spanish and native Mexihcano blood, took the reins. He managed to convene a Congress in 1813, which produced a declaration of independence for Mexihco, but was captured and executed in 1815. The situation finally resolved in 1820, when General Agustin de Iturbide was ordered to lead his troops against those of Vicente Guerrero, Morelos' successor. Instead of attacking, however, Iturbide, himself a criollo, or Mexihcano of pure Spanish descent like Father Hidalgo, joined forces with Guerrero. In 1821, the Spanish crown ceded the issue, and signed both the Treaty of Cordoba and the Declaration of Independence of the Mexihcan Empire.

Iturbide declared himself emperor of this new empire, but was promptly dethroned, and in 1823 a republican constitution was enacted, creating the United Mexihcan States. There followed forty years of conflict between liberales and conservadores over forms of government, economic instability, rebellion by five different ethnic groups, a war with the United States, another constitution, a civil war, and victory by the Liberales, just in time for the French to land. Archduke Ferdinand Maximilian of Austria ruled the Second Mexihcan Empire as Emperor Maximilian for a few years, before the conservadores decided that the federalist system of the liberales was preferable to a monarchy with a foreign king, and switched sides. Maximilian was executed, and Porfirio Diaz, a republican general, was elected Presidente of the reborn Estados Unidos de Mexihco.

Porfirio has led the EUM to substantial advances, bringing its economy under control for the first time in its existence. His government has provided large investments in the arts, and supported both public and private efforts in the advancement of science. At the same time, Ciudad Mexihco, the capitol, has a massive slum district and thousands of homeless indigents. The Catholic Church in Mexihco, cut off financially from Rome where the Vatican is still smarting over the criollo priests' role in the revolution, simply cannot shoulder the burden of charity. Representatives of charitable organizations from other nations tend to find themselves on the wrong end of a gun, having insulted the Mexihcanos by their very presence, implying that the EUM cannot take care of its own. Unskilled manual labor may be had for cheap, but the permits and openly demanded bribes to establish and operate a business can be prohibitive. In the northwest of the EUM, the Mayans

still hold the region of Chan Santa Cruz, and seem well on their way to establishing their own nation. Where all this will go next is anyone's guess, but one thing is certain: the next revolution will not be long in coming.

The United States of America (the "Union") / The Confederate States of America (the "Confederacy")

Like Siamese twins who cannot abide each other, these two nations are joined inseparably in a state of eternal conflict. The American Civil War ground to a halt in 1866, both sides too exhausted to continue. Considerable history comes both before and after the conflict, but the Civil War remains the defining event of both nations.

As a side note, the name applied to the conflict depends on location. Most of the world refers to it as the American Civil War, to differentiate it from all the other civil wars known to civilization. Citizens of the Union refer to the conflict as the War of Secession, or the War of Southern Secession. Citizens of the Confederacy know it officially as the Confederate Revolution, but more often refer to it as the War of Northern Aggression, never mind that the Confederacy fired the first shots at Fort Sumter. Since we are subjects of the Queen, we will use the more common name throughout this report.

While the origins of the United States of America as British crown colonies is well worth substantial examination, the key point is that those colonies rebelled against the Empire and broke away to form a new nation. The American Revolutionary War began in 1776, when the colonies declared themselves free and independent, and ended in 1783, with the new United States of America ratifying its Constitution. One should hardly be surprised, then, that less than a hundred years later, half of this new nation seceded, intent on forming their own country.

The state of South Carolina led the charge in 1860, following the election of President Abraham Lincoln, a staunch Unionist and abolitionist. Its economy dependent on cotton, which in turn depended upon African slaves, South Carolina saw in Lincoln's election the end of their economy and their cherished way of life. Parenthetically, for those eager to condemn the Confederacy for its continued practice of the abhorrent institution of slavery, one must remind these individuals that the textile mills of Manchester and the fortunes of many British subjects were dependent upon American cotton. Britain may have outlawed slavery in its own Empire years before, but contributed

substantially to the continued practice of slavery in the Southern states by purchasing the cotton that the use of slaves kept so cheap.

Mississippi, Florida, Alabama, Georgia, Louisiana, and Texas followed South Carolina away from the Union in the early part of 1861. The Articles of Confederation were signed at Montgomery, Alabama. Later, after the war began and the states of Virginia, Arkansas, North Carolina, and Tennessee joined the Confederacy, the capitol would be moved to Richmond, Virginia, putting the Confederate seat of government as close to the border as Washington, D.C, the seat of the Union. Later, when Richmond fell to Union forces, the capitol would be moved back to Montgomery, where it remains to this day.

Entire libraries have been written examining in minute detail the battles, the politics, the economics, and even the manufacturing of shoes during the American Civil War. This condensed report will confine itself to the major turning points and most significant events, those things that can be pointed to and said of them, here, these are what led to the current situation beyond any doubt. In the end, the Union had greater resources of manpower, industry, and raw materials. The Confederacy had greater resourcefulness, smarter engineers, and a few technological visionaries whose work changed the course of the war.

The Union sought early on to blockade the Confederacy, closing the secessionists' ports and denying them both supplies and the ability to communicate with other nations. This failed for a number of reasons. First off, the Union expected the British Empire to stand aside from the conflict, especially in light of the slavery issue. In the beginning, the Empire refused to extend recognition of any sort to the Confederacy. However, the Union breached the Empire's sovereignty in a series of incidents in Trent and Merseyside. The Confederacy had commissioned ships from English yards, and had gone through an elaborate series of legal fictions to deliver those ships to points where Confederate crews and guns could be brought aboard without violating English neutrality. The Union, in blatant disregard of proper procedure, decided not to wait until the ships reached international waters, and seized the vessels at the British dockside. Between this insult, which left the population in an uproar, and the economic cost of the seized vessels, which sent repercussions through the naval insurance firms and into the economy at large, Parliament was forced to respond. The addition of pressure from the textile mills of Manchester, desperate for Confederate cotton, with the twin specters of starvation among the factory workers and massive indemnities on the part of the industrialists, pushed the solution from the diplomatic arena to the military. British warships sailed for the Americas, and engaged the Union vessels blockading Confederate ports and hunting Confederate ships. While the strikes were perforce in international waters, kept to punitive levels, and not allowed to escalate into support actions for the Confederate war effort, they opened sufficient holes in the naval barrier to allow Confederate vessels some ability to pass. Later in the war, Brazilian ships fought alongside the British, and beside the Confederates as well. The Union, not having learned its lesson from Merseyside, captured *CSS Florida* at dock in a Brazilian port, in clear violation of Brazilian territorial rights. Brazil in turn became the first nation to extend full diplomatic recognition to the Confederacy.

The second reason that the blockade failed is threefold, three developments in technology in different areas that acted, in the grand scheme of things, similarly. With quiet assistance from a few Frenchmen, who sent copies of the work of Henri Giffard to Montgomery, the Confederacy made a breakthrough in lighter than air ship design. Marketing their expertise brought badly needed funds. The airships themselves, called Giffards in honor of the French engineer who laid the foundation, allowed the Confederates to ignore the Union naval blockade, bringing in critical supplies and

carrying out cargo far above the reach of the Union's shipboard guns. Bombs dropped from airships have effectively infinite range, while cannon do not, further contributing to the Giffards' ability to put holes in the blockade. Airship technology has since spread rapidly from the Confederacy to other nations, even, through a roundabout path, to the Union.

The Confederacy also made serious advances in underwater craft. On August 29th, 1863, Lt. John Payne, in command of *H. L. Hunley*, a prototype submarine, accidentally stepped on the diving planes lever and caused the *Hunley* to dive with her hatches still open. The crew escaped, as they were still in the process of casting off from the dock. Considerable effort went into reviewing the design, and substantial changes were made. The 15th October test, with Horace Hunley, the designer, in command, sank the target ship from underwater, with the *Hunley* not resurfacing until she was well away. Armed with a spar torpedo that used a novel electrical detonator, specifically redesigned for the *Hunley's* use during the September rebuild, the ship carried out her maiden mission with flying colors, sinking the *USS Housatonic* on 17th February , 1864, leading to her commission as a naval vessel. The success of *CSS Hunley* led to a series of further missions and the building of more submarines, which again had significant impact on the blockade.

CSS Virginia, launched in 1862, changed the game when it came to battles on the surface of the ocean. Built from the hull of the scuttled and burned *USS Merrimack*, *CSS Virginia* sat low on the water, her casemate ironclad superstructure rising above the waves like the roof of a submerged house. She carried considerable firepower, and substantial armor, but moved sluggishly, her steam engines not being quite up to the task of getting all that iron under way. More of a

mobile fort than a warship, *CSS Virginia* nevertheless acquitted herself well in combat, sinking two Union vessels at the Battle of Hampton Roads. The next day, *CSS Virginia* nearly met her end, as the Union ironclad *USS Monitor* arrived on the scene, and engaged the badly-damaged *CSS Virginia*. The two vessels pounded away at each other inconclusively until the first of two lucky shots by *Virginia* struck the pilothouse of *Monitor*, blinding her captain and severely impairing her ability to steer. While attempting to withdraw to shallow water, *Monitor* took a round of hot-shot through the cannon slit of her turret. The resulting magazine explosion tore the turret off *Monitor*, broke her keel, and killed half of her crew. The survivors were picked up by launches from the shore as *CSS Virginia* came about and set course for Portsmouth, where she went into drydock for repairs. The Union subsequently abandoned the *Monitor* design, and spent the rest of the war trying to copy Confederate ironclad designs and come up with a better one of their own. The Confederacy launched nine more casemate ironclads, these with more up to date engines and other design improvements over *Virginia*, before the war's end, doing substantial damage with them to the conventional vessels of the Union. Blockading Confederate ports with wooden vessels powered by sail simply became an untenable strategy.

Other Confederate technological breakthroughs included firearms. Christopher Spencer was unable to get through the highly conservative Department of War with the design for his falling-block lever-action carbine, a substantial improvement over the muzzle-loading rifles in use at the time. Frustrated by this, Spencer accepted the offer of a consortium of wealthy Southerners who saw potential in the weapon. Production of the Spencer lever-action repeating rifle began in 1860, shortly after the inauguration of President Lincoln. In 1861, when Union forces abandoned their camps and forts in the Utah Territory to march east for the war effort, the Confederacy signed a treaty with the Mormon Church, acknowledging it as the rightful government of the territory. With political recognition in place, the Mormons renamed the Territory back to Deseret, the name they had given it before the Union marched in and took the land, and proclaimed sovereignty. In return, the Confederacy was able to purchase copper from Desereti mines at rock-bottom prices. This assured the Confederacy of plenty of raw materials for the cartridges for the Spencer carbine, which had notable impact at the Battles of Gettysburg and Hoover's Gap.

Gettysburg could have been a turning point either way. If not for a long range cavalry patrol, and a bad night for a commanding general, the Union might have won a decisive victory, and halted Lee's northward march in its tracks. Stuart's cavalry outriders, ranging further than the usual, spotted the approaching Union forces under Buford. Their reports backed up Pettigrew's report to his commanders, Hill and Heth, indicating a substantial enemy force in the line of march. Hill decided to engage anyway, despite General Lee's orders to the contrary, but Heth sent a rider to Lee. Already in poor humor from having not slept well the night before, General Lee did not take well to the news of Hill's impetuous defiance. Lee issued a series of written orders in a terse and peremptory tone. Realizing that Hill was about to start a debacle, Lee ordered Hill to slow his advance and wait for reinforcements. Unfortunately, Hill had already ordered a charge, and Lee's order did not arrive in time to stop it. Lee had Stuart's cavalry split their forces and flank the Union, harassing the enemy from the sides and rear, and instructed Ewell, who led the forward troops, to seize the high ground and hold it at any cost. Ewell subsequently took Cemetery Hill despite substantial losses. The sacrifice of much of his command gave the Confederacy the high ground advantage, depriving the Union of the opportunity to anchor their line at the hill. Hill's Charge went down in history next to the Charge of the Light Brigade during the Crimean War as an example of a commanding officer slaughtering his own unit. Stuart's cavalry, on the other hand, armed with Spencer repeating

rifles, inflicted tremendous casualties on the Union forces while taking few themselves. The arrival of cannon on the second day of battle finished the task. With the Confederacy able to lob artillery fire down onto the Union from the heights, breaking up the Union formations, the numerically inferior Confederacy won the day.

Sadly, the victory at Gettysburg was forgotten seven months later. Jefferson Davis, the stern, autocratic President of the Confederacy, had suffered bouts of intermittent blindness and headache for years. On January 17th, 1864, the weakened artery in his brain finally burst. Alexander Stephens became President of a nation in desperate straits. The newly elevated Stephens proposed a measure that was rejected out of hand at first hearing, but given serious consideration once tempers cooled.

> *"Gentlemen, the institution of slavery in these Confederate States of America is dead as a doornail, and it is high time we not only admitted it, but drove the final nail into its coffin. What I propose is to then ship the box off to Washington, DC, and let them choke on it. We must give up an institution that, for reasons of economy, manpower, and developments in mechanization, we can no longer support. The Union has claimed for years that slavery is the primary reason for their waging of war upon us. If we put an end to our peculiar institution, we deprive the Union of their justification for this war. If the North then continues to prosecute the war against us, we can lay their naked aggression before the entire world for judgment."*
> *– from a speech to the Congress of the Confederate States of America by President Alexander Stephens*

In October of 1864, the institution of slavery became illegal in the Confederacy. Overnight, thousands of slaves became free men, women, and children, only a small percentage of the slaves that the Confederacy had held at the beginning of the war, but four years of armed conflict had taken their toll on more than just the white soldiers. With the repeal of slavery, Britain, France, and Bolivia signed alliances with the Confederacy, not only recognizing it as a nation, but stepping into the war alongside Brazil.

Between the failure of the blockade, the demonstrated tactical superiority of the Southern command, the supplies and promised troops of the new allies, and Confederate technological advances, the Union's superiority in manpower, manufacturing capacity, and supplies simply did not suffice. Union military leaders had assured their government that a swift, decisive victory would be inevitable. With the War dragging into Lincoln's second term, political pressure to end it one way or another threatened to blow the Union government apart like an overstressed boiler. Desperate measures were proposed. General Sherman planned a strike down into the heart of the Confederacy, a fast march with troops supplied by what could be commandeered along the way, cutting a swath of destruction across the enemy's territory. The Union command peremptorily dismissed his plan, saying that winning the war by terrorizing the civilian population was unacceptable, and that Sherman's forces were needed to hold the line. When Sherman attempted to take his forces into Confederate territory anyway, he was removed from command. The War ground on, slow and bloody, with the Confederacy worn away in fits and starts. Finally, in 1866, an armistice was declared. Enough Confederate territory had been conquered by the Union to assuage the politicians and justify at least part of the economic cost. Further hostilities would require resources that neither side could any longer afford to spend. The right of secession became law. The Confederacy consisted of Florida, Southern Georgia, Southern Alabama (including the Confederate capitol of Montgomery), Southern Mississippi (including Jackson, the former state capitol), and Eastern

Louisiana (including New Orleans and Baton Rouge). The Union consisted of thirty-six states, including Northern Georgia, Northern Alabama, Northern Mississippi, and Western Louisiana.

Over the next several years, a number of states exercised that right. North Georgia seceded from the Union following a popular vote and rejoined South Georgia. The Georgian Reunification was soon followed by the reunifications of Alabama, Mississippi, and Louisiana. South Carolina was the only former Confederate state wholly retaken by the Union where a plebiscite to secede carried by the required two-thirds margin. Arkansas, Tennessee, North Carolina, and Virginia continue to have active secessionist parties, but thus far they have not passed fifty percent in their popular support.

Today, the Confederacy consists of Florida, Georgia, Alabama (including the Confederate capitol of Montgomery), Mississippi, Louisiana, and South Carolina. The Confederacy survives partly because of its continued production of high-quality cotton, and partly because of its war materiel manufacturing. Importing vast quantities of raw materials and churning out guns, warships, and the like have given the Confederacy the capital needed to repay its war debts and hire mercenaries from all over the world to fill out its military. Half the standing troops in the modern Confederacy are of foreign origin, leading to a highly diverse culture as these troops bring their families to their duty stations. Slavery is gone, but blacks throughout the Confederacy still face hardships, thrown out on their own with no means of support, and open prejudice, many whites blaming the blacks for the war in a twist of logic peculiar to the South.

The Union consists of thirty-one states, having added Nebraska in 1867 and Colorado in 1876, although for how much longer remains to be seen. Poverty grips a considerable portion of its citizens, with the costs of the War still being felt thirteen years later. Taxes remain high, the cost of living higher. The massive casualties of the war left many factories unable to hire enough manpower to continue operating. The labor laws of a more enlightened age prevent those gaps from being filled with orphans and the children of widows. An entire generation of children were born after their fathers had died in battle, leaving the Union with yet another war debt, the pensions to the bereaved families. Social progress has at least been made. With the majority of the Union's surviving population being female, the women's suffrage movement won the vote with scarcely any effort. While the Union would no doubt be a more palatable ally than the Confederacy, its ability to contribute to the efforts of the Empire are virtually nil.

As previously mentioned, the Mormons renamed the former Utah Territory back to Deseret, the name they had given their proposed State before the War, and proclaimed sovereignty. Brigham Young, President of the Church of Latter-Day Saints and former governor of the Utah Territory, took office as Deseret's first President, openly merging church and state. Marketing Desereti natural resources to the Confederacy during the War paid for substantial amounts of weaponry and fortification. At this point, the Union is simply too exhausted to push the issue, but has thus far refused to extend any form of recognition to the Mormons. Deseret remains an ally of the Confederacy under the Copper Treaty of 1861.

Texas declared independence, and has thus far held off being swallowed up by Mexihco, largely because the Mexihcans are too busy dealing with the Mayan breakaway state. The Lone Star Republic exports beef and minerals, and imports pretty much everything else. How long its economy can hold up in the face of poor cropland and a series of droughts is anybody's guess.

Toward the end of the War, a considerable number of Confederate soldiers deserted. Some of these soldiers turned to banditry, and remain a problem in Florida. Others went west into the unincorporated territories, or left North America entirely, turning mercenary, along with units

that refused to stop fighting when the armistice was signed. These mercenary units now roam the world, looking for conflicts where one side or the other might have the ready cash to bring in paid assistance. Some of these units fight because war is all they know. Others send the majority of their pay back to the Confederacy, hoping one day to be recalled to the field to continue the struggle with the North. A few simply cannot return, some because their home no longer exists or was seized by the Union, others because of war crimes charges still outstanding. Mercenaries have been considered for use in the New World, to bolster Her Majesty's forces. Care should be taken in selecting these units. Some of the more notable individuals from the War are reputed to travel with mercenary units, and would no doubt leap at the chance to pass through the Rabbit Hole incognito and re-establish themselves on the far side. The Empire does not need Confederate leaders attempting to build a New Confederacy in the New World.

The Antipodes

Australia

Previously visited multiple times by Europeans, including the British and the Dutch, the continent we now know as Australia was first truly colonized by the Empire in 1788, when the first shipment of convicts and their keepers arrived at Botany Bay. The New South Wales colony established itself a short distance away, at Port Jackson on Sydney Cove, after Botany Bay turned out to be not quite suitable despite the glowing reports of the early explorers. Sydney became the capital of a burgeoning colonization effort, expanding rapidly over the next few decades. By 1829, the settlements of Brisbane, Perth, and a dozen others had sprung up, the flood of free settlers rising to a torrent that far outweighed the number of prisoners transported. Territorial governments and provincial boundaries became necessary, creating Victoria in 1851, Queensland in 1859, and the Northern Territory in 1863. Representative constitutions and limited self-rule have been granted to most Australian territories as of 1879, and talk has begun of organizing the territories into a federation and applying to the Crown for recognition as a commonwealth. Transportation of convicts, always a sore point, began to be phased out in 1840, and halted

entirely in 1868. Many Australians to this day seem to find a perverse sense of pride in being able to trace their ancestry to a transported convict.

Women as well as men rose to prominence through hard work and shrewd investments. Elizabeth MacArthur led the establishment of the merino wool industry, showing considerable business acumen and initiative after her husband John was imprisoned for leading the Rum Rebellion. By 1834, the sheep stations (the local word for a ranch out in the bush) were exporting over two million kilograms of wool per year. Caroline Chisholm set up shelters for migrant women, gathered support from financial backers in England, and gained considerable respect in both lands for her work supporting the establishment and success of families in the colonies. Women who held property gained the vote in 1861, leading to a widespread suffragette movement that sadly has yet to win the right to vote for women universally, although legislation is under discussion in the Australian parliament that would not only grant universal suffrage, but allow women to stand for political office as well.

Tasmania

Van Dieman's Land was settled in 1803, again starting as a penal colony, becoming a colony in its own right in 1825. Convicts who completed their sentences tended to migrate to the mainland, settling in Victoria, much to the annoyance of the free settlers in Melbourne. The incidence of re-offending by these ex-convicts tended toward the maximum, leading to the discontinuance of convict transportation to Van Dieman's Land in 1853.

The island's name was officially changed to Tasmania in 1856, in honor of the Dutch explorer Abel Tasman, the first European to set foot on the territory. At the same time, the newly rechristened island was granted responsible self-government, with its own representational parliament. The last penal colony, at Port Arthur, didn't close until 1877, and Tasmania still labors under a bad reputation.

New Zealand

New Zealand saw its first European settlement starting in the late 1700s as well, but no serious effort was made to establish much beyond a trading post until 1839, when the New Zealand Company began work to obtain sufficient land to establish proper colonies. Captain William Hobson, a naval officer appointed as Lieutenant-Governor of New Zealand, signed the Treaty of Waitangi with forty chiefs of the Maori on 8 February 1840, but the text in English differed from the text in the Maori language, resulting in decades of warfare and questions still not properly settled. Hobson became Governor and Commander in Chief of the Crown colony of New Zealand anyway, when a Royal charter arrived in November, and ruled despotically until 1842, when he died of a stroke with a recall petition outstanding against him.

The colony continued to grow, putting constant pressure on the Maori, leading inevitably to a series of conflicts between 1845 and 1872, known collectively as the Land Wars or the New Zealand Wars. While eventually Britain prevailed, the Maori proved themselves resourceful and clever, quickly mastering the art of trench warfare. Following the cessation of hostilities, the Crown's representatives offered the Maori a choice: give up land or people. Tribes that chose the first option had thousands of hectares confiscated as war reparations, forcing them off territory they had called home for

thousands of years. Tribes that chose the second option suffered a draft, with a percentage of their adult population being swept up into the military or into civilian service. In the end, the draft turned out to be the better deal, as Maori soldiers recovered some of their tribe's honor through their service. When the colonial auxiliaries were regularized, tribes with large numbers of serving soldiers found their status upgraded, becoming valuable resources to the Empire on the level of recruiting villages in England. One side effect of Maori troops was the introduction of a number of Maori words into regular usage, including the now-familiar term *mana*, used in English to mean "magical energy", deriving from the Maori *mana tapu*, loosely translating as "sacred power".

The Uluru Zone

On 6 September 1877, later known as Ayers Day, three months after the opening of the Grosvenor Portal, the Overland Telegraph Line operator at Alice Springs detected a line fault four hundred kilometers to the south. The repair team that was dispatched couldn't reach the site. The road they followed meandered to the west, and only halfway to the fault site, they found themselves and their animals mysteriously unable to continue. No effort of will or use of violence could convince man or beast to take one more step past a certain point. An attempt to reach the fault from the south ran into a similar problem, but not at the same place. Plotting the two locations and the fault on a map showed them all occurring at approximately 250 kilometers from Ayers Rock. Known to the natives as Uluru, Ayers Rock had become well known by then as both an Aboriginal sacred site and an archaeological treasure trove, a region chock-full of cave paintings.

Since Ayers Day, no contact has been made with any of the stations, native settlements, or military outposts within 250 kilometers of Uluru. An academic research team had been encamped at Uluru on Ayers Day, but has not been heard from, its fate unknown but expected to be grim as they only had a month's worth of supplies. People of European, African, or Asian descent find themselves unable to cross some sort of invisible line, their minds unable to form the thought of taking the necessary step. If pushed across, they fly into a panic, scrambling back as if pursued by their greatest childhood terror, but cannot later describe what frightened them so. People of half or greater proportion Aboriginal descent discard their clothing and all items of modern make upon crossing the line, and walk on, ignoring all orders. If not shot down, they proceed out of sight and are never seen again. The same appears to apply to animals. Species native to the Australian continent journey into the Uluru Zone without difficulty, but none have been observed to emerge. Species imported from other continents, such as horses, cannot cross the boundary, no matter what the incentive.

The territorial governments have placed restrictions on the travel of Aboriginals, as hundreds and possibly thousands have migrated or attempted to migrate to the Uluru Zone. Kept from traveling to the region, Aboriginals descend into quiet depression, and simply shake their heads when asked about it. The very few who have spoken about the phenomenon say that they need to go home, and either refuse to or cannot clarify. As more and more Aboriginal people sink into despair at being kept away from the Uluru Zone, and others journey into the region to vanish into the desert, a military presence has been built up around the perimeter, although in preparation for what, no one can quite say.

HIGGINS ©17

1879 GAMEMASTER'S GUIDE

Gamemastering 1879

"Ultimately, they learn the lesson of War: You cannot control Fate."
– Jesse Schell, The Art of Game Design

This chapter covers two major topics. First, we talk about the theory of running a campaign. We discuss our ideas on how to be an effective Gamemaster. Second, we provide rules for generating numbers. We cover how to create Target Numbers, how to handle Perception Tests, and how to set Adventure Point awards for the players.

How to Run The Game

First, we're going to tell you to ignore everything we say here and do it your own way. With that out of the way, we'll get on to our advice about how to Gamemaster a roleplaying game, which you may use or not as you see fit. In the end, it's you and your players telling a story. All other considerations are secondary.

Basic Rules and Why You Should Break Them

The world of *1879* is a fictional world—and the rules and mechanics presented reflect that fictional universe. The mechanics for doing things in *1879* are abstract guidelines for all of a character's actions, including combat, magic, and even social interactions. While we took real world

concepts and abstracted them into game mechanics, the rules of a game like this cannot take into account all conditions or factors that constitute a given situation. In some cases this means certain game mechanics are there to make the game fun and entertaining rather than to reflect how things would work in reality, and in all cases, the rules have to abstract things we take for granted in daily life. At the same time, we guarantee that two people playing *1879*, whether player or Gamemaster, will read the same rule in this book and interpret it two different ways. For example, a player might declare that their character intends to resolve a situation using a Skill that you, the Gamemaster, consider inappropriate to the task at hand. You reread the Skill description, and tell the player, "The description doesn't say that you can do that with this Skill." The player may retort, "Well, it doesn't say I can't." Who's right?

Hundreds of individual abilities create a lot of rules to keep track of, and so questions of interpretation will arise. In most cases, the Gamemaster decides how the rule works. As a rule of thumb, the *1879* rules describe what characters can do, rather than what they cannot, and so in the example above, the Gamemaster's interpretation of the rule would be correct. While we've tried to deal individually with most of the rules that we feel may pose problems, we cannot anticipate every possible question. We recommend resolving disputes over rule interpretations as they arise, on a case-by-case basis. Because of the vast array of possibilities presented in these rules, no single rule of thumb covers everything

Changing the Rules

As the Gamemaster, you are in control. If a particular game mechanic doesn't fit your style of play or doesn't make sense to you, feel free to come up with something else you think works better. The rules of the game are there to help tell good stories. When the rules get in the way of telling the story, ignore them. Getting bogged down in rules disputes is counterproductive. Keep the plot moving. Improvise things on the spot. If you create a new rule to resolve a specific situation that arises during a game, decide later whether or not you want to keep using it. You might decide to make it a "house rule" that will always apply in the future, or a one-shot solution that only applies in a similar situation. As with disputes over rules or decisions, wait until the game session ends to talk about the new rule. The middle of an adventure is no place to discuss the fine points of game mechanics. Gamemasters and players should play by the rules, so that everyone works with the same set of assumptions; but if you change rules, make sure everyone knows the new version.

Authority of the Gamemaster

The Gamemaster is the final authority, having accepted the responsibility for running the game, and therefore has the right to make the final decisions about what works and what doesn't. We guarantee that during the course of a game, the players will disagree with a decision made by the Gamemaster. Don't worry about it. If the players are uncomfortable with a decision, discuss it after the game session ends, or before the next game session. Stopping in the middle of a game to discuss the rules interrupts the flow of the action and makes it difficult to resume play at the same level. It also makes more sense to discuss rules disagreements after everyone has had a chance to calm down. Explaining how the device that killed a character works may not make much of an impression on a player who just lost London's top Byron.

To effectively shoulder their responsibilities, the Gamemaster must keep track of what happens during the game. If the Gamemaster does not know that a character is taking an action, they may

decide that that action didn't happen. For example, if a character wants to visit the marketplace to purchase new equipment, the player must tell the Gamemaster what their character intends to do. The player cannot simply say, "I went to the marketplace and bought some new equipment." The Gamemaster may reply, "No, you didn't," and the decision stands whether the player likes it or not. Keep in mind that the Gamemaster's authority does not exist to allow the Gamemaster to micromanage each player's character, or to ignore actions that throw off the plotline. It does prompt players to inform the Gamemaster of any and all actions they want their characters to take. After all, the Gamemaster cannot keep track of events unless they know the events are occurring.

If It's Not Fun, Why Are You Doing It?

Roleplaying games are first and foremost a form of entertainment. Think about it. Why do you play roleplaying games? To get together with some friends and have a good time. But it's easy, in the heat of the moment, to forget that you are playing the game to enjoy yourself. Some players pout when the adventure doesn't go the way they want it to. Some players get mad when their characters are injured or killed.

If at some point you discover that the group is no longer having fun playing *1879* (we hope this never happens), then stop. Talk it over with the rest of the players, and try to figure out why you are no longer enjoying yourselves. Maybe you just need a break. There's no harm in stopping a game session early to go out for pizza. Or maybe you're tired of Gamemastering, and want to try playing instead. As well as giving another player the chance to be the Gamemaster, this gives you a chance to learn what it's like on the other side of the Gamemaster screen.

Dice vs. No Dice

Action Tests should only be required when the situation demands it. Encourage your players to roleplay a situation instead of rolling the dice to randomly determine the outcome of their attempts. More often than not, the Gamemaster can tell what the outcome of a given situation is. If it isn't important to the story, don't even bother to make a test. In these situations, the Gamemaster can simply provide a description of the outcome of a character's action—just go for the most dramatic or most amusing result and move on.

The Gamemaster should not ask for a dice Test for routine tasks, or for tasks done with no time or resource pressure. For example, if the character is a Skilled baker, and has all day and a plentiful supply of ingredients, the Gamemaster should not ask the player to make a Baking Test to produce a loaf of bread. The only Test that should be made in this situation is one to see how many loaves were produced. If only one was sought, even that Test is unnecessary.

Such an action, where the character is assured of success based on available time and/or materials to retry as necessary, is called a "gimme". In order to keep the plot moving, the Gamemaster should readily declare an action to be a gimme if the Test result would not significantly affect the story.

Storytelling and the Triangle of Drama

A diagram often helps with keeping track of where things are and where they're going. The Triangle of Drama provides a road map for stories, a structure that can be used to organize events and figure out what should be happening next. The base of the triangle is the flow of time. The sides are the action of the story as it builds, accelerates, and comes to an end.

The Triangle starts with Exposition. This sets the stage, establishes what has already happened, and puts the story into motion. To use a train metaphor, Exposition is when the passengers board the train, the cargo is loaded, and the all-clear for departure is given. The Gamemaster should clearly establish the ground rules as the train pulls out of the station. Here is where we are, and there is the destination. You have a dead body on the floor, and you need to bring the murderer to justice. You have information that could change the course of the war, and you must get past natural hazards and enemy agents to deliver it to a senior officer on the front lines. The players know what they need to achieve, and can start figuring out how to accomplish it.

The train labors up the mountain of Rising Action. Everything builds here, from the amount of information the players have to the tension level. The top of the mountain comes into sight. The players can see some kind of tipping point. They have time to prepare for it, but maybe not as much as they would like. Hard decisions must be made. Follow the money or investigate the person with the emotional motive? Take the airship, which would be risky, but faster than horses, or stay on the ground and have more control over mobility but not as much speed?

At the top of the mountain, the train passes the Climax. Here's the big reveal, the event that puts the players onto the chase, that confrontation where they find out who the killer is. They get to the battlefield just as the artillery opens fire. Things have gotten far too real all of a sudden.

The train crests the peak and picks up speed, thundering down through the Falling Action. The players are along for the ride now. They may be able to steer a course, but there's no way to slow down. Shots have been fired. The murderer is on the run. Time is of the essence.

The tracks run out onto level ground, passing the Resolution. Some of the major plot threads get sorted, but not everything is tied off neatly. The players capture the murderer, but now have to get him back to the city without his friends rescuing him. The senior officer needs an escort back to headquarters. The players just crossed the battlefield, which makes them the current experts on the situation out there.

Finally, the train pulls into the station at Conclusion. The remaining pipes run out, the plot threads are tied off, and this story wraps up. The murderer is in custody. The senior officer has changed the battle strategy and gotten new orders relayed. Like train stations, though, Conclusions have more track out the far side. The Conclusion of one story can be the exposition of the next. The train takes on coal and water, passengers board or re-board, cargo is loaded, and the next journey begins.

By applying the Triangle of Drama, the Gamemaster can keep track of pacing, adjusting the speed of events to keep the right amount of pressure on the players. Tension levels can be ramped up or maintained to keep the players in suspense and actively engaged in the story. The Gamemaster using the Triangle will have a better idea of when to lay new pipe, when to re-route, and when to resolve.

Roleplaying a Cast of Thousands

The Gamemaster must play the part of everyone in the game world who is not a player character. Starting out, this is simple; a few contacts who actually have personalities of their own, and some generic shopkeepers and soldiers and ship captains. As the players establish their characters, this grows more complicated. They develop a relationship with their ammunition dealer, the local chemist, the supply officer at the military base. The players expect these people to have the same accent as previously, to remember the last time they met, to become people instead of remaining cardboard stock cutouts. How does the Gamemaster keep all of these people in their head?

Simple. They don't.

The Gamemaster takes notes. In a spreadsheet, a notebook, or whatever comes ready to hand, the Gamemaster records every GMC, every meeting, what actions are pending (ordering a pound of sulfur for the Brassman), and whatever other details will be needed to keep the GMC consistent. The next time the player characters meet the GMC, the Gamemaster has a reference to look at, something that says this person has a thick Glaswegian accent, and they can get the sulfur, but it got back ordered and won't be in until the fifteenth. The notes don't have to be highly detailed, but they do have to capture enough information to prod the Gamemaster's memory and ensure a consistent experience for the players.

And if the campaign goes on for twenty years, and the GMC count goes up into the thousands, the Gamemaster can build a wiki with a page for each GMC, and use the Search function during game sessions to find the information required. See the wiki at http://www.fortetsa-hebo.com for just such an example.

Keeping Secrets

The players don't need to know everything. They do need to know enough to figure out what's happening. Some groups may deduce the enemy's entire plan from a single subtle clue. Others wouldn't recognize a subtle clue if it painted itself purple and danced naked atop a harpsichord, singing "Subtle Clues Are Here Again". Where to strike the balance between not revealing enough and revealing too much requires the judgment of the Gamemaster and knowledge of the players involved.

As a general rule, if the Gamemaster believes that the clue has been cleverly and subtly displayed to the players, they've totally missed it. Unless the players fall to arguing among themselves as to what the clue means, it wasn't obvious enough and they missed it. Try again and be less clever.

Pay attention to player speculation. This will reveal whether or not the players are figuring out the clues. It will also provide inspiration for where the storyline could go. The players will come up with all sorts of terrifying possibilities as to what might be happening, and what they could be up against in their next encounter with the enemy. About half the time, what the players invent will be better than what the Gamemaster had planned. Don't be afraid to discard a plan in favor of an idea that the players have so generously provided. The players will be satisfied that they figured out the situation, and the Gamemaster will have a lot less work to do.

Laying Pipe, or Let The Players Decide

When events or information in a story create the possibility of future events, the writer is said to be "laying pipe". Some people call this foreshadowing, or setting up story threads, but the slang term will be used here. For example, the writer establishes that a character's father has been missing for many years, and that a mysterious old man has recently arrived in town. This lays pipe for the possible revelation that the old man is the missing father. In a roleplaying game, pipe being laid offers the players opportunities for action. They may decide to investigate the old man, or may decide to ignore him for now to pursue a case of forgery that has cost a friend of theirs dearly. The Gamemaster may discard the old man as a dead end, laying more pipe off the forgery case, or may splice the pipes, revealing that the old man, while not the character's father, is the forger. This in turn lays more pipe, raising questions as to who the old man really is and what happened to the character's father.

Pipe can be roughly equated to unanswered questions. These questions both drive the storyline and present the players with some degree of control over the course of the plot. The clever Gamemaster lays a lot of pipe, creating a wide range of opportunities for the players and hooks to hang plotlines on, and develops those threads that the players follow. This does not mean that the Gamemaster allows the players to wander randomly. Routing a pipe to a desired conclusion is an old technique. Chasing down the missing horse leads the players to the forger's workshop, now abandoned but with clues as to where the forger went. The Gamemaster sits back and grins smugly, having woven a dangling thread back into the story, and letting the players know that of course this was going to happen all along, having laid enough pipe to easily improvise a resolution despite

the players' apparently having taken off in an entirely unrelated direction. For the well prepared Gamemaster, all pipes lead to Rome.

Not all pipe must be used. Pipes are not Chekov's Gun. When a pistol is placed on the mantel, the players are within their rights to leave the house and never return, leaving the gun unfired. The Gamemaster must learn when to abandon pipe, when to develop it, when to re-route it, and when to lay more. As a rule, always lay more pipe. The more plot options the game has available, the more options are available for the players to arrive at the destination the Gamemaster chose by a route of the players' selection.

In any decent mystery, there must always be at least two ways that the critical clues can be discovered, to keep the story from derailing. The same applies to any other type of adventure. The players may not think of one of the options, or might not have the necessary character type in their party, or could down-end all their Tests. The Gamemaster must ensure that the story stays on the rails, providing a plausible explanation of why the players found the critical clue without just handing it to them. Having pipe laid gives both the players and the Gamemaster ways to work around an obstacle, alternate routes to where they need to go.

In summary: Keep the options open and diverse. Always lay more pipe. Don't be afraid to revise, re-route, or abandon pipe that's been laid. Let the players decide how they're going to get to the destination. If the Gamemaster has enough pipe laid, and manages it well, the Gamemaster will always look clever when the players discover they've been going the way the Gamemaster wanted them to all along. Gamemasters and cats meant to do that, whatever the outcome.

Props, Maps, and Atmosphere

As with so many other components of rolegaming, the use of player handouts (virtual or physical), props, and background music find no middle ground. Players and Gamemasters either swear by them or swear at them.

Maps range from something vaguely close to what the Gamemaster wanted photocopied from a book or printed out from a website, to meticulously hand drawn maps with every relevant detail. The advent of random map generators has made obtaining a reasonably useful map a matter of a few mouse clicks. Having a map of a region through which the players are traveling can help give a sense of scale, and explain why the trip is taking so long and generating so many random encounters. Maps in combat help with positioning, distance, and line of sight. Some groups use miniatures for combat, ranging from tokens on a hex map to hand-painted metal figures on a sand table. The advent of the Virtual Tabletop (VTT) has made use of maps faster and easier. All that having been said, there are groups that don't use maps at all, keeping track of positioning in their heads. For some, drama is more important than accuracy, and that's okay. If it suits the tone of the campaign to dispense with maps and use dramatic narration, as long as everybody's enjoying the game, the goal has been achieved.

Physical props, such as business cards, toy guns, and pocket watches can be useful for drawing attention to the item if the players are at the same table. Use of props in a VTT session tends to be limited to images and web links. As a general rule, the Gamemaster should limit the use of props to small items that can easily be passed from player to player around the table, and to only those objects that are critical or central to the storyline. More than that can cause confusion and distraction, as the players may not be certain what they're supposed to pay attention to.

Setting the atmosphere with mood lighting and background music again comes down to a matter of personal taste. Some players like having the "1812 Overture" playing during field battles. Others find it annoying and distracting. The Gamemaster should talk with the players and make sure that everyone is okay with the idea before putting on background music. Similarly, bringing the lights down can create a tense and spooky atmosphere, but it can also make it hard for players to read their dice and character sheets. Balancing the needs of the players with the tone of the session requires experience, which means the Gamemaster is going to make mistakes and have some problems when first starting out. Experience is something you get right after you needed it.

Bringing In a Shill

In the jargon of con artists and stage magicians, a shill is someone who's in on the con or the trick, planted in the audience so that they will be perceived as just another spectator, but who can assist at the right moment with the answer the performer needs. In rolegaming terms, a shill is a player who assists the Gamemaster by taking over a particularly important GMC. The shill plays the character according to instructions from the Gamemaster, freeing up the Gamemaster to focus on the storyline, the player characters, and the game mechanics. While not a common practice, those Gamemasters who have employed shills have found them to be a great help on occasion. Too frequent use of a shill downgrades the novelty, and can create issues as the shill moves from being a walk-on speaking part to an ongoing character. There comes a point where the shill is less an assistant to the Gamemaster and more a player with an unfair informational advantage. Like props, shills are best when used sparingly and only for critical situations.

Rewarding the Players

Later on in this chapter, we'll discuss awards of Adventure Points. These reward the players for accomplishing goals and roleplaying and generally being clever by giving them the means to advance their characters. Before we get there, we need to talk about why you reward your players, and ways to do so that don't involve handing out points. Recognizing player achievement as players of a game is important, and player gratification is essential to keeping a game going, but recognizing the achievements of the characters within the game world is also important, and feeds directly into player gratification. The sort of awards and benefits granted to players and their characters by the Gamemaster also helps determine the playing style of the group and the nature of the campaign.

Besides the more obvious motives of rewarding the players for achieving the goals of the adventure, the Gamemaster should draw attention to the methods used. What the players accomplished needs to be contrasted with How they did it. If the players defeated their foe, but laid waste to the area and left a trail of bodies in the process, not only should their AP reward be reduced, but there should be in-game repercussions as well. This gets into the idea of in-game rewards and consequences.

Characters deserve advancement not only in their Skill levels, but in their lives. A Weird Scientist who develops a new device that in turn takes her party to their Adventure Goal should get an invitation to be a visiting lecturer at a university, or to present her device to the War Office. A Big Game Hunter could receive an invitation from the Explorers' Club. Soldiers and military officers can receive commendations, and be called up in front of their fellows to be formally recognized for their efforts. Enough achievements and the character might make the Honors List

and earn a title. See the **Social Level** chapter (*1879 Players Guide*, pg.163) for details on what that sort of reward can do. Adventure Points recognize the effort of the player in playing the game. In-game awards recognize the effort of the player in playing their character.

This in turn leads into behavioral reinforcement. Players will do what has gained rewards in the past. To have players who follow the game and game-world rules, the Gamemaster must reward players for staying within the rules, and bring some sort of consequences for breaking the rules. Positive reinforcement works better than negative. A Gamemaster who consistently gives advantages to players and characters who push the plot forward, roleplay well, and stay within the boundaries of the Gentlemen's Code and the game mechanics will not have to crack down on disruptive players. The rest of the player group will take care of that, so that their rewards are not disrupted. The Gamemaster should always be aware of what sort of behavior they're encouraging. Plotlines that force difficult moral choices are good once in a while, but pushing the characters into becoming outlaws and social outcasts is unlikely to end well unless they're fighting against a corrupt society and authority. The antisocial and rule-breaking behavior of the characters will transfer over to the players, and the gaming group may dissolve in a welter of interpersonal conflict and rules arguments. Give the players ways to indulge themselves in ways that are socially approved in the game world – a mordslanger hunt tends to involve huge amounts of firepower – and the players will behave in a more socially appropriate way in the gaming group.

Creating Target Numbers

Target Numbers usually derive from an opponent's Attributes, Defense Ratings, or other characteristics. However, players often want to perform actions or tasks that do not directly target another person, creature, or object, or do not involve using a Skill or casting a spell. These situations offer no obvious values on which to base a Target Number. This section explains how to create Target Numbers for these situations.

Who Can Do It?

The key to the system for creating Target Numbers described below is deciding what type of person would normally perform the activity being attempted. Might an ordinary person take this action? Would a low level of skill suffice to accomplish it? Is it a task that only a highly skilled person would dare try? This system sets up five levels of expertise by assigning Target Number Ranges to five classes of characters: Ordinary, Novice, Journeyman, Warden, and Master.

An **Ordinary** character has no special Skill with which to perform the task.

A **Novice** character possesses a Skill particularly suited for the task, though not at an outstanding level. Novices include those characters with beginning and average Skills (Rank 1–4).

A **Journeyman** character is a seasoned veteran who knows the ropes and has climbed more than their share. Tasks that seem almost inconceivable for an Ordinary character, a Journeyman character considers merely difficult. The Journeyman category includes characters with above-average Skills (Rank 5–8).

A **Warden** character enjoys a reputation as one of the best in their field. Their prowess has made them famous. Others in their area of expertise speak with awe of their deeds. The Warden

category includes characters with high-level Skills, with Ranks that go beyond what the Ordinary person can ever achieve (Rank 9–12).

A **Master** character is legendary. Ordinary people know tales of their deeds, and tell them in awestruck whispers at the pub. The Master is an example of the best that is, was, and ever will be. Tasks that they accomplish with ease every day are the stuff of dreams to Ordinary folk. The Master category includes those with Skill and ability Ranks at the top end of the available range (Rank 13-15).

Task Difficulty

Once you choose the class of character that would normally perform a task, you decide how hard that task would be for the player character actually attempting it: Easy, Average, Hard, Very Hard, or Heroic. The Target Number Table lists the five classes of characters in the Acting Character column and the 5 levels of Difficulty in the Difficulty Row across the top of the table. Each entry gives a range of Target Numbers appropriate for a given class of character and Difficulty level.

*A character makes their first visit to a city. They want to find a chemist, but decide to reduce the chances of anyone remembering them by not asking for directions. To determine the Target Number of finding the chemist's shop, the Gamemaster reasons that many newcomers to the city need to purchase medications or personal care items. Most of them would eventually find the chemist's shop, but would also ask directions. The Gamemaster decides that finding the chemist is an average task for ordinary folks, made a hard task by refusing to ask directions. Consulting the **Target Number Table**, the Gamemaster reads across the Ordinary row to the Hard column, which gives a Target Number range of 6-9.*

Target Number Table

Acting Character	Easy	Average	Hard	Very Hard	Heroic
Ordinary	1-2	3-5	6-9	10-12	13+
Novice	1-2	3-7	8-12	13-16	17+
Journeyman	3-6	7-12	13-18	19-22	23+
Warden	6-8	12-16	18-24	25-29	30+
Master	8-11	17-20	25-28	29-34	35+

Finding the Target Number

From the appropriate range, choose the Target Number that fits the situation best. If you are worried about making the task too difficult, choose the lower end of the range. Keep in mind that assigning a Target Number is an art, not a science. The most important job is to come up with a reasonable number quickly. Getting a number wrong might create a small ripple in the flow of your game. Agonizing over the correct number for too long can stop it cold. Pick a number you feel is reasonable, explain your reasoning if appropriate, and have the players roll the dice.

Adjusting Target Numbers

A Gamemaster has three options for further adjusting the difficulty of a given task. The Gamemaster can adjust the Target Number directly, apply modifiers to the player's Action Test Step (see **Bonuses and Penalties** in the ***Players Guide***), or require more successes. The first two options allow the Gamemaster to fine-tune the Target Number, while modifying success levels provides a universal, but more coarse-grained, approach.

Modifiers vs. Target Numbers

There is a difference between applying modifiers to a Test Step and modifying the Target Number directly, although it is a small one. But how do you decide what's best in a given situation? Our rule of thumb says, if the effect is **temporary**, modify the character's Test Step, but if the effect is **permanent**, adjust the Target Number.

For example, when a character is under pressure or making a decision to do something different, the Test Step should be modified accordingly. If the character is facing a task that will be the same working under any circumstances (such as finding a chemist without asking for directions in the example above), a higher Target Number will do the trick.

Climbing the rigging of a sailing ship is an Average task for Novice Tier characters (Target Number 3–7). Now consider the ship being caught in a fierce storm. Blinding spray, howling winds, and crashing waves make being above deck a lot more dangerous. This situation is not permanent, so the Gamemaster applies a –4 modifier to the Test Step of any character trying to get up the rigging. Using the rigging to swing across the deck and snatch the hat off a passenger's head is a different story. Ordinary and Novice characters shouldn't be capable of performing this task, but experienced sailors (Journeymen characters) should. Consulting the table, the Gamemaster sees that an Average task for a Journeyman character has a Target Number range of 7–12. The Gamemaster decides that a Target Number of 10 is appropriate for this particular task.

Success Levels

As a third option, the Gamemaster can also use the Success Levels to determine how difficult a task is to perform depending on the current conditions or situation. This works in any situation, but is more coarse-grained.

To do this, the Gamemaster determines the Target Number of the task under normal (Average) circumstances using the methods described above, then determines the revised level of Difficulty to assign to the task (Easy, Hard, Very Hard, or Heroic). Once the Gamemaster has chosen one of these levels of Difficulty, additional successes are required based on the difficulty. Effectively, each shift to a higher difficulty adds an additional +5 to the Target Number.

While trying to pick a door lock, Pieter the Brassman triggers a trap which pours hot water down on him. Under normal circumstances, the Target Number for picking a lock is 9. However, because of the extreme discomfort and distraction caused by picking a lock under a shower of hot water, the Gamemaster decides that the task has become Hard, shifting the difficulty by one column. Hard tasks require an extra success, increasing the Target Number from 9 to 14 (9+5).

Perception Tests

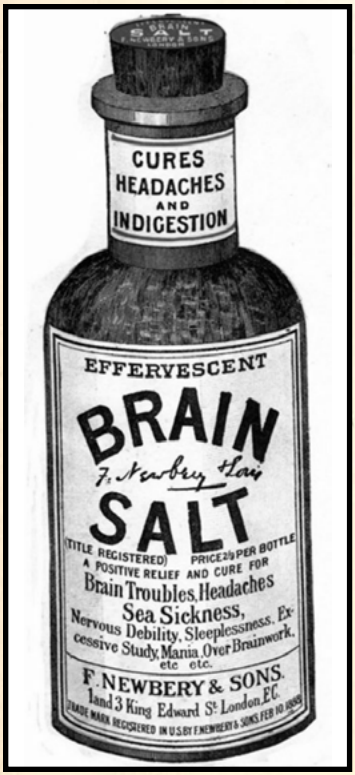
Much of what happens during an adventure depends on what the player characters notice around them. The adventure may hinge on a thief waiting to ambush the characters, a clue left behind by an assassin, or the scent of a creature or person.

The Target Number for a Perception Test derives from the object of the Test. For example, a Perception Test made to determine whether or not the characters see a thief hiding in ambush uses the thief's Dexterity Step or Stealthy Stride Test result as the Target Number. The Target Number for spotting a trap is the Detection Difficulty of the trap in question.

The **Perception Target Table** lists common situations requiring Perception Tests and the typical Target Number for the Tests. The Gamemaster should adjust these numbers to fit the situation at hand.

When to Make Perception Tests

Have the player make a Perception Test for their character when the Gamemaster needs to know whether or not a character notices something. Characters use their Perception Step to make Perception Tests, unless they have a Skill appropriate for the task. The character may use karma for the Perception Test if their Profession allows it as an Ability.



A group of explorers is cautiously examining the entrance of a suspected Anunnaki cache. The Gamemaster wants to see if they notice the trap ahead, so each player is asked to make a Perception Test for their character. Most of the characters use their Perception step, but the Dodger wants to use her Awareness Step instead. Because this Skill is appropriate to the situation, the Gamemaster agrees.

Sometimes the Gamemaster may wish to make a Perception Test on behalf of a character, usually to keep the result hidden from the player. The Gamemaster should keep a record of each character's Perception Step handy to make this task easier (and less obvious).

Perception Test Result Levels

The amount of information a Perception Test reveals depends on the success level of the Test. A single success tells the observing character that they noticed something. Two successes mean the character has some idea of what it is. Three successes means the character knows what type of object or person has been noticed, and can guess at its exact nature. Four or more means the character knows precisely what they are looking at. Until the object or person

can be approached and directly observed, however, the character does not learn any more specific information about it.

Perception Test Modifiers

Not all Perception Test Target Numbers are as clear-cut as the examples given above. The examples assume that no distracting sights, sounds, or other environmental conditions make it more difficult for characters to make observations. In reality, many factors can affect a character's physical ability to see or the likelihood of their noticing any given person or object. Though characters can make Perception Tests for any of the five senses—sight, hearing, smell, touch, and taste—environmental conditions can modify the Target Number of any Perception Test. The Perception Modifiers Table suggests ways for Gamemasters to take various environmental factors into account when players are making Perception Tests. Apply the suggested modifiers to the Target Number of the test.

Perception Target Table

Situation	Typical TN
Hidden target	Target's DEX Step
Locate Trap	Trap's Detection Difficulty
Spot Secret Door	8+
Notice Clues	5+

Perception Modifiers Table - Sight

Condition	TN Modifier
Dusk/Dawn	+2
Partial Darkness	+1
Full Dark	+3
Complete Darkness	+5
Light Rain	+1
Heavy Rain	+3
Partial Cover/Conceal	+2
Full Cover/Conceal	+4
Target Camouflaged	+3
Target Contrasts background	-3
Target Uniquely Shaped	-2
Viewer Knows what to look for	-2

Perception Modifiers Table - Sound

Condition	TN Modifier
Soft background noise	+1
People talking in background	+2
Boisterous talk in background	+3

Loud noise/battle in background: 10-20 yards away	+4
Loud noise/battle in background: 21-50 yards away	+2
Loud noise/battle in background: More than 50 yards away	+1
Sound lower than background	+2
Sound higher than background	-2
Sound has steady rhythm that contrasts background	-2
Listener heard sound before	-2
Only audible sound	-3

Perception Modifiers Table - Smell

Condition	TN Modifier
Obvious odor	-2
Other odors present	+2

Perception Modifiers Table - Touch

Condition	TN Modifier
Extreme temperature	-3
Perceiver is wearing gloves	+3

Perception Modifiers Table - Taste

Condition	TN Modifier
Taste is obvious	-3
Perceiver has a cold or other condition that interferes with sense of taste	+3

Loot

During the course of an adventure, characters will discover many opportunities for gathering loot and will seize those opportunities with both hands. Loot may be books, tools, supplies, money or gemstones snatched from fallen enemies, precious objects found in a creature's lair, pieces of a creature brought back as trophies, or arcane devices found in an Anunnaki cache. Whatever its form, Loot comes in two distinct varieties: **loot worth money** and **treasure.**

Loot Worth Money

Ancient coins, precious stones, items that can be sold for cash, or jewelry filched from an enemy all qualify as loot worth money. Characters can gather immediately usable money from dead opponents. Other forms of loot must be converted to cash. The Gamemaster ultimately decides the amount of potential loot available in any given adventure, and must tailor the amount of money or other loot the characters find or acquire to the type of campaign being run.

A common, but risky, method of turning loot into money is to sell equipment that belonged to deceased opponents. This requires a certain amount of caution. Adventurers who leave town in the morning and return later that same day carrying various bits of equipment to sell that they didn't have before tend to draw the attention of the local constabulary. However, not every town frowns on such activity. Several towns and cities regard the sale of used equipment as their primary local industry.

Treasure

In addition to loot worth money, characters can also find treasure, the objects that legendary adventurers acquire during their adventures. Treasure comes in three forms: rare items, such as first-printing books, paintings, unique pieces of jewelry, and items of significance such as battle standards; magical treasure, such as Weird Science devices, charms, talismans, and potions; and creature treasure, trophies hewn off the slain beast.

Rare Items

Rare items covers anything that is valuable because it is hard to come by. Leonardo da Vinci's sketchbook would be worth a fortune to the right buyer. The unit flag of an enemy battalion, seized in combat, demonstrates the bravery and prowess of the person who collected it. A Stradivarius violin may not be one of a kind, but very few of them were made, and not all of them have survived.

Magical Treasure

Magical treasure includes Weird Science devices that continue to function after being removed from their creator, and magical weapons and other items of either ancient or modern make that characters seek or find during their adventures. As a rule of thumb, if the magical item cannot be used once it has been collected, such as an expended spirit fetish, it counts as a Rare Item rather than as Magical Treasure.

Creature Treasure

Big Game Hunters and similar Professions often take bits and pieces of the creatures they bring down as proof of the encounter and of their prowess. These trophies represent a kind of treasure that increases a character's legendary status. Because only heroes normally collect bits and pieces of vanquished creatures, characters often collect such trophies to prove that they are heroes.

Awarding Adventure Points

Players use Adventure Points to improve their characters by increasing Attribute Values, adding Ranks to Skills, advancing to a higher Tier, and so on. They earn Adventure Points according to a system called Adventure Awards.

When designing an adventure, the Gamemaster calculates the potential number of Adventure Points each character may earn for the whole adventure by taking into account four elements: completing the game session goal, conflicts, acquiring treasure, and completing the overall adventure goal.

Depending on how well the characters fulfill these elements, characters earn Adventure Awards, a number of Adventure Points determined by the character's Tier. Characters also earn Adventure Awards for creative roleplaying and heroics, but the Gamemaster determines these awards at the end of each session, rather than when designing the adventure. (See **Assigning Adventure Awards**, below).

The Gamemaster awards Adventure Points at the end of each game session, determining how much of the calculated Adventure Award each player character has actually earned based on the events that took place during the session and how the characters handled those events.

Assigning Adventure Awards

The **Adventure Award Table** provides the Gamemaster with a standard for determining the Adventure Point value of the four elements mentioned above, and for evaluating characters' creative roleplaying and heroics during the session in terms of Adventure Awards. Guidelines for determining specific Adventure Award numbers for any of these elements appear in the descriptions of those elements following.

Based on a character's Tier, a single Adventure Award should award a number of Adventure Points that falls within the range given in the Adventure Award column, and somewhere near the average number given in parentheses. For example, a Novice Tier character should usually receive from 100 to 700 Adventure Points per Adventure Award, averaging around 350 Adventure Points per Adventure Award.

The average award shown in parentheses in the Adventure Award Table provides the benchmark for character advancement. For faster advancement, increase the average Adventure Award towards the top end of the range given. Conversely, for slower advancement, reduce the average Adventure Award toward the bottom end of the range given.

For each game session, the Gamemaster should design an Adventure Award for each character for each of the following elements:

- Completing Session Goals
- Conflicts
- Gathering Treasure
- Individual Deeds
- Roleplaying

Additionally, on completion of the adventure, each character gets an Adventure Award for achieving the Adventure Goal. This means that the character may receive three or four Adventure Awards for a single session, as the awards for session goals, conflicts, treasure, deeds, roleplaying, and Adventure Goals add up. See the third column of the table, **Total Adventure Points per Session**, for a recommended range and an average for the total points received by a character from the cumulative awards.

Adventure Award Table

Tier	Adventure Award	Total Adventure Points per Session
Initiate	25-75 (50)	100-300 (200)
Novice	100-700 (350)	400-2,800 (1,400)

Journeyman	500-7,000 (2,850)	2,000-28,000 (11,350)
Warden	4,800-68,850 (27,700)	19,200-275,400 (110,800)
Master	42,500-360,000 (162,500)	170,000-1,440,000 (650,000)

Completing Session Goals

Most adventures last for more than one game session. A session goal functions like a chapter break in a book. The story has not been resolved, but the current action reaches a conclusion. Session goals may be simple objectives such as the following:

- Contact the Crown agent in town
- Win the airship race
- Eat supper with the Baron without committing a serious social blunder

Sessions may also be cliff-hanger ending points, rather than objectives. Some examples include:

- Discovering the secret door leading down into the Anunnaki ruins
- Flying the airship into the heart of a storm to shake off pursuit
- Uncovering the identity of the traitor in the military outpost

Conflicts

Characters receive Adventure Points for surviving conflicts. This is often a matter of defeating creatures and opponents, though defeating them does not necessarily mean killing them. If the characters defeat creatures that you have set up as their opposition, award Adventure Points. Not all conflicts are physical. If the characters outmaneuver the nefarious Gamemaster characters at the charity ball and secure the backing of the Duke for themselves, that's a Social conflict won and it counts as defeating the enemy. If the player characters engage in wanton butchery of creatures or Gamemaster characters never intended as opponents, you may cheerfully ignore their indignant pleas for Adventure Points.

Each session should provide about an Adventure Award's worth of Conflict Adventure Points per character. The ranges given on the Adventure Award Table provide a benchmark, with the average award shown in parentheses. All opponents should come with an "Adventure Award" entry in their game statistics, denoting how many Adventure Points are awarded to the characters after defeating them.

Gathering Treasure

Everything your player characters carry away from defeated creatures or opponents is loot. However, treasure is the only kind of loot worth Adventure Points. Characters acquire treasure through heroic acts. Characters who claim legendary treasures soon become legends themselves. Treasure is represented by goodies that people expect heroes to acquire: bits of nasty monsters, forgotten items from antiquity, expensive weapons, magical talismans, symbols of the enemy such as battalion standards or scepters. Characters do not acquire treasure by lopping off a mercenary's head for his pay. That isn't heroic, so that coin doesn't count as treasure. It's plain old loot, and carries no Adventure Points.

An adventure should provide a payoff of one Adventure Award's worth of Treasure Adventure Points per character, and should include the treasures that many creatures or foes possess. When you are deciding what creatures or foes you want the characters to meet, remember to note any treasure those creatures might have in their lair or what those foes might carry, and include it in your total Treasure Adventure Points. Creature treasure should be listed in each creature's description.

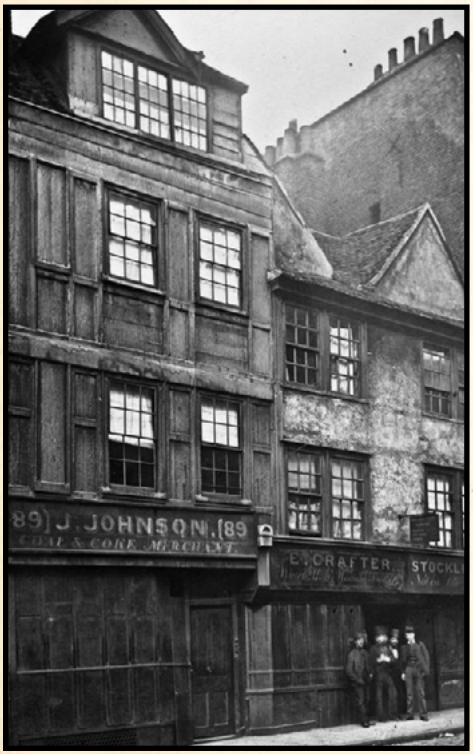
Individual Deeds

Players sometimes play their characters with particular zest, entertaining the group with their antics and coming up with ingenious ways out of difficult situations. If you feel a player contributed something special to the game session, award their character a number of Adventure Points up to one half of the session's Adventure Award for that contribution.

Individual deeds are the heroic actions of high adventure; running underground rapids rather than taking the roadway, or holding off zombies by setting a bridge on fire and then fighting the enemy on the burning bridge until the last possible moment. This is the stuff adrenaline rushes are made of. The Gamemaster may build opportunities for heroics into the adventure, or the players may discover them on their own. Any character who performs serious heroics should earn up to one half of an Adventure Award.

Roleplaying

Roleplaying includes coming up with creative ideas, plans, or tactics for the group. Players who deliver a magnificent line at the right moment, solve the puzzle, or discover a particularly twisted use for a spell would all qualify for this bonus. Gamemasters can also give characters bonus Adventure Awards for sticking to their character's personality traits even when doing so puts the character at risk. A player who keeps their character true to themselves only when it is safe to do so is missing part of the point of roleplaying. Award characters up to a full Adventure Award for a convincing roleplaying performance.



Achieving the Adventure Goal

The Gamemaster should design adventures around goals toward which the player characters strive, and each game session should bring them closer to achieving these ends. The overall adventure goal could be retrieving a specific treasure, producing evidence of treachery, discovering the identity of a murderer, or convincing a Saurid tribe to work for your firm rather than for a rival. Achieving the goal is the climax of the adventure.

Give your players the Adventure Goal Award at the end of the session in which the characters accomplish the adventure goal. Do not award a Session Adventure Award in the same session in which you bestow the Adventure Goal Award. The adventure goal becomes the goal for that game session. Because most session goals represent steps on the way toward fulfilling the larger adventure goal, accomplishing the adventure goal earns the characters 2 Adventure Awards.

The Gamemaster should give Adventure Awards for reaching session goals, defeating creatures, obtaining treasures, and creative roleplaying/heroics on a session-by-session basis. Give the Adventure Goal Award only at the end of the story. Don't give partial Awards for approaching the adventure goal. This "lump sum" Adventure Award emphasizes the story's climax: the big finale gets the big award.

Total Adventure Awards

Each player should earn between 2 and 5 Adventure Awards per game session. Players can only earn the maximum of 6 Adventure Awards in the session where they complete the adventure goal. On average, players should earn 3 or 4 Adventure Awards per session, including one for achieving the session goal, one for defeating creatures and opponents, one for acquiring treasure, and one for character heroics and creative roleplaying.

Adjust the Adventure Awards to suit your gaming style. For example, you might want to award more than the suggested Adventure Points for acquiring treasure and fewer for conflicts. Remember, however, that keeping the per-character Adventure Award total within the bounds described here will help you maintain the pacing of your game.

1879 GAMEMASTER'S GUIDE

Gamemaster Characters

The beings of the mind are not of clay;
Essentially immortal, they create
And multiply in us a brighter ray
And more beloved existence: that which Fate
Prohibits to dull life, in this our state
Of mortal bondage, by these spirits supplied,
First exiles, then replaces what we hate;
Watering the heart whose early flowers have died,
And with a fresher growth replenishing the void.
– George Gordon, Lord Byron, from Childe Harold's Pilgrimage, Canto IV

Types of GMCs

Gamemaster Characters, or GMCs, divide loosely into two categories: those seen once, and those seen often. We'll refer to the first group as One-offs, and the second as Recurring, with some subdivision within the categories. Which of the two broadly defined types a GMC lands in determines the amount of development and record keeping required of the Gamemaster.

One-offs and Spear Carriers

The first subcategory here, the One-off GMC, can be thought of as an extra, like in a television show or movie. One-offs are the walk-on speaking parts, the bartender, the shopkeeper, the guy at the bus stop. They deliver a line or two, maybe interact with the main characters a little bit, and when the scene is over, it's very unlikely they'll ever appear again. Spear carriers, a term from stage acting, don't even get lines. They're the soldiers guarding Buckingham Palace, the passing crowd in Russell Square, the driver of the London omnibus.

One-offs rarely get names assigned to them, just a quick description. If they do get a name, the Gamemaster should make a note of it, as the players may decide to return to the shop or bar or whatever, now that they know the name of the shopkeeper or bartender. This evolves a one-off GMC into a recurring GMC, which then requires a bit more development effort on the part of the Gamemaster.

Spear carriers (a term from stage plays for the people in the background) hardly ever get names. They're more walking props, set dressing, than people. If a player character goes out of their way to interact with a spear carrier, that bumps the spear carrier up to one-off status, at which point the Gamemaster needs to make a note of the name and description given. Player characters will go in unexpected directions, and may decide to evolve the spear carrier into a one-off, and the one-off into a supporter, in the process of building a contact within an organization. The Gamemaster is advised to keep a list of names handy, for giving names to GMCs on the fly. At the time of this writing, Kate Monk's Onomastikon, located at http://tekeli.li/onomastikon/, is an excellent source of such, being organized by nationality and ethnicity and subdivided into gender and family names.

Recurring Characters

GMCs that the player characters interact with more than once become the supporting actors and actresses in the drama. These recurring characters may offer services the player group needs, provide them with more overt support, or be their opposition.

Supporters

Supporters generally have a Neutral Attitude (see **Gamemaster Character Attitudes**, further along in this chapter) toward the characters, although they may slide a degree or two to either side, depending on how the interactions go. These are the frequently visited shopkeepers, the bartender at the regular pub, the night watchman at the library, people whom the player group see on a routine or frequent basis. They may sell goods that the player group must resupply, or do repair work on the sort of kit the player characters carry, or work at the airfield where the party keeps their Giffard. The Gamemaster should keep a page, file, or index card on these GMCs, with notes as to their appearance, accent, race, gender, political views, and any other defining characteristics that allow the Gamemaster to quickly pick up the role and play the GMC consistently from one encounter to the next. Keeping track of how previous encounters went is also a good idea, as the GMC can then remember (via the Gamemaster's notes) that the player characters still owe her three bob from their last visit.

Patrons

These GMCs provide political, economic, or other support to the player group, and have a Friendly or better Attitude toward the group as a whole. Patrons include the secretary of the Explorers' Club who put the player group in for membership and pushed the application through, the Earl who heartily approves of the good work the player characters are doing and slipped a provision into a bill in the House of Lords to grant them a stipend, and the Baroness who invites the player characters to the right salons and events so that their Social Level rises with their achievements. Patrons generally expect to get something back in return for their support. For example, Mister Fagin provides the Dodger team with their mission and their pay, expecting to receive news that the mission went well and the objective was achieved with little or no fuss. The skeelie woman in the Irish rookery up in the East End fits the characters out with protective charms, knowing that when they come back from the dockside warehouses with their loot, they'll bring her a couple of bottles of whiskey.

Patrons must be tracked with care. As with Supporters, their physical and personality characteristics must be recorded, so that they can be portrayed consistently. The Gamemaster must also keep records of favors extended, favors owed, shifts in Attitude, and external influences that change the patron's ability and willingness to support the player group. For example, the secretary may not be able to continue assisting the party with their application after a certain retired Colonel threatened to have her blackballed if she brought the subject up again. The skeelie woman has been arrested for violating the Witchcraft Act, and the player characters are going to have to bail her out and get her a proper license so she doesn't get arrested again if they ever want another talisman from her.

Enemies

These are GMCs with a personal, political, or economic reason to cause trouble for the player characters. Their animosity may result from a grudge, a family conflict, or an unresolved insult. They may just see the player characters as in the way of their goals, and want to remove them to clear the field. They may oppose the player characters because of religious or political beliefs. Whatever the motivation, the enemy drives the conflict of the story in which they appear.

Never allow the Enemy to become one-dimensional. While some people do in fact do evil things simply because they are mean, spiteful people, most opposition comes from people who believe that they are in the right and that you are in the wrong. An aristocrat who sees the player characters as a danger to the established order, or a Home Office agent who knows of secret plans that the party may interfere with, or a collector for the Inland Revenue who suspects that the player characters haven't declared all of their gains makes for a much more interesting enemy than a mustache twirler who just wants to Blow Stuff Up.

As with Patrons, the Gamemaster must keep extensive records of the party's Enemies. Making plans ahead of time for the Enemy, with contingencies, keeps the plotline moving. The Gamemaster should know what the Enemy is plotting at any given moment, as this will provide a considerable part of the action for the game. If the Enemy's plan is stymied or thwarted, they should have a fallback or failsafe. Some Gamemasters will go so far as to draw up a flowchart of the Enemy's plan, showing the branching points where player character interference could push the course of the plan one way or the other. At the very least, the Gamemaster should always know what the Enemy's next step is based on what the player group might do.

Creating GMCs

Putting together a GMC may or may not require much in the way of effort. How much is required depends on how important the GMC is to the story and the game, and how involved they're likely to be with the player characters. Spear carriers may not even need statistics, unless the Gamemaster expects the player characters to come into conflict with them, or otherwise interact. One-off characters should have game statistics, as the players are likely to use their characters' Skills and abilities while interacting with them. The shopkeeper needs their Social Defense defined, so that when the Brassman tries to Haggle, the Gamemaster has the numbers ready and available.

Recurring characters require more effort. They should have their Skills, or at least a few of them, defined. They need a little background, a personality trait or two, things that give them more depth than the walk on speaking parts get. If the recurring character is a Patron or Enemy, they should have their connections mapped out, who they know and what they owe and what is owed to them. Their monetary and material resources should be at least loosely defined. "Can put their hands to whatever they need on short notice" is good enough, as is "Skint so long they wouldn't recognize a penny if they stepped on it". How much work the Gamemaster puts into a GMC really depends on how important they are to the game. The more likely the player characters are to continue to interact with the GMC, the more fully developed the GMC should be.

Gamemaster Character Attitudes

All social interactions with Gamemaster characters are based on the characters' attitudes toward the player characters. Their attitudes determine how difficult or easy it is for a character to influence a Gamemaster character or otherwise achieve a goal requiring cooperation.

Like all characters, Gamemaster characters have their own personalities. Each has a unique way of viewing the world and other characters. The Gamemaster may give each of these characters a detailed personality, or may decide to accomplish the same ends using a kind of shorthand referred to as the character's Attitude. This attitude represents the Gamemaster character's basic point of view about other characters and affects every type of interaction other than combat.

A Gamemaster may assign one of seven basic attitudes to these characters: Awestruck, Loyal, Friendly, Neutral, Unfriendly, Hostile, and Enemy. Gamemaster characters, like most people, hold different attitudes toward different people. A character need only be concerned with a Gamemaster character's attitude toward that character. A servant who is Loyal to the king, for example, might be Hostile to another character. Player characters should not judge Gamemaster characters' attitudes toward themselves by their attitudes toward other player or Gamemaster characters.

Awestruck

When a Gamemaster character is **Awestruck**, he thinks the other character is the most wonderful person in the world. He may worship the character as a hero or fall head over heels in love with them. An Awestruck Gamemaster character willingly makes great sacrifices to please the object of his worship, and will take great risks, giving little or no thought to the consequences of his actions. He may even sacrifice his own life to save the life of the character.

Loyal

A Gamemaster character who is **Loyal** firmly believes in the other character's worth. A Loyal character might look up to or devote herself to a cause the other character serves; harbor a strong, quiet love for the other character; be a close friend; or serve faithfully as a long-time employee. A Loyal character looks out for the other character's best interests and expects to have her loyalty returned, but waits patiently even if this doesn't happen immediately. A Loyal Gamemaster character will take great risks for the other character as long as she considers the character's actions and behavior worthy of her loyalty, and she will betray them only under extreme duress.

Friendly

A **Friendly** Gamemaster character enjoys the other character's companionship and values the character as a person. The Friendly attitude encompasses friendships formed through time, the relationships of employers and respected employees, and the solidarity of characters who share a common bond, such as a group of expatriates meeting in a foreign tavern. Friendly characters expect a mutually beneficial relationship over the short term as well as the long term. A Friendly Gamemaster character readily does small favors as long as those favors are returned. A character may convince a Friendly character to take considerable risks for him, but only rarely and with much difficulty.

Neutral

A **Neutral** Gamemaster character takes a "live-and-let-live" attitude toward the other character. She will not go out of her way to accommodate the other character, but usually takes action if she sees someone violate another's right to live and let live. Neutral characters include neighbors and merchants—people who know the other character but consider them no more than an acquaintance. A Neutral character might help a player character to fight an immediate, obvious injustice such as a mugging from a gang of thugs. She might not intervene, however, if she thinks the other character started the fight. A Neutral character is more dispassionate than indifferent. If she sees values that she holds dear being trampled, she will involve herself in other people's affairs, but she will not go out of her way to make life better for others. Neutral Gamemaster characters can be convinced to do small favors, but they will not take significant risks without the promise of equally significant rewards.

Unfriendly

An **Unfriendly** character is out for himself. He holds a "live-and-let-die" attitude toward the other character. A greedy merchant, suspicious authorities, or a Gamemaster character who supports a cause the other character opposes would all be Unfriendly. An Unfriendly character will take advantage of another character but without openly harming them, and will gladly deceive them. He may often act politely and feign friendliness to gain the other character's trust. An Unfriendly character cannot be persuaded to do even a small favor, unless he clearly gains from doing so. Convincing an Unfriendly character to take risks for another character will prove extremely difficult, and he will weasel out of any commitment at the first opportunity.

Hostile

A **Hostile** character is out for herself, and will not hesitate to harm the other character if doing so will better her station in life. Hostile characters include bureaucrats, thieves and other criminals, and citizens of rival political powers. As with Unfriendly characters, Hostile characters may pretend friendliness to gain another character's trust in order to take advantage. However, most won't even bother with that pretense, openly and immediately attacking a character they judge incapable of defending themselves. Another character will find it almost impossible to convince a Hostile character to take any positive action on his behalf, and convincing one to take significant risks is out of the question.

Enemy

An **Enemy** character harbors a personal vendetta against the other character, or takes political motives and makes them personal, such as inflicting injury on an unarmed civilian because their nations are at war. The enemy may try to fake friendliness, but usually the best he can manage is a chilly politeness. An Enemy character takes great delight in contemplating and planning ways of harming the character and cannot be convinced to do them any favors. An Enemy will mock any attempts at persuading him to take risks for a hated character.

Better and Worse Attitudes

Awestruck is the most favorable attitude a Gamemaster character can have toward another character. Enemy is the least favorable. An attitude is "better" if it lies closer to Awestruck than the character's current attitude. An attitude is worse if it lies closer to Enemy. Thus, when the rules specify "an attitude of Unfriendly or better," this includes the Unfriendly, Neutral, Friendly, Loyal, and Awestruck attitudes. An attitude of "Neutral or worse" includes Neutral, Unfriendly, Hostile, and Enemy. An attitude that improves from Neutral to Friendly has improved by one degree. Some interactions, such as Favors, work only within a limited range of character attitudes, as explained below.

Social Interactions

This section provides rules on how player characters interact with Gamemaster characters to accomplish ordinary tasks in the course of questing for a goal, those times a player character is not hacking an Engine or firing a pistol. These social interactions are grouped into two general categories: roleplaying and making Interaction Tests.

Roleplaying

Roleplaying is the best way to resolve interactions with Gamemaster characters. Players speak for their characters and describe their actions and reactions to the Gamemaster characters. The Gamemaster does the same for the Gamemaster characters. The players and the Gamemaster continue in this manner until they resolve the scene or reach an impasse. If you roleplay your way through the scene, congratulations! Your character has succeeded at continuing their adventure through wit rather than dice rolls. If you reach an impasse, you can try another avenue.

Interaction Tests

Even the most imaginative roleplaying sometimes ends in an impasse between player and Gamemaster characters. Other times, neither wants to play out what is, after all, just an incidental encounter, and both player and Gamemaster would like to move the story along a little more quickly. To resolve such a situation, player characters can use their Charisma Step to make an Interaction Test. Five basic Interaction Tests can be resolved this way: Deceit, Insight, Intimidation, Making an Impression, and Favors. Most social interactions characters need to make fall into one of these categories. To resolve interactions, a character makes an Interaction Test against the target's Social Defense. The number of successes achieved in the Test determines the outcome, good or bad.

Social dynamics affect Interaction Tests, based on the relationships of the classes and represented by differences in Social Level (SL). Find the difference between the character's SL and the target's. If the character's SL is less than the target's, the character takes the difference as a penalty on the Interaction Test. If the character's SL is greater than the target's, the character gains the difference as a bonus on the Interaction Test. If one character is a Boojum and the other is not, or the player character is of a different race than the GMC target, the target may not react well due to the inherent racism of the European cultures of the time. The Gamemaster may apply a penalty here if appropriate to the character. If the target holds prejudices against Boojums or other races (a Saurid, for example, who does not think well of humans), treat the character's SL as being one point lower than it actually is.

If a character has a Skill appropriate to a situation where interaction is required, a Skill Test may be made in place of the Charisma Test. Many Skills add bonuses to the character's Interaction Tests. When a player character uses these Skills when interacting with Gamemaster characters, the rules given for the Skill supersede the interaction rules detailed in this section.

Skills often provide better results than default Interaction Tests, but have a limited range of applications when compared to the Interaction Test rules. For example, Skills can rarely be used when requesting favors or using Intimidation to coerce a character. As a rule of thumb, the Gamemaster should limit the use of Skills to the applications described in the skill's description.

To find the minimum result levels required for each different type of Interaction Test, see the **Interaction Success Table.**

Interaction Success Table

Type of Interaction		Successes Needed
Deceit		
	Exaggeration	1
	Fabrication	2
	Half-Truth	1
Insight		
	Detect Basic Emotions	1
	Detect Deception	2
	Detect Deception when target's features are concealed	3
Intimidation		
	Do nothing	1
	Take action	2
Make an Impression		
	Improve target's Attitude	1+
Ask for a Favor		
	Refer to the Favor Success Table	

Deceit

A character can attempt to convince another character of something that isn't true. This type of interaction is called Deceit. This covers everything from the typical "little white lie" to the darkest moment of betrayal. Some types of Deceit are easier to accomplish than others. In order to deceive another target character, a character must speak to, and must be understood by, the character they are trying to deceive. A Deceived character remains so until presented with facts or evidence that contradict the deception, which immediately ends the deception. There are three different types of Deceit: Exaggeration, Fabrication, and Half-Truth.

Exaggeration: An Exaggeration is a stretching of the truth, perhaps changing details of a story to make it more impressive in some way. For example, telling your superior that you were ambushed by a dozen snarks, rather than by the five who actually jumped you, would be an Exaggeration. Claiming that the snarks were armed with pistols, or misstating the size of a creature that got away, whether claiming it was larger or smaller than its actual size, would also be an Exaggeration. To make an Exaggeration, a character makes an Interaction Test against the target character's Social Defense. If the Test is successful, the target believes the Exaggeration to be true.

Fabrication: A Fabrication is an outright lie. The story, or important parts of the story, have no basis in truth. Lies that contradict actual events are Fabrications. For example, reporting to your superior that no ambush attempt took place, even after dispatching the five snarks who jumped you, would be a Fabrication. Saying you have no map to the enemy forward post when you actually do, or

making up stories about an Anunnaki ruin, would also count as Fabrications. To tell a Fabrication, a character makes an Interaction Test against the target character's Social Defense. One success causes the target to suspect the truth of the character's Fabrication. The character must come up with another good reason for their Fabrication to be believed to allow another Interaction Test to be made to convince the target character. Two successes means the target believes the Fabrication to be true.

Half-Truth: A Half-Truth reveals a sizable portion of the truth, while withholding at least one vital piece of information. A character telling a Half-Truth is speaking the truth, but in such a way as to mislead the listener. For example, telling someone you found more than 800 guineas when you actually found closer to 3,000 guineas would be a Half-Truth. Telling authorities you saw nothing at the scene of a crime, when you heard the cries of the victim, would also be a Half-Truth. To tell a Half-Truth, a character makes an Interaction Test against the target character's Social Defense. If the Test is successful, the target believes the Half-Truth to be true.

Insight

A character can attempt to determine the intentions of another character. **Insight** gives the character information on what the target character is trying to accomplish in an interaction.

Basic Emotions: A character can use Insight to judge another target character's surface emotions or state of mind. Insight can allow a character to detect such emotions as anger, love, fear, lust, hunger, tranquility, or nervousness. To detect basic emotions, the character makes an Interaction

Test against the target character's Social Defense. If the test is successful, the character successfully reads the target's feelings.

Detect Deception: Insight also allows a character to determine whether or not an opponent is trying to Deceive them (see **Deceit**, above). To use Insight in this way, the character must observe the target character as they speak. If the character cannot directly see or hear the target character speaking, they cannot use Insight to detect the deception. The character makes an Interaction Test against the target character's Social Defense. Two successes allow the character to detect the deception, seeing right through it. If the target character's features are obscured by a mask or helmet or their voice muffled, three successes are needed to detect the deception. The Gamemaster can use the result of the Interaction Test from the Deception attempt as the Target Number to sense the deception. In this case, a single success will see through the lie.

Intimidation

Player characters can also try to influence an interaction with another character by **Intimidation.** Generally, a character may only attempt Intimidation if the target character understands the character's speech and is within line of sight. The Gamemaster may allow non-verbal or indirect Intimidation in some cases. To use Intimidation, make an Interaction Test against the target character's Social Defense. The success level determines how successful the attempt is.

Intimidation often creates resentment in the target character. A successful use of Intimidation against a target character makes all subsequent Favor attempts aimed at that same character at least one degree more difficult. Intimidation works best against characters who have a reason to fear, and who hold Unfriendly or worse attitudes toward another character.

Stopping Actions: A character can use Intimidation to order a character to refrain from performing an action, or do nothing. Examples of the first include orders such as "don't touch that," "stop in your tracks," or "leave her alone." A single success on the Interaction Test makes a target character stop their action for one round. Three or more successes convince the target character to refrain from a forbidden action as long as the intimidator is within sight. Player characters cannot use Intimidation to make a target character stop an action they perform simply by existing. They cannot, for example, order a character to stop breathing.

Forcing Actions: Intimidation can also be used to force a character into taking an action, but the target character will not take an action they believe is more dangerous than resisting the Intimidation. Two successes on the Interaction Test will convince the target character to spill secrets, walk ahead in a corridor, or cast a spell. An intimidated character stops performing the requested action as soon as they are out of the intimidator's sight.

Making an Impression

Sometimes player characters want to impress Gamemaster characters immediately upon meeting them. Player characters cannot simply impress anyone they choose to, however. For example, a character cannot impress characters who are already Awestruck, Loyal, or Enemies of the character.

When a character first meets another character, they may declare an intention to Make an Impression on the target. To make an impression, make an Interaction Test against the target character's Social Defense. Success improves the character's Attitude by one degree: an Unfriendly character becomes Neutral, a Neutral character becomes Friendly, and so on. The attitude only

improves by one degree, regardless of the number of successes scored. However, the number of successes does determine how difficult it is for the target to shake off the impression (see below).

Each time the character interacts with the impressed character in a Neutral, Unfriendly, or Hostile manner (determined by the Gamemaster), the favorable impression may wear off. In this case, the impressed character makes a Willpower Test against the other character's Social Defense. If the result level of the Willpower Test is equal to or greater than the result level of the player character's Interaction Test, the impression fades. Any openly hostile act a player character commits against the impressed character immediately erases the impression.

Donat Brissaud, a Fiddler from Provence, Makes an Impression on an Unfriendly troll Dodger in a Manchester public house. He gets two successes on his Interaction Test, and the troll takes a Neutral attitude toward him. In an effort to trick the troll into an ambush, the Fiddler tries to talk him into going to another pub. The troll makes a Willpower Test against Donat's Social Defense and gets two successes. Because his result level matched Donat's, the troll's attitude reverts to Unfriendly. Worse, he's now suspicious of the Fiddler, and may damage his most valuable asset – his face.

Favors

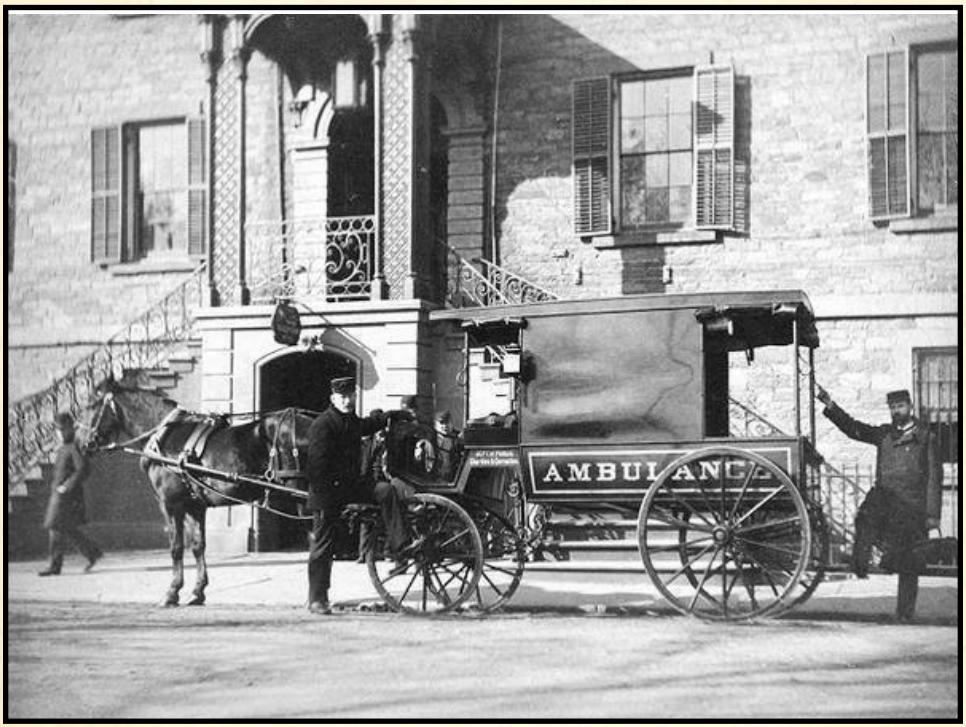
Player characters may try to convince a Gamemaster character to take an action through logical argument, flattery, appeals to friendship, or "buttering up" the target character in other ways. As long as the target character understands the player character's speech, the player character may try to persuade the target to do a **Favor** for the player character. In some cases the Gamemaster may allow non-verbal attempts at such persuasion.

The target character's Attitude can alter the success level required. This type of persuasion works best on characters who harbor a Neutral or better Attitude. A character whose Attitude is Unfriendly or worse can be persuaded to perform a favor only if they believe that doing so will benefit them.

Favors are grants of time, money, or resources that benefit another character, or actions performed on behalf of another character, that may or may not produce any immediate benefit for the person doing the favor. The result level needed to gain a favor depends on the Attitude of the Gamemaster character from whom the boon is requested. A character can persuade characters with a Friendly or better Attitude toward them to do large or small favors over an extended period. For example, the tavern owner who always has a character's favorite ale on tap is doing the character a small favor over time. Consult the **Favor Success Table** to determine the result level required.

Small Favor: Small favors include such things as holding a character's place in line, buying a round of drinks, or bringing water to a character's cell. As a rule of thumb, small favors cannot endanger a character or require more than 30 minutes of extra effort (as determined by the Gamemaster). Small favors cannot cost a character more than 5 shillings, a few hours' earnings, or 1 percent of their cash on hand, whichever amount is largest. Characters holding an Unfriendly or better attitude toward the player character can be persuaded to do small favors.

Large Favor: Large favors include giving loans (which the player character must repay, usually in a few days), delivering a package across town into a questionable neighborhood, giving the player character a place to stay for a few days, untying the player character, and so on. As a rule of thumb,



large favors cannot cost a character more than a day's earnings or 3 percent of their total cash savings. Loans provided as large favors cannot exceed a character's weekly earnings or 15 percent of their total savings. A large favor cannot require more than 8 hours of extra effort from a character, though it can pose physical, mental, or emotional risks. Keep in mind that only characters Loyal or Awestruck will agree to obviously dangerous favors.

Friendly characters may let small favors go unreturned, but expect large favors to be repaid in kind. They expect a character to repay borrowed funds and items promptly, and will not extend more than one large favor until the other character has done them a large favor in return. Characters holding Loyal and Awestruck attitudes are more lenient in their accounting and will extend "credit" for two or even three large favors. They still expect favors in return, but will wait several months for repayment. Hostile or Enemy characters will do no favors unless prompted by their own ulterior motives.

Making Favor Tests

Except at the Gamemaster's discretion, a character can request only one favor per day from a Gamemaster character. To request a favor, the player character makes an Interaction Test against the Gamemaster character's Social Defense. The Gamemaster character's attitude toward the player character determines the number of successes required, as shown in the Favor Success Table. If the test fails, the player character cannot repeat the request or ask that character for another favor for 24 hours.

Increasing the Likelihood of Favors

Characters can increase the likelihood of getting favors from a Gamemaster character by "sweetening the deal", adjusting their request for the favor or offering something in return. For example, they may offer to perform a small favor in exchange for a small favor, or a large favor for a large favor. If the Gamemaster character accepts this deal, they must perform their favor first. A character may make two consecutive Interaction Tests to persuade the Gamemaster character to perform the favor.

Alternatively, they may propose the same "favor for favor" exchange, but have their character offer to perform a favor first. For the purposes of the Interaction Tests in this instance, the Gamemaster character's Attitude improves one degree. For example, if the player character does a small favor first, an Unfriendly guard becomes Neutral when the player character tries to persuade him to do a small favor in return. As noted above, in this case the character can make two consecutive Interaction Tests to try to persuade the Gamemaster character.

The character may also offer to perform a large favor in return for a small favor, with the Gamemaster character performing their favor first. For purposes of the Interaction Test in this case, the Gamemaster character's Attitude improves two degrees.

Finally, the player character may offer to perform a large favor in return for a small favor at a later date. The player character may make two consecutive Interaction Tests to persuade the Gamemaster character, whose Attitude improves two degrees for the purposes of the tests.

Favor Success Table

Target Attitude	Small Favor	Large Favor
Awestruck	Automatic	1 success
Loyal	1 success	2 successes
Friendly	2 successes	3 successes
Neutral	3 successes	4 successes
Unfriendly	4 successes	NA
Hostile	NA	NA
Enemy	NA	NA

GAZETTE
DEAD RISE

1879 GAMEMASTER'S GUIDE

Adventures & Campaigns

There are only two or three human stories, and they go on repeating themselves as fiercely as if they had never happened before.
– Willa Cather

This chapter provides information for Gamemasters on different approaches they can use for their adventures. Gamemasters may use themes, subplots, storytelling, roleplaying, and other techniques to create, change, or enhance adventures and campaigns. The techniques defined below provide examples of their use. This section also offers suggestions for creating and maintaining an ongoing *1879* campaign and guidelines for making your *1879* game unique.

Story Origins

Where your story comes from helps determine where it's going. You can use pre-written adventures published specifically for *1879*, or adapt adventures written for other games. The best results start with the Gamemaster and the players collaborating to write their own story.

Using Pre-Written Adventures

Many gaming groups play *1879* by running published adventures as written, but published adventures do not provide the appropriate opposition level for every diverse group of player characters. Some groups are inherently more powerful than others, so Gamemasters have to tweak those adventures to suit their group or style of play. Therefore, Gamemasters may need to adjust

the game statistics and capabilities of an adventure's opposition to provide their players with an appropriate challenge.

Consult the **Gamemaster Characters** (pg.171) and **Bestiary** (pg.333) chapters for more information on how to customize the opposition's game statistics to your needs.

Converting from Other Systems

Lots of adventures are available in printed or electronic format from publishers of other roleplaying games. Even though these were not written specifically for **1879**, they are likely to contain good ideas which can be easily converted into an **1879** story. All you need to do is use them as blueprints to develop adventures of your own.

If a story works well except for a glitch here and there, modify the plot or events to make the adventure a better one. Come up with game statistics for the Gamemaster characters and creatures contained in that adventure and replace the names and locations with *1879*-specific ones.

This works with most, but not all, roleplaying adventures published without *1879* in mind. FASA Games is not the only source of ideas for *1879*. Just be ready for some potentially challenging conversions.

Writing Your Own Story

Though experience is by far the best way to learn how to create and run (and perhaps even write) a good adventure, here's some suggestions and tips to help Gamemasters cover the vital parts. The main elements of an adventure include a plot, objectives, motivations, and opposition. Though these represent the most important elements of a good story, a good adventure also includes other elements such as atmosphere, mood, conflicts and challenges, themes, subplots, and storytelling.

Plot

The plot is the path of the adventure. A rough familiarity with the Triangle of Drama comes in handy here.

The plot starts with the **Exposition**, where the situation is introduced. The heroes meet in a bar, or are hired through a firm or a Fagin, or are asked by a Crown representative to take care of a problem. They have the problem explained to them, either by the person doing the hiring or someone who is familiar with the issue.

Rising Action leads the heroes through increasing levels of dramatic tension. Clues are discovered, the true nature of the menace is revealed, and the situation gets complicated. Opposition becomes more intense.

Think of the **Climax** as the top of the roller coaster hill. The plot has climbed all that way up, and has now hit the point of no return, where it's all high speed turns and loops from there to the station. The Climax isn't necessarily the biggest moment in the story, but it's the dramatic turning point where the plot takes off on its own. From here on to the end, momentum should be sustained.

Falling Action takes the main characters downhill at breakneck speed. Here you find the big chase scene, the attack on the besieged fort, the pieces of the mystery coming together to present a possible solution.

Resolution is the final confrontation, the villain cornered in his lair, the duel on the parapet, the moment in the drawing room where the detective reveals the identity of the murderer. The main part of the plot wraps up here, hopefully tying off to the satisfaction of the players.

The **Conclusion** is the end game. Here's where the loose threads are wrapped up, where we find out if the hero rides off into the sunset or stays and marries the schoolteacher. The Conclusion of one story can be the Exposition of another, which leads into the idea of campaigns as a series of linked adventures. That's discussed in more depth further along in this chapter.

Objectives

The basic objective of every player character in an adventure is usually survival. Beyond that, the group often accepts a specific task: find a lost artifact, rescue a kidnap victim, pay off a debt, kill or capture a villain, or foil a villain's plan.

The stated objective may differ from the real objective. In fact, the group often changes its goal in mid-adventure. For example, an adventuring group might believe they were hired to accompany an emissary from Fort Alice to a tribal stronghold in the western forest, until they discover that the emissary plans to betray the tribe to a British mining consortium, or plans to fail the mission to give advantage to another tribe. If one of the characters belongs to that tribe, and perhaps even if not, the group may decide to adopt a new objective: foil the emissary's plan.

When writing an adventure, keep track of the group's objectives and give characters a chance to meet them. Offer them assignments or let them find clues that reveal the objectives. Characters who accomplish their objectives earn Adventure Points. Therefore, fulfilling objectives becomes an important aspect of the game. In an adventure with several objectives, these are often called **Milestones**.

Motivation

Why the characters do things is just as important as what they do. Motivation is what drives the characters to do what they do, the why behind the how. The more information the Gamemaster has about the player characters' lives, beliefs, and psychology, the more material the Gamemaster can work with to build motivation into the adventures. As the players get more involved in the game, their characters should acquire friends, enemies, and obligations, and probably develop quirks. All these factors make good motivators for the adventurers, and the Gamemaster should keep them in mind.

Suppose the Gamemaster creates an adventure and presents a situation that catapults the player characters right into the middle of it. However, the players look at each other and have their characters say, "Thank you for the intriguing offer, but we cannot accept at this time." If this happens, the Gamemaster needs to step out of the game and ask the players why they don't want to tackle the adventure.

Does it look too dangerous? Gauging the danger of a situation can be difficult for both the Gamemaster and the players. If the situation is not really all that dangerous, the Gamemaster has to ask their players why they think it is. The presentation may have overemphasized the danger, or the players might not really understand just how powerful their characters are. If the Gamemaster has commonly killed player characters, perhaps the players are understandably averse to letting their characters be killed. Perhaps the Gamemaster needs to re-examine their adventure building (or adventure choosing if using a pre-published scenario). Perhaps the Gamemaster has built in safeguards that will keep the characters alive. This can be difficult if the safeguards are supposed

to be a surprise. At this point, the Gamemaster needs to consider why the players aren't buying it when the Gamemaster says "Trust me."

Does it look boring? If the premise of the adventure doesn't engage the players, it may be better to scrap the game in favor of a discussion on the kinds of adventures the players would find interesting.

Does it offer too little reward for the characters? This is more of an in-game problem. Some players may say their characters might prefer payment in kind to pounds sterling. Soldiers and other warrior types may want a promise of time off, resupply, or better equipment. Magicians may ask for supplies, or connections, or research materials. Scientists may want access to laboratory facilities, or a guarantee of publication. In-game rewards have to be adjusted to the needs of the characters.

Opposition

Adventures require opposition, and the world of *1879* provides a wide array. In some adventures, the opposition may be as impersonal as an impenetrable forest, a curmudgeonly bartender, or an obscure inscription in the ruins. These obstacles may or may not have anything to do with the goal the adventurers strive for, being challenges that have to be passed in order to reach the goal. In other adventures, the group may need to face and defeat a personal enemy in order to achieve their objectives.

Opposition from individuals or small groups roughly equal in size and power to the adventuring group can get personal very quickly, and a good enemy becomes a valuable resource for the Gamemaster in devising future adventures. Depending on how thoroughly the adventurers trounced him, such a foe may want to repeatedly oppose the group simply to get revenge. A personal enemy can turn adventures into a series of duels between the player characters and their relentless foe, building up to a final showdown. The same enemy may also show up in unrelated adventures, just to strike at the characters any way he can.

Gamemasters may find the following descriptions of typical opposition useful. This list is by no means exhaustive, and lists only the biggest threats. Creatures and secret societies bent on world domination also make for great opposition, as do British merchant firms engaged in ungentlemanly conduct.

The Saurids

The British Empire sees the Gruv as ripe for colonization and exploitation, which means moving into new territory that already has occupants. Whether allied with the British or not, the Saurid tribes are not going to take well to British concerns, either governmental or private, pushing into their land. There's also three major cultures, each with several tribes that all have different interpretations of those cultures, so what works with one tribe probably won't work with another. Getting caught in between rival tribes never ends well.

The Saurids are not an industrialized race, although in some ways they are just as technologically advanced as the British. Always keep in mind that the Gruv is their world. They know it like the backs of their scaly hands. Moreover, the British and other Europeans have come new to the concept of working magic. The Saurid shamans have been using magic for centuries.

Also, be aware that Saurids almost always think three-dimensionally. Even mountain-dwelling Saurids have some aquatic abilities and some virtually live in the trees. British soldiers expecting their foes to face them across a flat plain need to learn to look up, and down.

The Samsut

The Samsut and the people of Earth have a cultural collision that isn't likely to be resolved in the next generation or two. Their underlying philosophies of life are just too different for them to have common grounds for negotiation. The territorial war between the two will continue for the foreseeable future. This means missions across enemy lines, attempts at diplomacy even though they're doomed to fail, espionage and trickery and the bloody grind of trench warfare near the frontier fortresses. The Amelites and the Earth high command both need a lot of people for their plans. The possibility of a rogue agent from either side presents opportunities for either exploiting the rogue or putting a stop to them before they cause more damage to their own side than the enemy.

At the same time, some Samsut are more upset at the Brits than others. Merchants always have their own agendas. Some of the new settlers may consider Samsut ways peculiar, but nothing to get excited about. A counter-espionage mission may suddenly become a problem of warring merchant houses.

Secret Societies

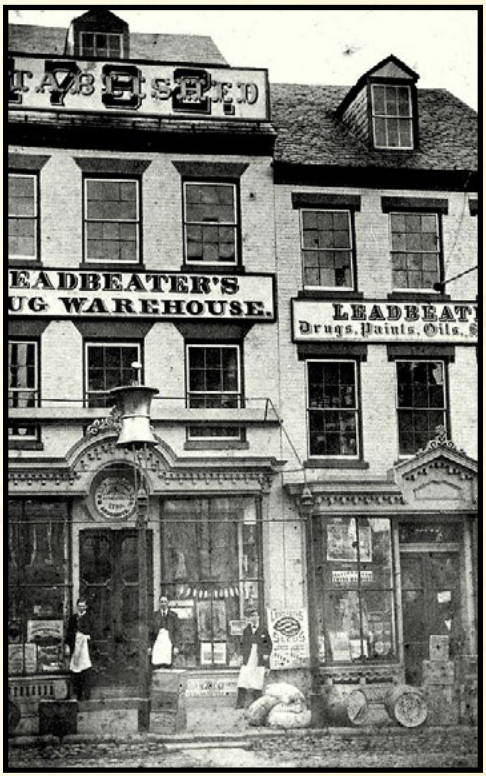
Into all of this come organizations that think they could run things better. The Sons of Thoth, for example, believe that the war with the Samsut would come to a satisfactory end for all concerned, and the new lands of the Gruv would be much better managed, if they were in power.

One does not simply take over an Empire, though. Power bases must be established. Covert actions must be pursued, putting friendly people in positions of control, removing opponents through disgrace or reassignment or death. Research must be done, which means going into dangerous or restricted areas in the quest for knowledge. Trial runs have to be made, to see if the plan works on the small scale before attempting to implement it on a global level. All of these provide opportunities for the heroes to interfere, and stymie the secret society's plans.

Not all Secret Societies are bad people. The Levellers, for example, just want a more fair and equitable society, and proper treatment for the people who actually do the work that makes the world function. In order to accomplish this, they want the aristocracy abolished, and a leveling of wealth as well as social advancement. Of course, this isn't going to be popular with anyone who holds a title or a fortune. Whether to maintain the current social order or try to improve it through possibly destructive means – well, that's a question the heroes are going to have to answer, now, isn't it?

Atmosphere and Mood

The atmosphere of an adventure goes beyond its physical setting to include such elements as the attitudes of unfamiliar Gamemaster characters, their actions, and the impression or "feeling" the characters receive from their environment. The atmosphere of an adventure taking place during the day in London should be very different than that of an adventure set at night near the Swamp of Sorrows or in the Western forest. In a big city during the day, the characters may feel relatively safe from surprise attack by anyone (or anything), not that this is particularly valid. Characters in the wilds of the Gruv, on the other hand, can never be too careful.



In addition to the particular setting, an adventure should also have an overall "feel" or mood. Is the adventure a light-hearted journey to a big city or a dark, serious tale of evil and corruption? By defining the mood of an adventure, you sum up the overall emotional impression it should leave on the characters. You can establish the mood of an adventure quite easily by creating an atmosphere that conveys the feeling you want. For example, if the adventure is the tale of a village's slow degeneration into madness due to unknown influences, the overall atmosphere, or mood, should be dark and gloomy with a touch of despair. Mood also relates closely to an adventure's theme (see below).

Conflicts and Challenges

Good adventures present the characters with conflicts other than combat against opposition. Conflicts can be emotional, intellectual, moral, or ethical. For example, an adventure may revolve around the inevitable conflict of heroes manipulated by a corrupt official in the pay of a secret society bent on world domination. The heroes start out believing that their noble goal is to root out a Samsut agent, but when they finally encounter the agent, they discover that, in reality, he has been fighting to keep the secret society from using Akkadian magic to mind-control senior officials at Fort Alice. By the time the characters realize they've been duped by their employer, they must choose between two evils. Using non-combat conflict in your adventures forces your players to think carefully about their characters' actions.

Each adventure may offer several conflicts and resolutions. If an adventure takes several game sessions to complete, each session should have a goal (see **Awarding Adventure Points** in the **Gamemastering** chapter on pg.151), which may be the resolution to one or more conflicts. A conflict need not always have a resolution, though the players and characters may find too many loose ends frustrating. Strike a balance between conflicts that can be resolved, continuing plotlines, and situations that simply offer no satisfactory conclusion.

Good adventures challenge the characters in different ways. Some challenges take the form of an opposing Gamemaster character or creature, but some are less direct. Sometimes the greatest challenge in an adventure is the journey across an unexplored area of the Gruv. Successfully completing the adventure may require the characters to solve a puzzle of some sort, presenting an intellectual challenge rather than a physical one.

Themes

The basic conflicts of drama are Man vs. Himself, Man vs. Man, Man vs. Society, and Man vs. Nature. In *1879*, these themes can be explored as follows.

Man vs. Himself usually plays out as an ethical or moral quandary. The individual character, or the group, must make a difficult choice based on their beliefs about what is right and wrong. Is the enemy of your enemy really your ally? Who can you actually trust? When can you break a law or the Gentlemen's Code in the pursuit of a higher goal, and is your goal really that noble?

Man vs. Man shows up the most often in roleplaying games of this sort. The heroes have a villain or group of villains they must stop. The opposition may be a well-placed bureaucrat, or a cult priest, or a trade union, or an entire tribe of Saurids, but in the end, the conflict comes down to one person or group of people who believe they're in the right going up against another person or group of people who believe they're in the right. Sometimes, of course, a group considers that being in the right means that they have a right to whatever they want to take, or take over. Which group prevails may be determined by negotiation or by violence, but in the end only one of the opposing viewpoints can be dominant.

Man vs. Society pits the hero or heroes against social conventions, against laws, against basic concepts that the majority of the people around them hold to be right and true. The suffragettes who agitated for women to get the vote went up against the law, and fought to have the law changed. At one time, a majority of the people in control thought women should not vote, creating a conflict with those who believed that all adults should have a say in their government regardless of gender. The heroes may not be agitating for social change on this level, but some basic concept of their culture has caused a problem, and needs to be adjusted. Boojum rights suggest themselves readily as an issue that the heroes could fight for. Native rights also fall into this issue. Does a nomad Saurid tribe that always winters on a range of hills the Brits are excavating for iron ore have the right to deny access to the hills? Do they have a right to a share of the profits for the ore being mined? Human slavery is outlawed in the British Empire and throughout most of Europe and North America. What about Saurid slavery?

Man vs. Nature comes down to one of two things: either something in the natural world is trying to kill you, or you're in an environment where you might not survive. Creature encounters fall into this category. A pack of sabertooths has decided that the heroes would make a tasty dinner. The party has stumbled into a patch of ripping creeper. In the second option, the heroes may be traveling through hostile terrain. Climbing a mountain, at an altitude that requires air tanks, can result in fatalities due to the conditions of an indifferent environment. The mountain does not care if the heroes climb it, and takes no action against the party, but if they haven't made proper preparations, or have a run of bad luck, they may end up dead anyway. Crossing a desert, traveling on the ocean, taking to the air in a Giffard, all put the heroes in a natural environment where the conditions present a challenge.

Reward

The heroes should get something out of the adventure other than points or loot. While awarding points allows for character advancement, and everybody likes to find treasure, the adventure feels flat if there isn't a sense of accomplishment at the end. Part of the role of the Gamemaster is to provide that sense of accomplishment, the feeling that the heroes, by their actions, have made a positive change in the world.

Fame can be a measure of this accomplishment. If the heroes have done something really worth recognizing, the newspapers may pick up the story. People might invite them to a high-society party or two, so that they can tell their adventures to a grateful public. Among the lower classes,

they might get bought a round of drinks at a pub. People in general like to be around those who have done great things. Let the heroes have a bit of celebrity status in return for their efforts.

Social Level can be used as a reward. If the heroes have done a series of great things, if they've saved Fort Alice from invasion or destruction, or found the secret of the Samsut's defenses, or rescued an airship full of dignitaries from certain death, they could make the Honors List. There's a bevy of knighthoods, earldoms, and other titles that can be bestowed, all of which raise the heroes' Social Level. For that matter, just being well thought of can raise Social Level. "Well, he's not such a bad sort after all, perhaps we should invite him round to the club, see if he might be our sort of people." Academic honors can also reward heroes who have accomplished great things. "She discovered the catalyst that sets zombies on fire. Perhaps we've found our new Dean for the Chemistry Department. Certainly ought to give her the Mulbert Award at the December dinner, at any rate." Accumulating academic honors has a positive effect on Social Level.

Money can be a reward in ways other than the value of the loot collected. For instance, someone of means might decide the heroes should have some kind of support for their efforts, and grant them a stipend, a monthly payment to encourage them to keep on with what they're doing. Of course, such an income might come with a string or two, a suggestion as to what to do next, but that's not a bad thing, as it can lead to further adventures, or to conflict if the patron wants the heroes to do something they'd rather not.

Triumph is its own reward. Let the heroes bask in the moment. Let them have their victory. The real world has enough frustration in it, and enough times when accomplishments go unnoticed, or worse, are downplayed. Let there be celebration when the heroes take down the villain. The Gamemaster, either directly or through Gamemaster characters, should provide some applause when the heroes defeat a serious challenge. This is their story, after all. Let them take their bows.

Subplots,

or How to Tell an Interesting Diversion From an Annoying Digression

Subplots are secondary, less important stories that serve as counterpoint or provide subtle emphasis to the main story of the adventure. These lesser plotlines can provide comic relief or serve as a device to accomplish something in the main story of the adventure. For example, a subplot could center on a young child who follows a group of heroes around the city during an adventure and always manages to be in the way at inopportune times. The child may have nothing to do with the story at all and may be just a harmless annoyance. On the other hand, he may turn out to be the son of the scientist the characters are trying to find.

Subplots can also help establish mood and atmosphere, or emphasize the theme of an adventure. For example, if the adventure's theme is vengeance, then a subplot about a Gamemaster character from a past adventure seeking revenge against one of the players' characters would serve to support the overall theme.

The concept of "laying pipe" bears mention here. The term comes from fiction writing and from the construction industry. When putting up a building, the builder must plan where his pipe must be laid so that air and water and power get to the right parts of the building. When building a campaign, the Gamemaster must lay pipe for possible subplots and plot developments ahead of time. The goals and milestones of the campaign must be planned, with redundancy in case the plot veers off the main path but can still be directed where it needs to go. Whenever something is

dropped into the story that opens up options for future plot threads or subplots, that's pipe being laid. Clever Gamemasters lay a lot of pipe, so that they have options available no matter which direction the players decide to go.

Mutual Storytelling

Presenting the players with a number of options, some that could be explored as subplots, others that can be major plot threads, allows the players to help direct the story based on what they find interesting. The adventure will not go quite the way the Gamemaster envisioned it, but the cooperative nature of such storytelling engages the players at a deeper level and provides a better experience for everyone involved. Essentially, the Gamemaster sows the seeds of lots of potential storylines, and tends the ones that the players pay attention to. Threads that the players ignore may return at a later date to provide new conflict, as a situation that has festered due to neglect, things left alone having gone from bad to worse. How this all works is largely up to the Gamemaster, as to which threads to develop, which subplots to turn into major plotlines, which plotlines to relegate to subplots, but the players provide a good deal of direction for the Gamemaster who pays attention to them.

Adventures

Adventures in the world of *1879* divide into quite a few types. What follows is a discussion and some examples of the major ones. These should give you ideas as to what your heroes could do. Each of these can be the subject of one act of a story, or the main plot of the adventure. Several could be combined to encompass a full campaign (discussed further along). Alternately, an adventure can be devised to fill up an evening's or weekend's gaming time to give the players an idea of the world of *1879* and see if they want to continue with further adventures through the Rabbit Hole.

Adventure Ideas

Exploration

The heroes help to fill in the empty spaces on the map. There's an entire world to be explored, full of ruins and dangerous creatures, erupting volcanoes and collapsing glaciers, deserts and swamps and hostile tribes. Just getting back with the report presents a challenge. If anything of interest to the Powers That Be is found, a full-on expedition, with base camp and supply train, may be in order. We know of two Anunnaki ruins in the Gruv. There's likely to be more. And who's to say that the Anunnaki were the only race leaving behind evidence of their passing? For instance, many of the monsters of the Gruv are unclassifiable and are thought to have been bred especially to cause death and disruption in the Gruv. Were they created by the Anunnaki? Or were they created by some other race, perhaps one inimical to the Anunnaki and the cause of their destruction?

Investigation

Mysteries abound, with crimes to be solved, official corruption to be brought to light, and dark doings that must be stopped. A clever hero could spend a lifetime solving these puzzles. The Gruv offers all sorts of complications. Imagine trying to work out who murdered the quartermaster

in the middle of a Samsut attack. What if the embezzler used their ill-gotten funds to finance an expedition into the Darlington Mountains? Who has jurisdiction, the British whose citizen died under peculiar circumstances or the Zulus whose village he was in at the time?

War

There is no glory in war, only blood, sweat, toil, and tears, but there are stories to be told. From the cavalry charges to the grim struggle in the trenches, from the night sapping missions to the dawn aerial bombardments, and from the artillery to the front lines, the very nature of warfare is conflict, and conflict drives stories. The heroes could be enlisted men and women just trying to survive, or officers whose careers ride on the success of their tactics. They could be front-line troops, or rear echelon support staff. They could even be Samsut, fighting against the invaders who despoil the land and do not respect the delicate Balance that allows humans to survive.

Diplomacy

Conflict doesn't necessarily mean physical violence. Intense conflict can occur around a bargaining table, or at a reception, or during a conversation in the lobby of a theater. The diplomatic adventure requires heavy investment in social Skills, and a willingness to engage in maneuvering for position. Double dealing, false pretenses, and bargains forced at the threat of blackmail are the weapons of choice. Are the heroes subtle enough to win through, or do negotiations break down and the military get called in?

Crisis Management

Famine, fire, flood, plague, and pestilence all create challenges for heroes. The trope of getting the medicine through to the remote location in time to save the dying population exists because it's a good story, with a Man vs. Nature conflict but also a Man vs. Himself. Can the heroes get through in time? Do they have the endurance for it? Anything from a forest fire to an outbreak of giant fleas could happen in the Gruv. Earth has its own crises to manage, rivers overflowing their banks due to torrential rains in the nearby mountains, crop failures, plenty of possibilities for a group of heroes that wants a challenge that's not yet another villain to defeat.

Espionage

The Great Game rages in Europe, a covert war between political powers easily the equal of the Cold War between the USA and Soviet Russia. In the Gruv, the Samsut need to understand the British to defeat them, and work to place agents among them, and vice versa. The great mercantile firms of London and Paris and Berlin conspire against each other, sending spies into each other's factories and offices, looking for manufacturing secrets, financial information, and the embers of scandal that might be blown up into a public conflagration to embarrass a rival. Stories of deception, double and triple dealing, betrayal, disguise, infiltration, and the quest to capture a secret await their chance to be told. In a world where a brief glance may be all the warning one has, can the heroes elude capture, deceive their enemies, and escape with their ethics intact? Or does the Great Game devour their morality and turn them into yet another batch of soulless pawns? Or even cynical puppet masters?

From Adventure to Campaign: Extending the Story

An adventure has a conclusion. There comes a point where the story is done, the major plotline wraps up, the subplots tie off or are left unresolved as appropriate, and the world moves on. Campaigns pick up with the next story, and the next. The heroes took care of that last bit of business, and have a chance to rest, or not, but there's another story already beginning. As discussed in the **Plot** section above, the Conclusion of one story can be the Exposition of another. This is the realm of the Campaign.

Types of Campaigns

Campaigns, being constructed of Adventures linked together by common threads, tend to divide into similar types. This section considers those types in the larger scale of the Campaign.

The Sandbox Campaign

Some campaigns have direction and goals. Others just present a world, like the Gruv, and let the players take their characters wherever they wish to wander. Adventures are self-contained, or have no more than a couple of acts until they are resolved.

This seems like a simple way to run a campaign, but it actually demands more work from the Gamemaster, because they must be ready for any direction the players wish to take. Also, unlike a campaign where an ever-growing problem keeps the players concentrating, each part of the sandbox campaign has to be interesting in and of itself. Sandbox campaigns tend to concentrate more on roleplaying, or tactical problems, or perhaps player rewards that enhance the character but do not enhance any overall plot.

Gamemasters who are not sure of their players' interest can embark on a sandbox campaign with the idea of finding out what the players are really interested in, then building a story campaign around that interest. The Gamemaster can create a sandbox and then build several stories within it that the players can follow or not.

For instance, a Gamemaster could drop the player characters into one of the villages of the British colonization program as a group assembled by a mysterious benefactor. They've been asked to explore the Gruv and find useful resources and perhaps some Anunnaki artifacts. The game starts as an exploration campaign, but then the unpopular village peacekeeper is murdered and the player group is either deputized by the populace to find out what happened, or framed for the murder. In the course of resolving this situation, the group happens upon an artifact that takes them to the Samsut lands, and they have to stay alive, figure out how to reverse the effect, and perhaps even take some steps toward resolving the war, or perhaps just find allies amongst the Samsut who can be of use to them in the future, war or no war.

All this can be started by simply choosing the village, having some idea who the mysterious benefactor might be, and establishing a peacekeeper NPC who rubs everyone the wrong way. The Anunnaki artifact might appear because one of the player characters is confident that any problem is probably the fault of ancient Anunnaki plots, or is sure the Samsut are responsible for any bad events. Events among the Samsut are determined by player actions once they find themselves in that situation.

Exploration

The heroes have filled in one blank spot on the map, but there's always more. Once you have a reputation for being successful in your expeditions, there's patronage, Royal grants, plenty of sources of funding, and people lining up to send you off into the wilderness again. Gotten tired of deserts? There's mountains to be climbed. Done with high altitudes? There's this fellow has a new submersible he'd like to send into the depths, see what's down there. The Royal Conservatory would like the heroes to attend a function or two, talk about their exploits, perhaps even a formal speaking engagement. The university lecture tour beckons, with academic politics and travel into foreign countries to provide new challenges for the experienced explorer. Just going back and forth between Earth and the Gruv is an experience, never quite the same trip twice, always the danger of trouble passing through the Rabbit Hole, chancy thing that it is.

War

There's more to war than an endless series of battles, taking the same hilltop this week that you took a month ago but the enemy reclaimed. Politics rears its ugly head out on the front line, as officers jockey for position and promotion. Letters arrive from home, and soldiers have to deal with news of events they cannot affect. The enemy may be encountered in a less violent way, a stray soldier trying to find his regiment, an officer with a flag of truce, a man or woman disillusioned with their leadership and wishing to defect to the other side. Scouting parties are sent out, and sometimes find something other than their foe. Scientific discoveries and new magical techniques have to be tested in the field. Civilians have to be rescued, supplies moved, and once in a while, a group of soldiers comes upon a situation that their training simply hasn't prepared them for at all.

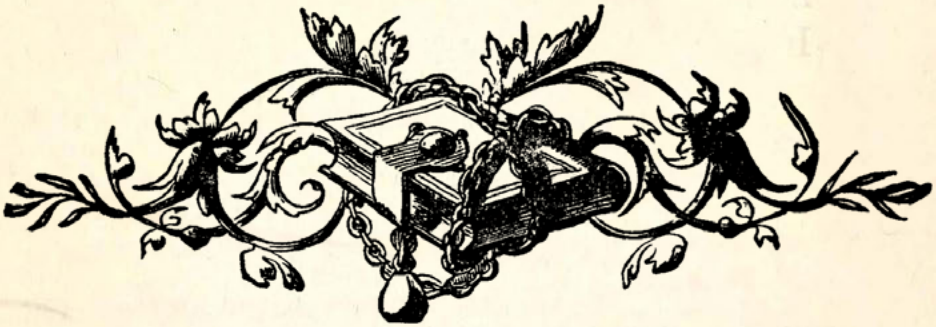
Special operations units consist of specialists in different areas of warfare assembled to meet the more difficult challenges. Such a force could find itself embroiled in any of the situations described above, and any number of circumstances that the standard British Tommy has no concept of. Members of this group might be soldiers with advanced training, or civilians induced into helping the military out, or even criminals offered pardons and rewards if they just take care of a few little problems for the General Staff.

Politics

High and low offices both require elections to be won. Once in office, there's negotiations, petitions, committee meetings, bills to debate and regulations to consider. Not everyone involved in politics is a candidate or office-holder, either. Around each elected official swarms a cloud of supporters, clarks, speechwriters, diplomats, military officers, ward heelers, and the press. Managing a situation requires a lot of hands to turn-to, not just the person with the title, but the ones who write the policy documents, talk with the trade union representatives and mercantile firm officers, set up the meetings and deals, and get the paperwork done afterward.

Crime and the Underworld

The opening of the Rabbit Hole has solved several problems in the Empire and opened up a kit bag full of new ones. Plants such as splithee have the potential of making opium a minor addiction to be relegated to the "old problems" back burner. With Fort Alice just a short railroad trip away, the opportunity for invading life forms to destroy English agriculture is tremendous. Like so many instances in the First World, many animals and plants of the Gruv at first appear to be potentially entertaining and useful. For instance, an entrepreneur might decide that Josisaurs are



an obvious new pet for middle class British children. Once loose in the British Isles, though, a new insectivore could devastate the ecology. The Foreign Office wisely restrains such projects from coming to fruition, but there is an entire criminal class (see **Dodgers** in the *1879 Players Guide*) in England dedicated to keeping the authorities from being too complacent about the enforcement of such regulations. And what if some crime lord decided that the importation of a larger predator might be just the thing to back up his enforcement agents?

The Gruv is an excellent place for criminals high on Scotland Yard's Most Wanted list to hide. Criminals who have been sentenced to the Gruv for rehabilitation have realized that the level of household security does not compare well with that of the more prosperous areas of London. Opportunities on both sides of the law present themselves by the hundred.

A population fed by a generation of dime novels about the American Wild West looks at the Gruv and sees an opportunity to emulate the desperadoes so well delineated in that literature. Indeed, there are already new dime novels featuring "authentic" adventures in the Gruv available for perusal on both sides of the Rabbit Hole. What terrible events or tragic mistakes could result from real life attempting to emulate cheap fiction?

The underworlds of many European cities are also finding inspiration in the Gruv. Slavery is outlawed in the British Empire, but with an entire world to establish plantations in, who can tell who is badly paid labor and who is an abject slave? Human trafficking has not ended. It's just gotten more subtle.

Espionage

The Gruv has tossed a massive spanner into the machinations of the Foreign Ministries of every country of the world with an independent foreign policy. England is being flooded with "sightseers" who are trying to discover the secrets of the Rabbit Hole. That the Empire has no clue how it was created, whether it is a permanent phenomenon, or whether more portals can be generated does not seem to dampen the enthusiasm of the spying community.

Moreover, spies that manage to insinuate themselves into the colonial administration have an excellent opportunity to follow that path back to London and information they may be seeking on ship building, military tactics, the placement of British spies in their own countries. Most European powers are convinced that the Brits are planning to bring their Saurid recruits through the Rabbit Hole to Earth, to spearhead an invasion of the Continent.

Spies and counterspies are everywhere. Espionage stories are studies in patience. Players whose approach to confrontation tends to be violent should find another story to tell. Players of a more methodological bent, who have the patience for the indirect, will do well in espionage.

Linking Adventures into Campaigns

Within roleplaying games, campaigns are the ongoing stories told by the Gamemaster and players together. More than a collection of game maps and Gamemaster character statistics, campaigns truly represent a storytelling medium.

As with any such medium, campaigns have their challenges. The story is not simply told by the Gamemaster. It's explored one detail at a time by the players. More importantly, those details are often determined by the players. What the campaign provides is the direction, the outline, of the story. As play continues, the story unfolds in unique ways that could never have been dreamt of by the pen that began writing the story.

This unique way of telling a story fits the familiar format of television shows. A campaign directs an overarching plot by revealing it through episodes. This technique, seen in shows like *Doctor Who* and *Supernatural*, dishes out small portions of the overarching plot while smaller adventures take the spotlight, each adventure leading up to a grand design.

Using the Plot

It's said that all stories must answer two questions: "what do I want?" and "why do I care?" Campaigns must answer the same questions for the players. The plot of the campaign exists as a hook to tie adventures to a common goal. It drives their desire to enter into an adventure that answers both questions for the players.

The campaign's plot arc does not need to be immediately obvious. Players may start their adventure with a noble goal in mind, yet find that naively chasing this goal actually manipulates them into helping an enemy grow his power. In an example, players are sent to kill a menacing Saurid who has been purported to murder travelers in his land, only to find that this Saurid is the son of a chieftain, and the messenger who sent them is trying to start a civil war. The plot device that would compel the players to start on the first quest morphs into an elaborate hook to feed interest in stopping a war.

The hook represents the campaign's main story arc, the continuing plot that leads to the end goal. The story is told using a sequence of adventures, each representing its own smaller story. These adventures each tie into the campaign's plot, however loose the connection. It's important to segment the story this way because during play, the plot acts as an outline to a story whose details unfurl every time a player makes a decision. Using multiple smaller stories to create adventures within the main story arc of a campaign flows naturally with this type of story telling. The details of each adventure grow, come to a head, and then make their own resolutions, each forming one more step in the total plot.

As the adventures unfold in play, players create a challenge for the Gamemaster to continue the campaign's plot. Their actions fill out the details in the adventure, but sometimes those actions contradict the expected outcome. This is where flexibility is a must, both for the small plot in an adventure and the campaign's story arc. When players avoid stopping a robbery in order to confront the villain directly, the Gamemaster can reveal that the players fell for a decoy as important events take place elsewhere, driving them to return to the scene of the robbery to search for clues. If players

mistakenly travel the wrong direction out of town, perhaps it should be the right direction after all to keep the players on task.

As the creator of a campaign, be aware of this dynamic. Make sure that the detailing the players create allows them to continue with the story. Be flexible to let the story move in any new direction this creates. Most important, when the players derail the plot, be ready to make adjustments to bring it back on track. Since the details are the game, the details should not unnaturally bend to the campaign's plot. The plot must bend to the details.

Decide an Ending

Although this can be the hardest part of the story to write, it's important to have an ending goal for the campaign. Knowing what end the main story arc should arrive at makes dividing the arc into adventures much easier. A campaign without an ending is directionless and risks losing the hook that brought the players to start the adventure to begin with. This ending can be simple, such as "find the secret laboratory that is creating monstrous animals and destroy it." The ending can be complex and filled with nuance, such as "find a resolution to the ongoing war between the Samsut and British and bring it to a close." The Gamemaster does not have to know how the solution to the problem can be reached. Players are generally quite adept at details, once they know their goal. Their actions will often inspire the Gamemaster towards a solution satisfactory to all.

The ending is a goal, something to work towards. The players expect accolades, rewards, or some secret knowledge, even if the secret knowledge is a stoic realization that the heroic events couldn't change a society at large. This reward must be appropriate. Knowing how much the players can be expected to improve over each adventure, and if the reward matches their skill level, is vital to keeping the ending appropriate for the adventure experienced.

Establishing the end goal for the campaign's story does not mean that how the story ends is set in stone. Simply knowing what the finish line looks like is enough. Instead of crossing a finish line, the players will undoubtedly run around it, tear it down, set it on fire, and feed it to a pack of wild animals that roam the Gruv. Don't expect the campaign to end with a death defying duel atop the villain's mansion or the crescendo of a scandalous court case. The players always find another solution that they like better, that crosses the finish line in its own way.

Filling the World With Characters

A campaign doesn't come to life without people to fill it. The player characters represent only a small segment of those people. They need others to interact with; others that tell the campaign's story to them. This is the role of the Gamemaster characters.

Players encounter each person in the game as either antagonists (opponents and sources of conflict) or protagonists (potential allies or story drivers). A given Gamemaster character's role is usually complicated, and he or she may alternate between antagonist and protagonist, but this simple classification helps the players understand who is telling the story, and who is trying to stop the story from being told. Keep this in mind while creating characters to fill the world.

Most important, characters in a role playing game, as in television shows, include main characters, recurring characters, and the expendable. Main characters are present throughout the whole campaign, and likely show up in every individual adventure. Recurring characters show up

for a single adventure, then disappear for a while before returning in a later adventure. Expendable characters are the most common. They have only a walk-on role in the story.

Main characters become important to the campaign's plot as they are likely the ones telling part of the story directly to the players. Main characters require more detail. They need dialog, personalities, and a few Skills on top of regular character stats. Gamemasters may find they need a full character sheet for the main GMCs, to track their advancement and keep it in line with that of the player characters.

Recurring characters are often just expendable characters that carry a plot device. A person met in the first adventure may deliver a message in a future adventure. Recurring characters have enough of a personality to sacrifice it later, giving up their lives to help the players out of danger, creating emotional impact in the process. One more role of a recurring character is even more invaluable, and that is a narrator, a source of exposition or explanation. Players may only interact with a recurring character through a dialog, or plot summary, at the beginning and end of an adventure. This can make recurring characters the most important storytelling characters in the campaign. Recurring characters need some type of personality, but do not always need stats.

Expendable characters are perhaps the most important, as they provide sources of both immediate motivation and conflict. Though many are simply passers by in a town, or nameless victims succumbing to an evil act, others are helpful assistants in defeating that evil. Many are a part of that evil, fighting back against the players to stop them, often times physically. Expendable characters provide both a setting as walk on roles, and a challenge as adversaries. As such, expendable characters typically need a generic set of stats, but little else. Some expendable characters, however, need more explication in the way of special attributes and/or weaponry, or position in the society of the campaign. These are the intermediate villains or opponents who act as local masterminds. They function as major obstacles that assail the player characters all through the course of one act of a campaign, and must be eliminated before the player characters can move on to the next act.

Players do not need to know immediately what kind of character that any person is in the campaign. Discovering who is friend or foe, and how long that relationship continues, is part of storytelling. Even the Gamemaster does not know how important every character is until the players have the chance to interact with them. Gamemaster Characters must be flexible to become what the players need them to be, even if it alters part of an adventure's plot. For example, the corrupt Fort Commander who has been tasked by the plot to keep the player characters from learning the answers needed to put them on the trail to final resolution of the campaign might be persuaded by a player character to return to adherence to Duty to the Queen that originally motivated him. Instead of being the person who must be killed or disgraced in order for the player characters to proceed, he becomes a source of vital information and perhaps a supporting character to the player characters for the rest of the campaign.

Milestones

Where a campaign consists of the main story arc, adventures constitute milestones within that arc. Each adventure needs to advance that arc further. This works to both tie the adventurers to the campaign's plot, and to help the players flesh out their characters easily. Knowing the milestones gives each adventure a goal to achieve, providing the objectives of the plot.

Each milestone is a step in the outline for the campaign's main plot. Being able to break up the campaign's main plot into this kind of an outline helps to visualize the end goal, and gives the

players tangible progression through the plot. Most importantly, completing the milestones ensures that the players remain protagonists in the story. Without a bit of guidance, it's easy for players to meander about without ever finding the details that are needed to solve the campaign's plot.

Adventures are milestones because the end of an adventure represents a natural stopping point in a segment of the campaign's main story arc. If every story consists of acts and scenes, then think of each encounter or intervening investigation as a scene. The adventure is the act. If the game takes place over an evening, the play should involve one to three scenes. If the game is an all-day affair, it should encompass a complete act. It contains its own rising action, its own conflict, and its own resolution. The resolution should contain some kind of reward for the players, even if it's just a temporary ease from danger. This thought makes finding a resolution for an adventure easy, as collecting that reward is a great stopping point.

Enter the Player Characters

In the story each player generally wants to be the main character. Not one of the main characters, but the only main character. Each player in a group, therefore, needs to feel that their character is vital to the resolution of the story. Engaging the players in this way is challenging, but every adventure in a campaign is a tool to do just that. This is because story elements do not always need to be told to the players. Players themselves can create these elements through their character's strengths.

Not every adventure needs to revolve around every character. Think of your favorite ensemble-cast television show. One episode puts the spotlight on one of the characters, while the next episode puts the spotlight on another. Over the course of the season, every character gets their turn in the spotlight, their chance to shine. Campaigns work the same way. Each milestone may only involve the strengths of one or two of the player characters, but over the course of the campaign, every character does something critical to the success of the campaign story arc.

The campaign's main story does not need to revolve around any of the player characters. Only a character's hook into an adventure is necessary to make the player feel essential. This is easily done by choosing a skill that the player's character excels at. A scholar may come to a realization through a passage in a book, and have the ability to learn more by exercising his skill. A soldier might have a plot element revealed as a series of orders handed down by the command. Even divine intervention provided to the magically inclined draws players into the story.

Exposing the milestones of the campaign's plot through adventures multiplies opportunities to include the players as key elements in the story. Soon the campaign's main arc, and the characters in that arc, relies on the player's (or player group's) fame and notoriety. It becomes part of the plot, and the players serve in a more pivotal role.

Roleplaying campaigns exist as an excellent media for telling stories. The collaborative nature of them makes creating a plot for a campaign challenging, but one that always yields wonderful nuances. Translating the plot to the campaign is as simple as relying on the players to write a part of the story for you.

1879 GAMEMASTER'S GUIDE

The Perils of Adventuring

Adventure is someone else having a hell of a tough time a thousand miles away.
– Robert Lynn Asprin

Barriers and Structures

During most adventures, player characters will eventually find themselves outside a structure they want to get into, or inside a structure but determined to get out. Lacking a key or a handy spell, the characters will need to break through a barrier to get in or out. To determine how successfully characters storm a barrier, the Gamemaster must know the structural capacity of different types of barriers.

Every barrier has two characteristics: **Physical Armor** and **Barrier Rating**. Physical Armor serves the same purpose as armor worn by characters: it reduces the damage done by attacks. However, unlike physical armor worn by characters, Armor-Defeating Hits cannot be made against a barrier. Being inanimate, physical barriers and structures are immune to any damage or effects that are reduced by Mystic Armor. The Barrier Rating indicates the amount of damage the barrier can take before it breaks, crumbles, or falls apart, acting much like the Death Rating of a person or creature.

Characters make Attack Tests against barriers using a base Target Number of 7, which may be modified by circumstances such as the environment or the nature of the barrier. If successful, the character makes a Damage Test as normal, subtracting the barrier's Physical Armor from the result. Otherwise, the blow glances off the barrier and causes no damage.

The **Barrier Rating Table** suggests Physical Armor and Barrier Ratings for common building materials. The Gamemaster should use these as the basis for determining similar ratings for other materials.

Barrier Rating Table

Barrier Material	Physical Armor	Barrier Rating
Cave or Natural Wall	31	150
Wood (2 inches thick)	7	20
Wood (more than 2 in)	9	30
Stone Wall	12	45
Stone Block	20	85

Secret Doors

Secret doors usually lead to areas used as hiding places, treasure rooms, and defensive strongholds. Treasure rooms keep valuables safe, and offer the most tempting targets for adventurers. Defensive areas are small rooms where people can take prepared defensive positions against invaders. These rooms commonly include safe places from which missile weapons or firearms could be loosed upon the opponents, or rooms from which magicians could safely cast spells. Some secret doors conceal magical or weird science laboratories, smith shops, and even temples.

Detecting Secret Doors

A character attempting to detect a secret door makes a Perception Test against a Target Number based on how well the door is hidden. Suggested Target Numbers are given in the **Detection Difficulty Table**. If the character's Perception Test is successful, they find the secret door. The Gamemaster should vary the Detection Difficulty for secret doors to reflect how carefully the characters are looking for them. If the characters look for a secret door in every room, hoping to get lucky, use the same Detection Difficulty for every door. If the characters minutely examine every inch of wall space, the Gamemaster might subtract –2 or –3 from the Target Number to reflect this meticulous searching.

Opening Secret Doors

Successfully spotting a secret door does not mean a character knows how to open it. Some secret doors open when pushed. Others slide into slots carved into the walls. Still others open when a character works some type of mechanism.

The Gamemaster decides how a secret door opens, the purpose of the door, and how well it is hidden. Characters may succeed in opening the door on the first try, or they may open it only after a process of trial and error.

Detection Difficulty Table

Detection Difficulty	TN
Easy	5
Average	10
Hard	15
Very Hard	20
Heroic	25

Traps

Shortly after people began to create goods worth keeping, they designed traps to protect them. Traps come in all shapes and sizes. They may lie concealed in small treasure chests, or guard the entrance to a research facility. Characters may encounter traps in abandoned ruins.

Detection: A character making a Perception or Skill Test to see or otherwise sense a trap uses the trap's Detection Difficulty as the Target Number. Most traps have a Detection Difficulty of 5, though some traps are so obvious that the Detection Difficulty is NA (automatic). In effect, the owner of the trapped goods or treasure is saying, "Look, stupid, this thing is trapped. So why don't you go steal someone else's stuff?" Magical traps typically use the trap's Mystic Defense as the Detection Difficulty.

Disarm: This figure is the Target Number for disarming the trap. If a character does not have the Disarm Trap Skill, they cannot disarm the trap. The best a character lacking the appropriate Skill can hope for is to keep from triggering the trap when they open the door, step on the pressure plate, or take some other action that would normally activate the trap.

A character attempting to avoid triggering a trap makes a Dexterity Test to avoid mechanical traps and a Perception Test to avoid magical traps. The Disarm Difficulty of the trap becomes the Target Number for these Tests. Most mechanical traps have a Disarm Difficulty of 7 to 9. The Disarm Difficulty of most magical traps is 8 or more.

The only other way a character can avoid a trap is to achieve a higher Test result than the triggered trap on an Initiative Test.

Mystic Defense: Only magical traps have a Mystic Defense Rating, which also serves as their Detection Difficulty. The Mystic Defense Rating of most magical traps is equal to the Mystic Defense of the character who built the trap.

Initiative: This figure is the trap's Initiative Step Number. Most mechanical traps have an Initiative Step of 8 to 10. Magical traps often have a higher Initiative Step. When a character triggers a trap, the Gamemaster makes an Initiative Test for the trap. All characters within range of the trap also make Initiative Tests. Those who achieve a higher result than the trap may be able to act to get out of harm's way. Those whose Initiative Test results are lower than or equal to the trap's Initiative succumb to its effect. The Danger Sense Skill allows characters to react to traps more quickly than normal.

Trigger: This entry describes the mechanism or action that triggers the trap. Stepping on a pressure plate, lifting the lid of a chest, and opening a door are common examples of trigger conditions for mechanical traps. Characters using magically-based Skills or casting spells within a certain range may trigger magical traps.

Effect: The trap effect entry describes the type and steps of damage the trap inflicts. For example, some traps restrain their targets, others mark them with a magical stain, and still others may put a spell on the character that takes effect after a delay. A trap may have any effect conjured by the imagination and resources of the person building the trap. The type of damage the trap inflicts determines its Damage Step. For example, the trap effect of a simple pit trap might be only Damage Step 4, while a trap designed to smash an intruder might have a trap effect of Damage Step 10 or more.

Trap Descriptions

Here are descriptions for several typical traps, which can be adjusted to almost any situation by the Gamemaster.

Blade Trap

Blade traps generally feature several sharp blades set to slit a victim's throat or cut them across their legs. In old ruins the blades may be centuries old and rusted or corroded. These rusty blades can cause infected Wounds or be so weakened that they do less damage than a clean, new blade. Use the following statistics for a typical blade trap:

Detection: 7
Disarm: 9
Initiative: 17/D12+2D8
Trigger: A pressure plate, trip wire, or moving a specific object or stone.
Effect: One or more blades spring from the ground beneath the victim or from the walls, each causing Step 13/D12+D10 damage (Physical Armor provides protection). Most blades are rusty and break easily. If armor prevents a blade from causing any damage, it shatters. If the blade causes a Wound there is a chance that blood poisoning sets in. The Gamemaster makes a Step 5/D8 Poison Test against the victim's Toughness Step. If successful, the Wound becomes infected and the victim is treated as if affected by a debilitating poison (see **Poison**, pg. 239). Three to five days after receiving the Wound, fever, delirium, and nausea overcome the victim. The infected Wound heals only if it is treated and the victim rests for at least three days or it is cured by a magical healing aid.

Dart Trap

One or more spring-loaded darts are launched at the target. The darts are often coated with a poison (see **Poison**, pg. 239). A typical dart trap uses the following statistics:
Detection: 15
Disarm: 8
Initiative: 13/D12+D10
Trigger: Opening the box lid.
Effect: One or more darts strike the victim, each causing Step 6/D10 damage (Physical Armor provides protection). If the victim takes any damage, the poison takes effect.

Trap Ward

A trap ward is a magical trap designed to protect a place from intruders. A typical ward uses the following statistics:
Detection: 5
Disarm: 19
Spell Defense: 19
Initiative: 30/D20+D12+2D10
Trigger: The Gamemaster makes a Step 17/D12+2D8 Spellcasting Test against the Mystic Defense of any character within 2 yards of the trap. If successful, the character triggers the trap.
Effect: The trap casts a spell against the victim who triggered it, causing Effect Step 23/D20+2D10 damage per round for ten rounds (Mystic Armor provides protection).

Mantrap

Often disguised by illusion or camouflage netting, a character who steps on one of these ghastly things triggers serrated metal jaws that spring up and grip their leg. This example has been disguised with magic, making it semi-invisible, and therefore extremely difficult to detect:

Detection: 16

Disarm: 12

Initiative: 13/D12+D10

Trigger: A pressure plate.

Effect: Jaws spring shut on the victim's leg, causing Step 20/D20+D8+D6 damage (Physical Armor provides protection) and trapping them. Until freed, the victim is considered Harried and suffers 1 Damage Point each round (no armor provides protection). The Gamemaster may also decide that a mantrap is poisoned, to further add to the victim's misery. The victim can be freed if one or two non-trapped characters pry open the metal jaws. Add the Strength Steps of the characters together to determine the Step Number and make a Strength (12) Test. If successful, the victim is freed.

Pit Trap

A pit trap consists of a pit filled with stakes, hidden by a section of false floor. A typical pit trap uses the following statistics:

Detection: 7

Disarm: 7

Initiative: 10/2D8

Trigger: A pressure plate or trip wire.

Effect: A section of floor drops away, dumping the victim into a 6-yard-deep pit with stakes at the bottom. The fall causes Step 10/2D8 damage (no armor provides protection) and the victim is struck by D4 stakes, each causing Step 12/2D10 damage (Physical Armor provides protection).

Spike Trap

Spikes are sometimes hidden in the gaps between stones in some castles or cult lairs. A thin layer of mortar conceals the spikes, making them difficult to detect. A typical spike trap uses the following statistics:

Detection: 15

Disarm: 15

Initiative: 25/D20+2D12

Trigger: A pressure plate or trip wire.

Effect: One or more spikes shoots out from cracks in the walls, striking the victim who tripped the trap with incredible force. Each spike causes Step 23/D20+2D10 damage (Physical Armor provides protection). If the victim receives a Wound, they are impaled on the spike and are considered Knocked Down. One or two other characters may attempt to ease the victim off the spike. Add the Dexterity Steps of the characters together to determine the Step Number and make a Dexterity (15) Test. If successful, the spike is safely removed. If the test fails, the victim takes Step 6/D10 damage (no armor provides protection) and remains impaled. Corridor spike traps block passage, once triggered. To push the spikes back into the walls, a character must make a successful Disarm Trap or Dexterity Test against a Target Number of 15.

Traveling

Adventurers will spend many days traveling from place to place and searching the land for new adventures. Population centers may be spread out across the land, requiring long journeys simply to get from one place to the next. For long distances where mounts or steam coaches may not be practical, or otherwise appropriate situations, player characters may travel by train, riverboat, or Giffard airship (the latter for those who can afford it, or who must move with the speed a Giffard offers). Whatever mode of travel they choose, adventuring parties are likely to spend a great deal of time getting from one place to another. The information in this section outlines modes of transport, needed supplies, and ways of dealing with the weather and other potential travel hazards.

Travel Time

Travel time is most often measured in days or hours. Most maps (in most published products) contain scales for determining distance, and travel rates are provided in the **Travel Rate Table**. Characters can calculate travel times by dividing the distance of the trip by their travel rate. For example, a single horseman could make a 100-mile journey in two and a half days.

Characters on foot or mounted usually travel for eight hours a day, with occasional stops along the way to rest and eat. Every few hours, travelers should also stop briefly to check their location and verify that they are still on the correct route. Characters can attempt to travel for longer than eight hours per day but may become fatigued (see **Fatigue and Injury**, pg.231). If characters with mounts travel for longer than eight hours, their mounts also suffer fatigue. Additionally, each hour of travel beyond eight causes 3 Strain to the mount. Thus, a careless traveler can keep a mount going until it falls unconscious. Horses become more prone to spook as they grow tired. The Gamemaster should apply the **Spook** Table (pg.211) more frequently if the characters overtax their horses.

Trains, riverboats, and Giffards can travel for longer than the standard eight hours by rotating their crews (which requires them to carry enough crewmen for an extra shift). Except for occasional stops to repair and take on supplies, such vessels can travel almost indefinitely. The same applies to steam coaches, although they normally are too small to carry extra crew. Generally, a long distance steam coach line will have fresh crew waiting at the refueling stops, so that the crew can be replaced while the coach is taking on coke and water.

Overland Travel

Most adventurers travel over land, either on foot, mounted, or in a small vehicle. Characters traveling on foot can cover roughly 25 miles per day, assuming they travel for eight hours each day, with only occasional rest and food breaks. Injured characters and those carrying encumbering loads may travel more slowly, perhaps only 20 miles per day. In developed areas with good roads, travel could be faster, up to 30 miles per day.

Characters riding mounts can travel roughly 45 miles per day, again assuming eight hours of travel with occasional breaks. Some mounts may cover more or less distance than this; be sure to check the movement rate of the mount. If the mounts are carrying encumbering loads, they will cover less distance per day.

Characters traveling by personal vehicle or other conveyance will cover as much distance in the day as the vehicle's Movement Rate allows, with stops for refueling and other necessities as appropriate. See the **Steam Powered** chapter (pg. 255) for details on commonly used vehicles.

Occasionally, characters travel with cargo shipments, or merchant or trader caravans, either as guards or as fellow travelers. Animal-drawn caravans travel at a rate of 30 miles per day. Caravans using powered vehicles are limited only by the speed of the vehicles, supplies, and crew fatigue. Once again, good roads can increase the distance traveled.

Travel Rate Table

Method of Travel	Miles in 8 Hours	Miles in 16 Hours
Caravan (foot)	20	40
Caravan (mounted)	30	60
Giffard (Cargo)	221	442
Giffard (Passenger)	254	507
Giffard (Scout)	292	584
Person (foot)	25	–
Person (horseback)	45	–
Riverboat	109	218
Steam Coach	221	442
Train	414	829

Safe Areas

Because many areas of the Gruv are unexplored, and many areas of Earth lie far outside the reach of law enforcement authorities, most law-abiding citizens consider only the areas immediately surrounding cities, towns, and villages, and along established trading routes to be safe. Wandering away from these safe areas can prove hazardous to travelers (see **Wilderness**, below, and **Travel Hazards**, pg. 217). Smaller farming towns and villages generally surround major cities, supplying the city with agricultural goods. Their proximity to the city makes single-day trips between the city and the farming communities feasible. Most of the territory within fifteen miles of a city or town remains safe for travelers, but even these areas can encompass desolate and dangerous spots.

Major trade routes connect major cities and towns. Well-traveled, often by rail and armed steam coach employing seasoned guards, and frequently policed by the regional or national authorities, trade routes are usually safe for travelers. Keep in mind, however, that every trade route crosses unpopulated territories. Travelers who stray as little as a thousand yards off from a trade route in the Gruv are effectively in an unmapped and unexplored region.

Wilderness

Much of the time, adventurers travel through wilderness. Even rail lines often cut through regions that remain wild and largely unexplored. Whether traveling through jungles, mountain ranges, or sparsely inhabited plains, adventuring characters must obtain adequate food, water, and shelter, which can be just as challenging as dealing with hazardous terrain and dangerous creatures.

Though adventuring characters will likely carry rations and water with them, they may need to live off the land if and when their supplies run out—if the characters get lost, for example, and subsequently take longer than they'd planned to get where they're going. The Fishing, Hunting, and Wilderness Survival skills allow characters to obtain food, find water, and make shelter in the wilderness.

Avoiding Attention

In many situations, traveling characters may wish to avoid the notice of patrols, guards, creatures, suspicious locals, and other potential threats. Moving through an area unobtrusively reduces the chances that someone will spot a character or group of characters, but it also reduces the characters' travel rate by half. If a group of adventurers is making no attempt at concealment, the Target Number for guards, other characters, or creatures attempting to detect them is equal to the lowest Dexterity Step of all the player characters in the group, appropriately modified for visibility and other factors. If characters traveling overland take steps to avoid attracting attention, however, for example sneaking past a walled village rather than walking up to the front gate, keeping to less-traveled roads, and so on, the Target Number for spotting them is the highest Dexterity Step of the group (with appropriate modifiers).

Despite the penalty to travel rate, player characters may well find this benefit desirable, especially when approaching areas prone to conflict (territory being fought over by rival Saurid tribes, for example) or traveling to cities known for their harsh treatment of strangers (such as any European trying to make their way around in China). The Gamemaster should consider such factors when determining if anyone spots the adventurers.

Encounters Along the Road

Traveling characters may have any number of interesting encounters during their journeys. Among other things, they may notice or encounter various creatures, other travelers, natural hazards such as rivers or streams to be crossed, rockslides, precarious bridges, and so on. To liven up a road trip, have the characters make Perception Tests whenever they might spot anything of potential interest, whether dangerous or not. When characters make Perception Tests outdoors, use the guidelines for Perception Test modifiers given in the **Gamemastering** chapter (pg.151). Note that followers of some Professions can also use various Skills and abilities to improve their awareness and extend their range of vision.

Social Interaction

Characters may meet any number of different people along the road—fellow travelers, local townspeople, bandits and raiders, and so on. In some cases they may fight, but combat is not the only or even the best way for adventurers to deal with other people. Through social interaction, Gamemasters can offer player characters some challenges in areas other than combat. Complex negotiations, political maneuvering, and intrigue can also form the basis of adventures or campaigns in civilized settings. The rules for Social Interaction and Interaction Tests outlined in the **Gamemaster Characters** chapter (pg.171) offer useful guidelines for encounters with GMCs on the road. While these rules are no substitute for good roleplaying on the part of the players, they can help the Gamemaster determine how GMCs might respond to player characters' actions.

Horses Are Not Vegetative Bicycles

One of the large problems with horses, and any herbivorous mount, is that they are prey animals. As such, they maintain a constant wariness for anything that could represent a threat. Never mind that they're massive, outweighing most Terrestrial predators by a significant margin. They're not built to fight. Survival for a horse means running away. This leads to a degree of paranoia that can cause a flight reaction when it's not appropriate. Such behavior is called "spooking".

When a horse spooks, it reacts to something that's not actually a threat to its life as if it were. A spooked horse may bolt, freeze, throw its rider, or even attack the thing that spooked it, sometimes trying to do all of these at once. An experienced rider can sometimes manage a spook, calming the animal and regaining control of their mount. A less experienced rider, or an unlucky one, may end up abruptly parted from the saddle, potentially being injured, and having to chase down a panicked mount that's many times faster than they are.

The Spook Table

The following table lists a few situations that can cause a spook. Bear in mind that under the right circumstances, or wrong ones as the case may be, a mount may spook at virtually anything. The Gamemaster is advised to check for spooking infrequently, and not every time someone mounts up and tries to go anywhere.

Spook Cause Table

Stimulus	Description
Collision	The mount runs into something unexpectedly, whether it's a fence rail, a wall, a carriage in the street, the kerb of the sidewalk, another horse, etc.
Another Animal	The mount catches sight of another animal where it did not expect one. This may be the barn cat suddenly emerging from under a bench, a stray dog, the rider coming up to the mount from the wrong side, or the mount's own reflection.
Something Moving	The mount encounters movement where it did not expect such. Blowing leaves, a bit of trash going by, or the sun bouncing off water and creating the appearance of movement may be sufficient to cause a spook.
Unfamiliar Terrain	The mount arrives at a change in the landscape and balks at it. This may be something as simple as a gravel pathway across a grassy area, or something as dramatic as a gully with a fast moving stream.

To check for a spook, have the mount make a WIL Test against a base Target Number of 8. This may be adjusted according to the following table, and according to the context of the situation by the Gamemaster.

Spook Test Adjustment Table

Condition	Adjustment
Mount has been trained for war by a professional	TN -3
Mount has been trained for war by an amateur	TN -1
Mount is not trained for war and is in battle	TN +3
Character has used Animal Training to increase the mount's resistance to spooking	WIL bonus of up to the character's Animal Training Rank, based on effort. See the **Animal Training** Skill for details.
New mount	TN +2, and all Tests by the rider are at -2 due to the lack of trust by the mount.

If the mount spooks, the rider may attempt an **Animal Handling** (*1879 Players Guide*, pg.179) or CHA-based **Equestrian** (*1879 Players Guide*, pg.196) Test (whichever the rider would prefer) to regain control of the mount. The base Target Number for this Test is the mount's Social Defense +3. Double the Target Number if the mount had a Rule Of One result for its Spook Test. If the rider has used Animal Bond with the mount, the rider gains +1 to their Animal Handling or Equestrian Test per level of Attitude Increase above Neutral, with an additional +1 if the mount is Loyal.

The following optional table provides descriptions of the way in which the mount spooks. Some campaigns may want to include this level of detail, both for story purposes and for mechanical purposes, such as determining where the rider lands.

Spook Type Table

Name	Description
The Whirling Dervish	Mount spins in place, throwing rider in a random direction.
The Rodeo	Mount bucks wildly.
The Tap Dance	Mount won't either move or stand still, and frantically runs in place.
The Horizontal Teleport	Mount moves sideways abruptly, possibly out from under the rider.
The Vertical Teleport	Mount vaults straight up.
Full Speed Astern	Mount retreats from the stimulus at high speed, while focused entirely on the stimulus and ignoring what might be behind it.
Aggressive Stance and Snort	Mount plants its feet and engages in a threat display toward the stimulus.
Full Speed Anywhere	Mount bolts, running at gallop in a random direction.

*inspired by Lindsey Kahn's article on Eventing Nation, 10/31/2013 (http://eventingnation.com/home/infamous-spooking-styles/)

River Travel

When a group of adventurers must travel long distances, they sometimes arrange transport on the river. Because few characters own their own boats, most adventurers traveling up or down the river must buy passage on a riverboat.

Passage on a steam-powered riverboat costs an average of 1 shilling per person per day for steerage, 3 shillings for middle passage, and a pound a day or more for first class accommodations. Most ship captains and packet lines demand full advance payment, though some accept partial payment in advance, the remainder due on arrival at the character's destination. Some captains charge more than the average price, often bargaining with the characters to determine the fee. Characters can arrange to transport their mounts on the same craft, but must pay an additional 5 shillings per day for each animal, which includes feed, water, and basic care.

Characters lacking ready funds may sometimes pay for their riverboat passage by working as members of the crew during the voyage, although commercial lines will not allow this. Each day that a character works for the crew earns an average of 1 shilling 2 pence, though pay rates are negotiable based on the character's Skill Ranks. Some captains, instead of paying out coin, simply exchange passage for the character's time and labor. A character willing to travel on an independent ship can work off most or all of the cost of their trip in this manner. The higher the technology, the less likely the captain will trade out work for passage. Steamship (and airship) captains will not allow anyone to serve as crew unless they have a logbook to prove their Skills.

Riverboats travel roughly 200 miles and 16 hours per day, stopping along the river to pick up and drop off goods and passengers. Most riverboats stop only during daylight, usually sailing well into the night, but occasionally laying over at a port until morning. Pirates, as well as legitimate traders, sometimes travel the rivers in the less civilized parts of Earth. Those characters who help fight off pirates often receive a partial refund of their passage payment.

Railway Travel

The most common means of covering long distances on Earth or the Gruv, and for getting back and forth between the two, is by rail. With an average speed on straight level track of over fifty miles per hour, the train can cover hundreds of miles in just a few hours. Locomotives are accompanied by tenders, cars that hold extra water for the boiler and large supplies of fuel, extending the distance required between stops for resupply. The brake van, or caboose in North America, provides crew accommodations, allowing the train to change shifts without stopping.

Short-haul trains offer passenger cars with bench seating, and may or may not put on a dining car, depending on the length of the trip and whether the stations along the way have tea rooms. Long-haul trains that run overnight have sleeper cars. Some of these use seating that folds down into berths, while others have private cabins similar to those found on a packet liner or airship. As always, the better the ride, the more it costs. A seat in a passenger car from London to Manchester only runs a couple of shillings, but the overnight service from Dover to Berlin with first class dining and private cabin will cost several guineas.

On Earth, trains carry a few discreet guards in Europe, and uniformed military in Africa and the Middle East. On the Gruv, trains themselves are armed and armored, with guns and steel plating heavy enough to fend off a thorny molecrab or a pack of shardraqxi.

Characters will not be able to bargain over ticket prices or trade out services for passage except under the most extraordinary circumstances. Trains require specialized Skills for operation, and most railways are unwilling to allow anyone but their own trusted employees access to such expensive and potentially dangerous machinery.

Giffard Travel

A total disregard for terrain gives air travel its greatest advantage. Giffards can make anywhere from a bit over 400 miles in a day to a bit under 600, depending on the model, well slower than a train. Giffards, however, do not need rails, nor roads, nor anything except a clear spot to set down in. Most Giffard pilots will not fly at night, except in battles or raids. Giffards carrying passengers rarely engage in combat, unless the situation turns desperate.

Passage aboard a Giffard usually runs about 3 shillings per day for middle passage, which includes cramped quarters and a no-frills meal, or one pound six for first class, which has the same lack of space but better food. Giffards use their steerage space for crew and do not normally provide passage in steerage. Characters may be able to negotiate the rate with airship captains if they can provide services the ship will need. In most cases, adventurers offer to help protect airships from airborne attacks during the trip. Some airship captains are also willing to take on skilled characters as temporary crew members. Captains might also lower their prices for skilled navigators. However, Giffard captains are notoriously difficult to negotiate with. Most of them are former military officers, with deservedly fearsome reputations, or overburdened merchant captains, so they drive hard bargains.

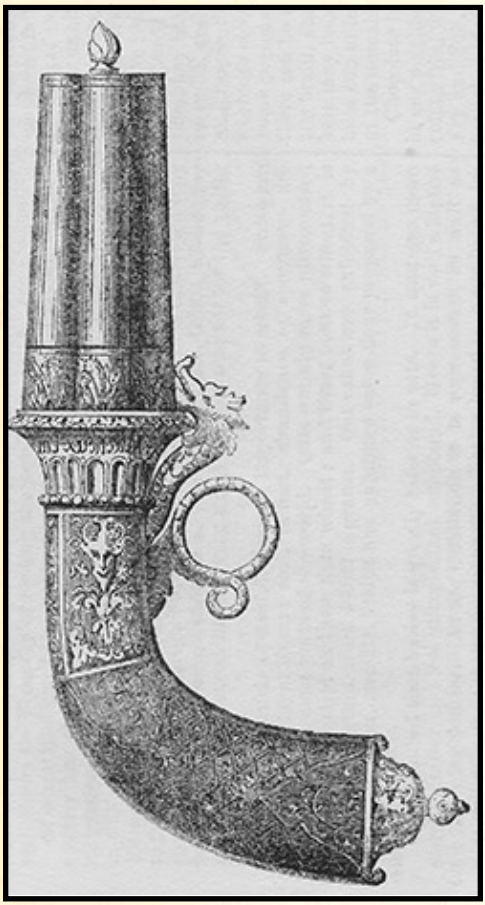
Cargo space on Giffards is at a premium, so Giffard passengers are rarely allowed to bring along more than their personal equipment. Bringing a mount aboard could cost 5 pounds or more per day, with the price going way up for especially large mounts. The characters would have to tend their beasts themselves, paying also for feed and for a water allowance, and have to do the cleanup at least twice daily. For obvious reasons, many Giffard captains won't hear of having a harpy or a garnickey on board. Trunks, chests, and other large pieces of luggage cost at least 5 shillings apiece to bring aboard, with larger pieces costing more at the Gamemaster's discretion.

Underground Travel

Characters are bound to explore an abandoned fortress or ruins at least once during their adventuring careers. In addition to such explorations, characters may venture underground in search of rare materials, while tracking down creatures, or seeking shelter from storms.

Movement Underground

Movement underground is somewhat slower than movement aboveground. Characters going underground will almost always travel on foot, simply because the ceilings of most tunnels and caves are too low to accommodate mounted characters or steam-powered vehicles, and few mounts or vehicles can navigate the slopes and sharp inclines commonly found beneath the surface. Additionally, characters must follow the paths already formed by natural tunnels and caves. Not being made by people, as roads are, many of these paths do not represent the most direct route from place to place. In most circumstances, characters can travel at a rate roughly half to three-quarters of their surface travel rate—about 10–15 miles every 8 hours.



Most tunnels are narrow and have uneven floors covered with loose rocks and dirt. Characters should take their time traveling through these areas, as it is easy to slip and fall if they move too quickly. In particularly rough spots, Gamemasters may call for Dexterity Tests against a Target Number no higher than 5. A failed test usually results in either a few points of damage (which armor does not protect against) or a minor injury (see **Fatigue and Injury**, pg.231).

Furthermore, many tunnels and caves slope upward or downward, restricting movement even more. Some inclines can be so extreme that characters must make Dexterity Tests to safely traverse them. Set the Target Number for these tests between 5 and 7, depending on the grade of the slope. A failed test can cause either a minor injury (for example, a sprained ankle or strained muscle), or falling damage if the slope is steep and long enough.

Unbreathable Air

Whenever characters enter areas containing stale air or poison gas, allow each character to make a Perception Test to detect any odor or taste that might alert them to the danger. Base the Target Number on the specific conditions that have rendered the air unfit to breathe. Oxygen-poor air is very difficult to detect, and so tests to detect it should have a Target Number of 10 to 12. Air tainted with toxic gases is more likely to smell or taste odd, and so the Target Number might be 6 to 9. A successful Perception Test alerts a character that something is wrong with the air but does not reveal the cause of the problem.

Characters with Skills appropriate to underground travel and exploration, such as Natural Science, Geology, or Mining can identify the problem by making an appropriate Skill Test against the same Target Number as the Perception Test. A success enables the character to recognize the specific hazard in the air and suggest an appropriate precaution (wearing cloths over their mouths, running like blazes, and so on). Some animals, especially birds and rodents, are more sensitive to bad air than most people. Characters with animal companions often rely on these to help them detect hazardous air when traveling underground.

Characters traveling through regions with stale air will suffer from suffocation. Extended travel through these areas can also impose a –1 penalty to a character's Fatigue Tests (if applicable, see **Fatigue and Injury**, pg.231).

Poison Gas

Traveling through areas containing poison gas can cause damage to the character beyond suffocation. The Gamemaster determines the Damage Step of any poison gas that characters encounter, with mild gases at Step 4/D6, dangerous gases at Step 8/2D6, and lethal gases at Step 12/2D10. Characters suffer this damage each round they remain in the toxic area. No armor protects against this damage.

Explosive Gas

Many natural gases are highly flammable and explode when exposed to open flames such as torches and candles. Treat explosive gas buildup as a trap (see **Traps**, pg.205). The following sample statistics offer suggested ratings for explosive gas traps.

Explosive Gas Trap
Detection: 7–12
Disarm: See text
Trap Initiative: 6–9
Trigger: Exposure to open flame.
Trap Effect: The gas explodes, causing Step 10–20 damage to all characters within the area of effect (Physical Armor provides protection). Characters can detect explosive gas by making successful Perception Tests against a Target Number equal to the Detection Difficulty of the gas. If characters detect explosive gas, they can attempt to douse all fire sources before accidentally triggering an explosion. To do so, each character carrying a fire source must make an Initiative Test against the Trap Initiative of the gas. If successful, the character manages to douse their flame in time. If one or more of the tests fail, the gas ignites and causes the damage listed under Trap Effect.

Cave-Ins and Collapses

At best, cave-ins and collapses impede characters' progress by blocking the way ahead. At worst, they can trap characters under tons of dirt and stone. Collisions with walls or braces or even loud noises in an unstable area can trigger cave-ins. Combat, especially using spells such as Explosion or Bolt, can trigger a collapse. Gas explosions and natural tremors can also trigger them (though these are far less frequent).

Characters entering an area where a collapse may be imminent should make a Perception Test to notice cracks in tunnel walls and ceilings, or weakened or rotting braces in the case of mine tunnels. Base the Target Number for such tests on the visibility of the cracks or other faults. Characters with Knowledge skills associated with mining or underground exploration, such as Geology or Mining, may make appropriate Skill Tests in place of (or to add a bonus to) Perception Tests. Characters can detect potential cave-ins or collapses by sensing minor shifts and tremors in the earth. Typically, these shifts are harder to detect than a crack in a wall but are often a much more reliable warning of an impending collapse.

An imminent collapse cannot really be disarmed, except through magic or the aid of an earth spirit at the Gamemaster's discretion. The best thing for characters to do is leave the dangerous area or find shelter from the falling rocks. In the event of a cave-in or collapse, each character should make an Initiative Test and compare the result to the result of a Trap Initiative Test. If the character's result is higher, they escape from the unstable area in time to escape the collapse. Any character whose test fails takes damage from the falling rocks and earth.

Treat cave-ins and collapsing tunnels as traps (see **Traps**, pg.205). The following sample provides suggested ranges for the characteristics of this type of trap.

Cave-In Trap
Detection: 6–10
Disarm: See preceding text
Trap Initiative: 7–12
Trigger: A collision or loud noise.
Trap Effect: The ceiling collapses, causing Step 12–18 damage to characters who fail to escape the fall (Physical Armor provides protection). Besides causing damage, cave-ins can also trap characters underground by blocking their way out of a cave or mine or burying them in rocks. In the latter case, trapped characters may also have to contend with a limited supply of fresh air. Gamemasters must determine how much air any trapped characters have and how long it will last before they begin to suffocate. If the trapped characters attempt to dig themselves out, they must make a Strength Test each round against a Target Number from 5 to 7, to reflect the difficulty of moving the fallen rock aside without triggering a second collapse. If the characters have spells or Skills that the Gamemaster deems appropriate for digging out, they may be allowed to use those abilities in place of the Strength Tests. On a failed test, the trapped characters make no progress freeing themselves. A Rule of One Result causes a minor secondary collapse that inflicts Step 7/D12 damage to each of the characters doing the digging (no armor provides protection). It takes an average of 10 Successes to dig out, though Gamemasters may adjust this number as they see fit. Each minor collapse reduces the character's accumulated-success tally by –1.

Travel Hazards

Adventurers can face serious risks traveling, especially when traveling over land. In many ways, the impersonal forces of nature can present a threat more challenging than any creature that characters might encounter. To survive in harsh conditions, characters must frequently use their wits and all the skills at their command.

Exposure and Frostbite

Exposure to severe cold can seriously injure people. If a character spends time exposed to the cold without adequate protection (warm clothing or some kind of magic), they run the risk of frostbite. For every half hour of exposure, the character suffers Step 4/D6 damage. No armor protects against this damage. The Gamemaster may increase the Damage Step for exceptionally harsh conditions such as snowstorms or being buried beneath an avalanche. If the character remains in the cold long enough, they will eventually fall unconscious and freeze to death.

If any single Damage Test for exposure to cold exceeds the character's Wound Threshold, minor frostbite occurs. Apply a –1 penalty to the character's Dexterity- or Strength-based Action Tests, depending on the affected body part. For example, a frostbitten finger would affect Dexterity, while a frostbitten calf might affect Strength.

If the character does not get to shelter within two hours of being frostbitten, they suffer from severe frostbite. At this point, the injury is considered a Wound and must be healed magically. (Any method of magical healing applicable to Wounds, such as laying on hands by a Priest, will eliminate frostbite.) If left untreated, the frozen portions of flesh begin to rot and become infected. Unless infected portions are amputated, the character may die.

High Altitudes

Double all physical Strain costs for characters operating at high altitudes to reflect the difficulty of breathing the thin air. Strain from spellcasting is not affected. Characters also tire more quickly at high altitudes. To reflect this, all characters, except for those accustomed to the mountain environment, receive a –1 penalty to Fatigue Tests made in high mountain regions (see **Fatigue and Injury**, pg.231).

Heat Exposure

Exposure to intense heat, such as that of a desert or proximity to a lava flow, can cause damage to characters lacking adequate protection. Such a character suffers Step 4/D6 damage per hour of exposure (no armor provides protection) and may also suffer dehydration if they are not carrying enough water. If heat exposure results in a Wound, treat it as a serious burn that will blister and require appropriate treatment. Extreme heat also causes fatigue. To reflect this, double all Strain costs and apply a –1 penalty to all Fatigue Tests in hot environments (see **Fatigue and Injury**, pg.231). Characters wearing armor heavy enough to impose an Initiative Penalty take Strain equal to the Initiative Penalty for every hour they travel in the armor, as well as every minute spent fighting in it.

Dehydration

A human-sized person needs to drink at least one quart of water each day, assuming they don't engage in any strenuous activity. Other races, such as dwarves or trolls, require less or more water, proportionate to their size. Saurids require two quarts of water per day, and immersion at least every third day. For each day that a character does not get sufficient water, they take 3 Damage Points from dehydration (no armor provides protection). Additionally, they receive a penalty to their Recovery Tests equal to the number of days they have gone without adequate water. This damage may be added to any damage inflicted by heat exposure.

Alternatively, the Gamemaster may treat dehydration as an injury and impose a –1 penalty to all Strength- or Toughness-based Action Tests (see **Fatigue and Injury**, pg.231).

Suffocation

Characters begin to suffocate whenever they cannot get sufficient oxygen into their lungs. Insufficient or depleted air in a mine shaft, being buried under snow, having a 500-pound troll sit on one's chest—these are just a few examples of such situations. Drowning occurs when a character cannot get sufficient oxygen because they are immersed in water. Both have the same effect. See the next section for specific rules on **Drowning**.

A character can hold their breath for a number of rounds equal to their Toughness Step. After that, they begin to take damage from suffocation. In the first round, the character takes Step 2 damage. This damage increases by +1 Step during each subsequent round. No armor protects against this damage. Suffocation damage does not cause Wounds. Strain-causing actions, such as combat, speed up the rate at which the character takes damage. Suffocating characters are considered Harried and their Movement rates are halved. Magical spells and effects that inflict suffocation cause additional damage because of their magical nature. For these spells, use the effect as given in place of these rules.

Survival

In order to survive extended periods of travel, especially on foot or mounted, characters must buy or otherwise acquire sufficient food and water. Though characters occasionally have the time to gather ample supplies of food and water for their trip, often circumstances force them to leave in a hurry. Taking off on an adventure or bolting out of town without sufficient food or water can quickly land a character in trouble. Characters can use the Wilderness Survival skill to find water while in the wild. Failure to find water leads to **Dehydration** (see above).

Weather

Another challenge of traveling outdoors is surviving the elements. The Gamemaster should use the weather to challenge the player characters from time to time. For example, as the characters travel through a ravine, the Gamemaster might whip up a heavy storm that forces the characters to seek shelter, or could mention the possibility of flash floods. The effects of weather may have more to do with the story than with game mechanics. For example, a thunderstorm might spook mounts (see the **Spook Table**, pg.211, and the **Equestrian Skill** in the ***1879 Players Guide***), causing them to throw their riders and flee. The detour to find shelter from the storm may range so far off the path that the group gets lost. Neither circumstance is life-threatening, though the mounts may run off with much-needed supplies, or the delay may allow the evil Weird Scientist more time to prepare a nasty surprise for the characters. Only extreme temperatures and heavy precipitation need produce game mechanic effects.

Precipitation most often causes problems with visibility, discussed below. Extreme temperatures may cause minor damage to the characters. For example, severe arctic temperatures on top of mountains might cause Step 4 or 5 damage (no armor provides protection) to characters dressed in inadequate clothing. Extreme heat might cause the same level of damage, or might damage a character in the same way as dehydration. The Gamemaster should determine the impact desired for weather to have in the game, and apply any game mechanics accordingly.

Visibility

Visibility rarely poses a problem during the day under a bright sun. But how far and how well can characters see at night? Or in the darkened rooms of a castle? Or during a torrential rainstorm? During daylight hours, with the sun overhead, a character can see clearly for several miles, depending on the terrain. On a bright, sunny day over clear terrain, for example, a character can see mountains from up to 150 miles away, but would see only their outlines and virtually no details. To distinguish

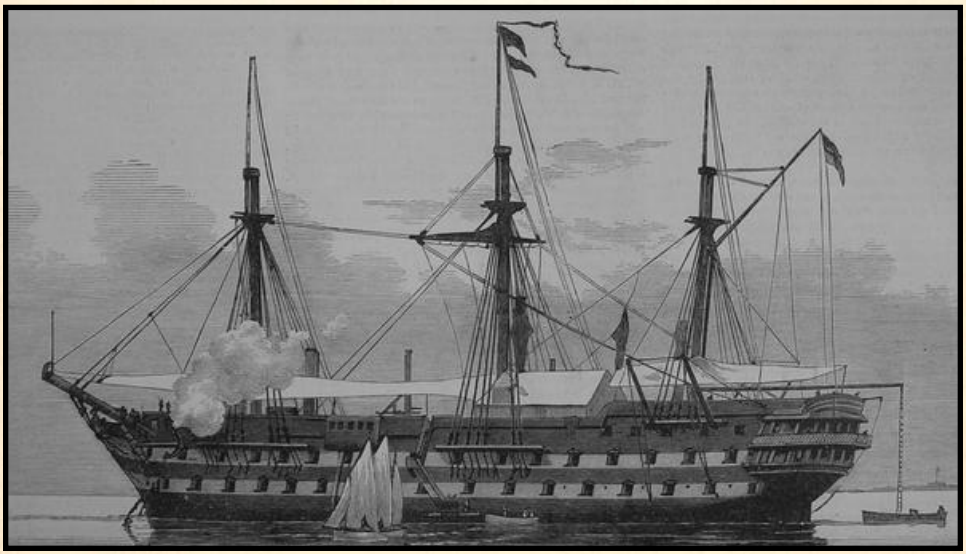
details, a character must be much closer to what they are looking at. Obviously, jungles and forests also limit characters' vision.

In order to notice someone or something, a character must be within at least 750 yards of the person or object. Beyond that distance, images begin to blur, losing distinguishing characteristics and markings. As a character approaches closer to an object or person, more details become visible. A character within 200 yards of a target can determine the identity of a person they know, or the type of creature or the race of the target. Spotting specific details requires a character to be within 20 yards of the target. As a rule of thumb, long-range visibility extends out to 750 yards, medium range to 200 yards, and short range to 20 yards from the object of a character's gaze.

Note that the terms long, medium, and short range are used to simplify the discussion of visibility. These ranges do not correspond to the Ranges of missile and throwing weapons. The distances listed represent visibility ranges during normal daylight hours, in clear weather; in other words, under ideal conditions. Both the weather and time of day can reduce visibility ranges. The **Visibility Table** suggests guidelines for determining visibility ranges under various conditions.

Visibility Table

Condition	Short Range	Med Range	Long Range
Daylight	20	200	750
Dawn/Dusk	15	125	500
Light Fog	10	75	250
Heavy Fog	2	5	10
Light Rain	15	175	350
Heavy Rain	10	50	100
Night with moon	5	60	200
Night, no moon	5	15	30



Darkness

The Visibility Table suggests visibility ranges for the natural darkness of night, which is often partially alleviated by a moon or stars. Characters within a cave or underground must cope with total darkness that completely eliminates visibility. Without a light source, a character functions as if blind and suffers the movement and action penalties described for Darkness in the **Combat** chapter (*1879 Players Guide*, pg.229). Typical light sources include campfires, torches, and lanterns. The **Light Source Table** suggests the effective ranges of light that these sources can provide. From these examples, the Gamemaster can extrapolate the effectiveness of other light sources.

Note that these are the effective visibility ranges. The character can see up to twice the distance shown, but incurs a Partial Darkness penalty unless they possess Low-Light Vision or a similar ability.

Light Source Table

Light Source	Radius
Candle	2 yds
Torch	5 yds
Campfire	10 yds
Lantern	10 yds
Carbon-Arc Lamp	30 yds

Getting Lost

Any number of circumstances can cause characters to lose their way. A fierce storm might force a group of adventurers to travel in the wrong direction, or the adventurers might detour to avoid a large patch of exploder pods and lose their bearings. Even travelers following maps can get lost, especially if they are wandering in areas inadequately mapped. Getting lost poses potentially enormous risks for the unlucky traveler. Adventurers may wander around certain areas for years without encountering civilized settlements, and many small towns and villages are so isolated that they may know nothing of the nearest village, let alone major landmarks or trade routes.

The Gamemaster should only force the characters out of their way to move the adventure forward. Having a group get lost just to watch them survive in the wild is only fun once, and may seriously frustrate the players. If, on the other hand, the characters get lost and happen to wander into a town being terrorized by a mordslanger, then throwing the characters off the track served a valid purpose and advanced the story. The Gamemaster should be careful of using this technique too often, as it may make players feel manipulated.

Wild Animals and Creatures

One of the most common perils of adventuring is confronting the creatures that inhabit the world. Many wild beasts are little more than part of the scenery, but others are potentially dangerous opponents. Though some creatures are highly aggressive and will attack characters on sight, others only attack to protect their young or to feed. Whatever the reason, characters will often

find themselves fighting off wild animals. On the other hand, some animals and magical creatures can be useful to player characters if properly trained.

Encountering Wild Animals and Creatures

Characters traveling through the wilderness most often encounter beasts in their natural habitats. This may give beasts a camouflage bonus that increases the difficulty of spotting them. This holds particularly true for predators that sneak up on their prey. Additionally, heavy foliage, rain, and darkness often provide cover for animals and enable creatures to approach characters unseen.

Detecting a creature or animal in the wilderness requires a successful Perception Test against the creature's or beast's Dexterity Step, appropriately modified for the surrounding conditions. Natural camouflage usually adds +3 to the Target Number. Heavy forest or jungle foliage adds +5, and heavy rain or darkness adds +7. If the creature is a predator stalking the characters, the Gamemaster makes an Action Test for the creature, using its Dexterity Step or an appropriate power. The result of that Test, plus any appropriate modifier, is the Target Number for detecting the animal. If the creature remains undetected, it may strike the characters with the advantage of Surprise.

Fighting Wild Beasts

Wild animals and creatures can use many of the same combat options open to characters. Most animals favor charging or swooping attacks. They often Attack to Knockdown on their first attack and then follow up while their opponent lies prone. If characters enrage them, by trespassing on their lairs, nests, or hunting grounds, for example, animals may attack aggressively. Generally, animals and creatures attempt surprise attacks, so apply Blindsided bonuses to their initial attack. Also, packs or flocks often attack a single opponent, which gives the opponent a Harried penalty.

Animal Training

The process of winning an animal's trust and training it to perform various tricks on command is described by the Animal Bond and Animal Training Skills. Any character seeking to develop an animal companion should learn them to properly establish a rapport through which they can train an animal.

Keep a close eye on the number of animal companions that characters acquire. Animal companions are not pieces of equipment. They are living creatures that must be treated as friends, just as if they were fellow adventurers. Animal companions need food, water, shelter, attention, and affection from their human or Saurid comrades, and failure to provide these things will have negative consequences.

A neglected animal will become more demanding, bothering the character for food, affection, and attention at the most inopportune times. Neglect will also tend to make the companion less and less willing to do as the character asks. If seriously neglected or mistreated, a beast will either leave or turn on its former friend.

Stress the requirements of a training bond between character and animal companion to remind the player of the responsibilities their character is taking on. Such reminders become even more important if a character intends to take the animal as a familiar. A character must swear a Blood Oath to the familiar and will suffer the consequences of neglecting or mistreating it.

At the Gamemaster's option, certain domesticated animals can become Loyal to a character without their using the Animal Bond Skill. Dogs and cats, which have long lived with people, can become Loyal through feeding and kind treatment. Horses and other domesticated mounts may

also form bonds with people this way. Wild animals and magical creatures, on the other hand, must always be tamed and taught to respect their trainer before any training can take place.

Piracy and Banditry

Travelers in the Gruv may take comfort in the fact that the Saurids do not routinely practice robbery along travel routes, and that the human population is not yet at such a level as to support highwaymen and bushrangers. The possibility of meeting with outlaws while traveling in the wilds of the New World is thus slim. Considering the other hazards of travel in the Gruv, this is perhaps small consolation.

Travelers on Earth must contend with a wide variety of hazards of the human sort. Pirates on the open ocean, bandits on the road, and scoundrels of all sorts prey upon the unwary. Some regions have more of a problem with this than others, as is the way of history, with the nations able to patrol their sea lanes and roads with trustworthy forces enjoying greater prosperity from the guarantee that cargoes and passengers will reach their destinations unmolested.

The golden age of Caribbean piracy ended over a hundred and fifty years ago, but ships throughout the world still hoist the black flag, or the local equivalent, and wise merchants stay to the well-traveled trade routes where a warship of Her Majesty's fleet or a friendly nation may be close at hand. Pirates these days are not so bold as to fire a warning shot and rely on their reputation, especially given the tendency of merchant vessels to be well armed and carrying the latest in military and steam technology. They signal for help, apparently in distress, or use other decoy measures, only showing their teeth once close enough for a decisive strike. The rules of the sea demand that aid be freely given to those in need, but only a fool rushes in without making sure that the trouble is real.

The succession of wars and collapse of governments throughout central Europe has left the economy in ruins as well as the land. In some areas, where farming has failed due to crops being trodden underfoot by passing armies, gangs of desperate, sometimes starving people have armed themselves with whatever comes ready to hand. They fall on any target that might have coin or food, or both, like the plague of locusts upon the Egyptians. Soldiers left with no homes to return to, and sometimes entire units left with no pay, no command, and no purpose turn to banditry for lack of opportunity to make an honest living. Similar situations may be found anywhere that war has ravaged the area, destroying homes and factories and means of making a livelihood.

Even in London, crime remains a serious problem. The implementation of street lighting, the recent reorganizations of the Metropolitan Police Department, and new developments in self and business protection have brought the rate of such acts down, but not eliminated them entirely. Footpads haunt the alleyways, and knock down streetlights to grant themselves the darkness in which they operate. House breakers remain a scourge from the East End to the West End and out into the surrounding boroughs. A variety of criminals unique to urban environments plague the population, such as the snoozer, who robs hotel rooms while the guests are present but asleep, and the dragsman, who specializes in robbing carriages. Just making one's way across town can be perilous, never mind boarding a train for Constantinople.

Bureaucracy at the Border, or Death by Tedium

The player group has gotten past the forest full of rabid badgers, across the river of burning sewage, and through the cave of murderous invisible bats. They think they're home free. Not so.

They still have to face one further terrifying foe, one who may halt them with a single word: the bureaucrat.

This person guards the border of the nation, or the entry to the town, or the ticket counter at the train station, with pencil, paper, rubber stamp, and a rulebook in fifty-five volumes that they know down to subparagraphs. They take their job far too seriously. They have a tiny modicum of power, just enough to know how little they actually have, and they will not hesitate to use it and prove that they are still More Important Than You. Are the characters' documents in order?

The ordinary person has very little trouble getting their papers stamped and moving on through the border crossing. They don't stand out, don't attract attention, and don't set off the alarms in the bureaucrat's head. Player characters, by definition, stand out and attract attention. Upon their arrival at the desk or window, the bureaucrat immediately starts going through the rules, looking for violations being committed. Letting through someone who has violated a rule results in a reprimand. Too many reprimands and the bureaucrat has to find a new job, having lost that tiny smidgin of power. The less power a person has, the more fiercely they protect it.

Any negotiation with a bureaucrat starts with a CHA Test against the bureaucrat's Social Defense. If the character has First Impression or a similar Skill, or can quietly work a little magic to enhance the interaction Test, so much the better. One success will get the bureaucrat to at least look at the character's documents before rejecting them. Two will get a proper review. Three or more and the bureaucrat is likely to stamp the papers and move on to the next person without consulting the rulebooks. A failure gets a rejection stamp without so much as a glance through the documents, and a Rule of One result gets the guards called, as obviously this person is up to something.

High SL only helps if the character is of the proper nationality. The Baron of Colchester speaking up for someone at a British border crossing will smooth things over nicely, but will have no effect whatsoever at a Prussian border station. Having the right name to drop may compensate for this. If the Baron's sister married a Prussian noble, that creates the necessary connection across the border and may influence the clerk with the rubber stamp.

Bribery attempts must be handled with extreme caution. In some cultures, bribery is expected. Try to cross the border from the Raj into Afghanistan, and the "border fee" is paid with a wink and a nod. In others, attempted bribery is punished swiftly and harshly. Try to offer a border fee at a Prussian outpost and you'll be in irons before you know what happened. Generally, the more European and strict the legal system, the harder it is to bribe the clerk. Attempting to bribe the bureaucrat at a French or British border crossing requires a Bribery Test at a -2 Step penalty. The more remote from Europe, the easier it is to offer a bribe and have it received. British officials on the borders of the Raj can be bribed at a +1 Step bonus.

Injurious Incidents

Far too often, player characters will find themselves in hazardous situations. They must deal with falling off cliffs or escaping a burning building. Herewith are the game mechanics for those situations.

Fire

Characters occasionally find themselves in situations where they may take damage from fire. In addition to the regular occurrence of fireballs and other fire-based spells, natural disaster or industrial accidents occur more frequently than the players would like.

The size of a fire determines how much damage it causes. The **Fire Damage Table** suggests Damage Steps for fires of varying sizes. Like the **Climbing Target Table**, this list is not exhaustive; it simply serves as an example for the Gamemaster. Smaller fires, like a torch or campfire, must be touched in order to cause damage. Larger fires, like a burning house, can harm any character who happens to be near from the high temperature alone. For each combat round a character remains adjacent to such a fire, up to 2 yards away, they take damage appropriate to the fire's size. At the Gamemaster's discretion, a fire may be hot enough for the heat to harm characters even further away. For these instances, the Gamemaster reduces the fire's Damage Step by –5 for every 2 yards after the first 2 yards.

While Physical Armor normally provides protection from fire damage, the Gamemaster may decide to ignore armor protection completely if a character is exposed to especially large or fierce fires, or where they touch a fire with an unprotected body part, or in situations where the character is completely surrounded by flame. Armor does not protect against pure heat, but some magical abilities may convey an Armor Rating that protects against heat damage.

When wielded as melee weapons, unlit torches use the same Damage Step as clubs (Step 3). They become Damage Step 4 weapons when ablaze. At the Gamemaster's discretion, a Rule of One Attack test result extinguishes a lit torch.

Farley Eight-fingers wakes to find the Crate and Hoist, never the finest of lodgings, a raging inferno. The Gamemaster decides that the inn fire is already hotter than a house fire, and sets the Damage Step at 11/D10+D8. Based on the position of his room, it will take Farley four combat rounds to get out of the inn. Each round, he takes Step 11/D10+D8 damage. Ouch! Once outside, the Dodger pauses to cough out some of the smoke, and try and catch his breath, only 4 yards away from the inn. The Gamemaster decides the fire is now so hot that it causes heat damage to everyone standing too close. If Farley stood next to the fire, he would take Step 11/D10+D8 damage as before. Being 2 yards further away, this Damage Step is reduced to 6/D10 (11 – 5 = 6). He really ought to move a few more steps as soon as he can.

Fire Damage Table

Size of Fire	Damage Step
Torch	4 (touch)
Campfire	6 (touch)
Bonfire	8 (touch)
House Fire	10
Forest Fire	12

Climbing

Many situations require a character to clamber their way out of (or into) trouble. Characters may have to climb out of pits they have fallen into, or scramble down a mountainside to escape bandits, or scale a wall to launch a surprise attack. The rules for climbing apply whenever a character chooses or is forced to climb up or down a vertical surface. A character who attempts to climb a vertical surface makes a Climbing Test against a Target Number based on the type of surface. The **Climbing Target Table** suggests typical Target Numbers for the Gamemaster to use as a guide.

Climbing uses a Standard Action in every round spent climbing, but a Climbing Test is only made when the surface condition changes or at the Gamemaster's discretion. Climbing characters move up or down a number of yards equal to their Climbing rank each round (to a maximum equal to their Movement Rate in yards). When climbing on a treacherous surface, or under adverse conditions (such as in a rainstorm, or while under missile fire), the Gamemaster may decide the character climbs more slowly: at half their normal climbing rate, for instance (1 yard per 2 Climbing Ranks).

Morgan Hampton-Smythe knows the Climbing Skill at Rank 6. She can climb up or down 6 yards per round with a successful Climbing Test. As her Movement Rate is 7, her climbing speed would benefit from a Climbing Rank increase to 7, but not from an increase to 8. You can climb only so fast, no matter how good you are!

Creatures and Climbing

Some creatures climb as easily as they travel on the ground. While they have a Climbing Skill and make Climbing Tests as normal, they use the Movement Rates shown in their descriptions to determine how fast they climb.

Climbing Gear

The Target Numbers given in the **Climbing Target Table** assume the character is climbing the surface freehand, without using climbing gear. A character using ropes and pitons, or other suitable climbing gear, gains a +4 bonus.

Claude Poincare' wants to climb down a cliff to reach the entrance of a possible Anunnaki ruin. He does not possess knowledge of the Climbing Skill, so the rules for Default Skill Use apply and he uses only his Dexterity Step of 6 for his Climbing Step. If he uses rope and pitons, he gains a +4 bonus to his Climbing Tests, making the climb easier and his chances of falling less likely.

Failing a Climbing Test

If a character's Climbing Test succeeds, they are able to safely climb that surface. But what happens if the character fails? On a simple failure, the character simply does not make any progress. Unless they have some sort of preventative measure in place (roped to another character, or fastened to a piton), a character who fails a Climbing Test with a Rule of One loses their grip and plummets to the ground, taking Falling damage based on the distance fallen (see below).

Falling Damage

It is a fact of life that characters will fall, usually from high places. When a character takes a dive, use the **Falling Damage Table** to determine how much damage is received. No armor protects against falling damage. The value in parentheses in the Damage Step column is the number of Damage Tests the player makes for the character's fall.

A character who falls from a height of 110 yards makes four Step 30/D20+D12+2D10 Damage Tests to determine how much falling damage is taken, without the benefit of armor. Even if the character survives, they will probably suffer at least 4 Wounds, and are unlikely to walk away from the fall.

Climbing Target Table

Surface	Difficulty
Tree	5
Pole	7
Rocky Cliff	9
Wall	12
Sheer Surface	15

Falling Damage Table

Distance	Damage Step
2-3 yds	5
4-6 yds	10
7-10 yds	15
11-20 yds	20 (2)
21-30 yds	25 (2)
31-50 yds	25 (3)
51-100 yds	30 (3)
101-150 yds	30 (4)
151-200 yds	35 (4)
201+ yds	35 (5)

Swimming and Drowning

Characters who cannot breathe underwater will eventually drown if they become trapped beneath the surface of the water, or if they score a Rule of One result on a Swimming Test. A character can hold their breath for a number of rounds equal to their Toughness value. Some races may be semi-aquatic, with the ability to hold their breath for longer, or to breathe underwater for short periods of time. As soon as the character runs out of breath, they begin to take damage from drowning. The Gamemaster makes a Damage Test each round to determine how much damage the character takes. In the first round of drowning, the character takes Step 4 damage. Each round thereafter, the Damage Step is increased by +2 steps until the character dies, is rescued, or somehow

reaches the surface of the water. No armor protects against this damage.

Characters can try to reach the surface again by making Swimming Tests, adding the last drowning Damage Step to the Target Number.

Curses

Curses are negative magical effects attached to items and places, and harmful magical effects placed on people against their will. The effects of a curse can range from sickness to a penalty when performing actions. The Gamemaster is free to invent the specific effects of curses, but we suggest the following guidelines for creating and implementing them.

Becoming Cursed

Items and places can become cursed through various means. The most common way is through prolonged exposure to evil and corrupt magical powers. Sometimes a place becomes cursed through the efforts of a mad priest. Some cursed items result from a magical mishap by their creator. The details of how an item or place became cursed often make up an important element in the background of an adventure.

People become cursed through interaction with cursed items or places, or through having a curse put on them by a magician. The curse of a place or item may transfer to or infect the character through a single contact, through prolonged contact, or under specific conditions according to the nature of the curse. Most magicians can work magic on people against their will. This is how combat magic works – nobody really wants to be hit with a lightning bolt. Putting a long-duration or permanent harmful effect on someone, however, goes well past the exigencies of combat and into malignant workings. Laying a curse on a person requires deliberately causing them harm over a lengthy time period, the same mindset involved in torture and other cruel acts.

Characters may be affected by two different degrees of curses, minor and major.

Minor Curses

The effects of minor curses usually range from inflicting a –2 or –3 penalty to a character's Action Tests, to affecting the character in a way similar to a debilitating poison. Minor curses are most often associated with magical items rather than places. A minor curse placed by a magician is sometimes referred to as a hex. The effects of a minor curse should handicap a character, but not

threaten their life. Curses whose effects prove more than a minor handicap or irritant are considered major.

Major Curses

The effects of major curses seriously impair characters that come into contact with the cursed item or place, or have the curse laid on them by a particularly vicious enemy. For example, a major curse might affect a character by lowering one of their Attribute values for the duration of the magical effect. If the curse affects a character's Strength value, they might still be able to fight as skillfully, but their blows would no longer cause as much damage. A major curse might create a runic scar across a character's face that causes other characters to fear them.

Major curses can be associated with both items and places, and can also be placed by an enemy magician. The curse's effect lasts as long as the character remains in contact with the cursed item or place, or until the curse is lifted by another magician (see the Dispel Magic Skill in the Players Guide). Characters affected by major curses must usually appeal to a powerful magician to help free them from the curse's effects.

Curse Effects

When a character comes into contact with a cursed item or place, the Gamemaster should make a Curse Test against the character's Mystic Defense to see if the curse affects the character. The curse's Step Number depends on the type of curse: minor curses use a Step Number of 7 or 8; major curses use a Step Number from 9 to 15. If successful, the curse affects the character.

If a character is targeted by a magician as the potential victim of a curse, the process follows the usual steps for spellcasting. The magician must make their Spellcasting Test, beating the character's Mystic Defense. Two or more successes are required to place a curse on a character and keep it going for any serious length of time. The forthcoming ***Magic*** sourcebook will have more detail on how spell effects can be anchored, or made permanent, and how such effects can be ended or removed.

Though the Gamemaster may create any effect for a curse, they should be careful to make the curse work within the adventure and the campaign, and avoid making the effects of the curse overwhelmingly powerful. When designing cursed items and places, or targeting a character for a curse by a powerful enemy, the Gamemaster should remember that curses are meant to challenge and hinder the player characters, but not to halt the action, and must be carefully thought out.

HIGGINS ©97

1879 GAMEMASTER'S GUIDE

Fatigue, Illness, Injury, & Poison

Pain dies quickly, and lets her weary prisoners go; the fiercest agonies have shortest reign.
– William C. Bryant

The rules for dealing with damage in *1879* are designed to reflect significant injuries inflicted in combat with creatures or other enemies. Even without combat, however, journeying through the wilderness is often risky and arduous. Several days of relatively uneventful travel can often leave characters fatigued or injured.

Generally, minor injuries such as sprained ankles, severe blisters from ill-fitting footwear, serious sunburns, and so on inflict a –1 penalty to any Action Tests involving one appropriate Attribute of the injured character. The Gamemaster determines which Attribute is affected by which type of injury. Some common minor injuries are described below. Minor ailments such as colds and mild fevers are considered injuries for purposes of these rules. This list does not describe all possible minor injuries characters may suffer. Gamemasters can create additional injuries if desired, patterned on the following examples.

Fatigue

Characters normally travel 8 hours per day when walking or riding, but in some instances may need to travel for longer durations. A character or mount (or both) that travels for more than 8 hours per day can suffer from fatigue, depending on how hard they are pushed.

For every 2 hours (or portion thereof) beyond 8 that a character travels in a single day, that character must make a Toughness (7) Test. If the test fails, the character takes a –1 penalty to all

of their Action Tests, including further Toughness Tests to avoid fatigue, until they have food, water, and sufficient rest.

Mounts, because they are carrying the weight of the character in addition to their own, suffer more. In addition to a -1 Action Test penalty, each hour of travel beyond eight causes 3 Strain to the mount. Thus, a careless traveler can keep a mount going until it falls unconscious. Horses become more prone to spook as they grow tired. The Gamemaster should apply the **Spook Table** (pg.211) more frequently if the characters overtax their horses.

Recovering From Fatigue

To recover from fatigue, a character must rest for 4 hours for each fatigue penalty suffered. (These 4 hours are in addition to the normal 8 hours of rest that most people require each day.) During this time, characters attempting to recover from fatigue cannot take any strenuous actions, such as practicing Skills, foraging, or hunting. Brief exertion, such as quickly fighting off creatures attacking a character's camp, does not interrupt this rest unless the combat lasts for more than 15 or 20 minutes.

Illness

Disease may strike down a character at any point. Avoiding illness, treating it, and recovering from it are not the stuff of heroic tales, but having carried on and completed the mission despite suffering a bout of malaria adds to the respect shown by one's audience when the tale is told. Some consideration of illness and disease is thus worth the time and effort.

Methods of Exposure

Most reputable physicians recognize the following basic truths about diseases. First, people usually contract illnesses by eating or drinking tainted food or water or by touching someone who is infected. Less often, diseases are spread by breathing the air near an infected person or being bitten by vermin that carry infection with them. Many diseases have an affinity with dirt and filth, and so cleanliness of body and surroundings is every person's strongest weapon against infection.

Characters can catch a disease from exposure to a disease-carrying person or creature, or from disease-prone environments such as jungles and swamps. A character exposed to a disease must make a Toughness Test against the disease's Effect Step to determine if they have become infected. If successful, the character resists the disease. If the test fails, the character comes down with the illness, which begins to take effect after the onset time has expired.

Many diseases cause minor symptoms during onset that allow other characters to detect and diagnose them. However, some diseases produce no visible symptoms until the character has developed a full-blown case. After the initial infection (the first failed Toughness Test), an infected character may make up to two more Toughness Tests to throw off the disease. The first test is made when the onset time expires, the second halfway through the disease's duration. If either test succeeds, the character recovers after the duration listed in the disease description. If both tests fail, the character and their companions can only let the disease run its course and hope for the best.

If the disease is Deadly, the character may very well die at the end of the disease's duration unless they receive medical treatment.

Bad Food or Water

A character who eats bad food or drinks unsafe water may suffer from any number of maladies, from nausea to diarrhea to fever. Most often, a character who eats bad food or drinks bad water suffers a –1 penalty to their Toughness Step, though this penalty can affect a character's Strength or Perception Step instead.

Impose this type of injury only when a character eats or drinks something potentially dangerous (such as eating a poisonous animal or drinking obviously dirty water) without taking precautions. Recovering from the effects of bad food or water takes at least 2 days.

Colds / Minor Illness

Characters getting caught in a torrential downpour or other severe weather can catch colds, especially if they are ill-prepared for rain and/or travel through terrain prone to rain and snowstorms, such as the high mountain slopes. As with bad food or water, impose this injury only on characters who take few or no preventive measures when planning a trip through territory with bad weather.

Colds are debilitating. A character who catches a cold suffers a –1 penalty to any or all of their Strength, Toughness, Dexterity, or Perception Steps, at the Gamemaster's discretion. The character will take at least 5 days to recover.

Fever

Fevers often accompany colds but can also occur when a character is exposed to other diseases or when a wound becomes infected. Characters succumb to fevers most often when traveling through the jungles, where they are often bitten by disease-carrying insects. A fever makes a character light-headed and nauseous, and so an adventurer who catches a fever suffers a –1 penalty to all Action Tests based on Perception. Recovery from a fever takes at least three days.

Disease Treatments

Diseases can be treated with a variety of medicines, ranging from quinine to Saurid antibiotics, and the Physician Skill. Some diseases may be treatable by magic. On Earth, this is still a very new approach, and considered wildly unreliable. In the Saurid and Samsut lands, magical healing is considerably more advanced, but its use is restricted by need and cultural rules. Gamemasters should determine possible treatments for the diseases in their games based on the following guidelines. A disease whose effects act like a poison may be treated with remedies that work against poisons. These remedies give an infected character additional Toughness Tests or provide a bonus for these tests. Appropriate medications, such as quinine for malaria, may be applied to address a specific illness. Palliative medications do not cure the disease, but relieve the symptoms, which reduces the impact of the disease and gives the character a better chance of survival. If desired, the Gamemaster may create other remedies and treatments, such as curative treatments and magical techniques, that can completely cure a disease if applied correctly.

Specific Diseases

Many diseases exist, including some that have been known from the beginnings of history. Other illnesses have vanished, but more have emerged to take their place. The Gruv has brought a host of new diseases to afflict humankind. Thus, the diagnosis of disease remains a difficult and challenging art.

Diseases in *1879* work like poisons. Each disease has an onset time, a duration, an effect, and an Effect Step. See **Poison** for more information on these terms. The sample diseases listed below provide rules for using them. Many additional diseases exist, however, along with plagues and illnesses spawned by curses and magic gone wrong. Feel free to invent new and insidious diseases to inflict on your players. Generally speaking, a disease should provide some obstacle or limitation for a character to overcome, rather than simply laying them flat on their back for a week of game time. Playing sick for a whole game isn't much fun.

Cholera

Type: Debilitation
Onset Time: 2 to 3 days, with a minimum of 5 hours and a maximum of 5 days
Effect Step: 11
Duration: 2 to 3 days

A side effect of poor sanitation, cholera ran rampant through London and the rest of Europe in the earlier part of the century. The newspapers carried columns each week listing the death toll. Thanks to the work of Dr. John Snow and Rev. Henry Whitehead, the cause of cholera as being contaminated water, tainted with sewage, was proven to a degree sufficient to start the London Sewer project. Over the next decade, cesspools became a thing of the past, and sewage was routed off through underground pipes for treatment, while incoming drinking water was kept clear of contamination. Cholera still breaks out anywhere that sanitation becomes even the least bit shaky, remaining a problem in India and Russia, and has been diagnosed in the Gruv. Concerns have been raised that cholera could infect the native shellfish population, due to sewage runoff being dumped into the streams and rivers, but thus far nothing has been done to address this.

A bacterium that attacks the digestive tract, cholera's primary symptoms are diarrhea and frequent vomiting. Victims may quickly dehydrate and die from either fluid loss or electrolyte imbalance. The dehydration can be so pronounced as to turn the victim's skin bluish-grey, giving rise to the nickname of "blue death". The most basic treatment for cholera is rehydration, feeding the patient boiled water with salt, sugar, and mashed banana mixed in, to replace not only the fluids lost but the vital nutrients and minerals as well. As a rule, more fluid should be administered to the patient than the patient wants or the person administering it thinks they might need.

On Earth, medications that treat cholera are still in the early stages of research and testing, and are not readily available. On the Gruv, the Saurids might have something that would attack the germ, but since cholera is not native to the Gruv, they might not have identified the counter-agent yet. The Samsut, being from Earth, brought cholera with them, but were able to exterminate the disease in their new homeland in their early days through methods that might be considered excessively harsh in the modern era.

Effect: Once the victim has developed symptoms, make a Disease Effect Test against the character's Toughness Step every 4 hours for two days. If rehydration therapy is administered,

reduce the Disease Effect Step to 5. Each time the victim takes a Wound from the disease damage, apply a -1 Step penalty to their Dexterity or Strength, alternating between the two Attributes. These penalties go away at a rate of one point per day, again alternating between the Attributes, after the disease has run its course.

Lockjaw

Type: Damage
Onset Time: 2-8 days
Effect Step: 8 (see below)
Duration: 3 to 4 weeks

As of 1879, scientists in Britain, Prussia, and Italy are working to isolate the cause, the method of transmission, and possible treatments. The disease is poorly understood, but known to result from infected wounds, or wounds made by dirty or contaminated objects.

The victim suffers rigidity of the neck and jaw muscles, light sensitivity, facial spasms, and stiffness of the chest and lower leg muscles, causing a -1 Step reduction to Dexterity, Perception, and Charisma for the duration of the disease. Symptoms also include excessive sweating, fever, irritability, and loss of bowel or bladder control. Damage is caused by full-body spasms that bend the victim backward into a characteristic arc shape.

There is no cure for lockjaw. Intense sedatives, such as opium, can prevent spasms from occurring, but reduce the breathing rate. Lockjaw interferes with breathing by constricting the airway in the neck. The combination of the two can be lethal. Putting in a tracheal tube is risky, as its presence can cause spasms. Make a Physician Test against the sum of the victim's Toughness Step and the disease's current Effect Step to put in a breathing tube without causing a spasm. Magnesium supplements, given as a shot twice a day, reduce the Effect Step Test to cause spasms by -3 Steps for the day. These supplements cost £1/5 per shot and have an Availability of Unusual.

Effect: The disease initially affects the character or creature at its base Effect Step. The Effect Step increases by +1 Step every 2 days, 1d4+2 times, for a maximum of +6 Steps, then declines at the same rate until the Step is zero and the disease is over. Make an Effect Step Test against the victim's Toughness Step, daily if the Effect Step is less than double the victim's Toughness Step, twice daily if the Effect Step is double or more the victim's Toughness Step. If successful, make a Damage Test using the Effect Step, at +1 Step for each additional success. Any Wound caused by a spasm also causes a -1 Step reduction to an Attribute, chosen at random. Attribute Step loss can be recovered at a rate of one Step per week, if the victim survives the disease.

Malaria

Type: Debilitation
Onset Time: 8 to 25 days
Effect Step: 13
Duration: Chronic (see text)

Spread primarily by bites from infected mosquitoes, malaria has plagued tropical zones on Earth for generations. Since the rise of the Empire, it has become the focus of considerable effort by Empire physicians and scientists. No vaccine has yet been developed. The best prevention involves mosquito netting and repellant, insecticide, and draining the swamps. Tonic water, carbonated water with quinine in, is thought to be a preventative for malaria, but the taste is so bitter that it has to

be disguised with gin or something of equal strength, hence the popularity of the gin and tonic among the upper classes in the tropics. For the rank and file, citronella is cheaper and more easily provided, and has the effect of repelling mosquitoes in an area where a gin and tonic only treats one person.

Initially, a bout of malaria looks very much like influenza. This can cause problems, as the treatment for the two are very different. Symptoms include fever with chills and headache, vomiting, joint pain, jaundice (skin turning yellowish due to liver problems), blood in the urine, and in severe cases blindness and convulsions. The difference may be told with observation, as influenza produces a steadily rising fever with dry skin, which breaks and results in profuse sweating when the disease is nearing the end of its course, but malaria produces bouts of chills followed by fever and sweating, recurring every two to three days and lasting 6 to 10 hours each. With influenza, palliatives, rehydration, and hope are all that modern medical science has available, but with malaria, a few shots of quinine generally puts the patient right in just a few days.

Effect: Once the disease is active, make a Disease Effect Test every three days against the victim's Toughness Step. If the victim takes a Wound, they either lose one point from their Dexterity, Strength, or Toughness Attribute, or take a permanent -1 penalty to all tests involving vision. If the vision penalty accumulates to where it equals the victim's Perception Step, the character goes blind. As with **Tuberculosis**, the Attribute points may be bought back with Adventure Points using the character advancement mechanic, with recovered points not being charged against the character's lifetime advancement maximum. If the victim survives the attack, the character makes a Toughness Test against the Disease Effect Step. If this succeeds, the disease goes into remission for a period of 1 to 12 months. If the victim receives quinine for seven days straight, with the usual dose being 9 grains every eight hours, the disease is cured. Each day that the victim receives quinine in the proper dose, the Disease Effect Step is reduced by 2, with the last point being negated on the final day. If therapy is interrupted, the disease regains 2 points of its Effect Step per day.

Tuberculosis

Type: Debilitation
Onset Time: 3 to 4 weeks, although some cases lay dormant for years before becoming active
Effect Step: 7
Duration: Chronic (see text)

Better known as "consumption", tuberculosis is an infection of the lungs and respiratory tract that spreads by contact with active cases. A cough or sneeze from an infected person is enough

to transmit the disease at close range. Symptoms include fever and chills that come and go, night sweats, loss of appetite, weight loss, fatigue, and most significantly, a chronic cough, often productive, sometimes producing bloody sputum. The germ, as yet unidentified, is known to survive for weeks on a dry surface, and resist exposure to weak disinfectants. As with any disease, the use of carbolic soap and other strong cleansing agents helps prevent its spread. Doctors, nurses, and other persons treating tuberculosis patients must wear cloth masks, change their clothing afterward, and practice strict sanitary precautions, as prolonged exposure increases the chance of infection.

No cure exists on Earth for tuberculosis. Once a patient has the disease, they will have it for the remainder of their life, however long or short that may be. Patients with identified cases are encouraged, and some areas required by law, to take up residence in sanatoriums, long-term care facilities specifically designed to deal with the effects of the disease and prevent its further spread. It is unknown at this time whether the Saurids or the Samsut have encountered the disease, and whether or not they have a treatment for it.

Effect: Once the disease has become active, make a Disease Effect Test against the victim's Toughness Step once per week. If the damage causes a Wound, the victim loses one point from either their Dexterity, their Strength, or their Toughness Attribute, in rotation. If any of these Attributes drop to zero, the character dies. If the disease is cured, the victim can regain these points by buying the Attributes back up with Adventure Points, treating each one as the first increase to the Attribute for purposes of point cost. Regaining Attribute Points lost to disease does not count against the lifetime maximum for Attribute increases. To represent the respiratory effects, the character must make a Toughness Test against a 6 each time they exert themselves to the point where they are breathing hard. Failing the Test results in the character being incapacitated by a coughing fit, which can last anywhere from a few combat rounds to several minutes, depending upon how hard the character was exerting themselves.

Typhoid

Type: Debilitation
Onset Time: 1 to 3 weeks
Effect Step: Variable (see text)
Duration: 4 weeks

Like cholera, typhoid is transmitted through poor sanitation practices, especially involving the treatment and disposal of sewage. Flies that land on sewage and then land on people can sometimes transmit the disease, with the chance rising based on the level of sanitation and the number of flies encountered. Considerable work is being done in England and Prussia to identify the infectious agent, and perhaps develop a vaccine against it, but while great progress has been made, the goal has not yet been reached.

Typhoid runs a four week course, during which oral rehydration therapy, as used with cholera, vastly improves the patient's chances of survival. In the first week, the patient becomes listless, suffering from headache and a cough, and a fever that sometimes causes heart palpitations. A quarter of patients will suffer nosebleeds or abdominal cramps. In the second week, the fever soars, causing frequent heart palpitations, delirium, and a patchy rash on the lower chest and abdomen. The abdomen becomes distended, and the patient suffers frequent bouts of diarrhea. In the third week, bloody diarrhea develops, along with mental disturbances due to nerve damage in the spine and brain. Damage may occur to the heart, bones, and liver or gall bladder, resulting in permanent impairment. In the fourth week, the symptoms begin to subside, with the fever going first.

Effect: Twice each week, make a Disease Effect Test against the victim's Toughness Step. In the first week, the Disease Effect Step is 5. In the second week, the Effect Step rises to 9. In the third week, the Effect Step rises to 13. In the fourth week, the Effect Step drops to 7. Rehydration therapy reduces the Effect Step by 5. If at any point, the patient suffers a Wound from the disease, the victim loses one point from their Perception, Dexterity, Strength, or Toughness Attribute, in rotation. See **Tuberculosis** for further details on point loss and regain.

Injury

Besides Damage Points and Wounds, characters may suffer a variety of injuries with specialized causes and effects.

Burns

Burns are typically difficult to treat, prone to infection, and slow to heal completely. Minor burns (heat-exposure damage below a character's Wound Threshold) are considered injuries and impose a –1 penalty to the afflicted character's Strength Tests.

At the Gamemaster's discretion, a character may also receive a Wound per standard rules if they suffer fire or heat-related damage that exceeds their Wound Threshold. Burn Wounds heal twice as slowly as normal Wounds (requiring two Recovery Tests, or the equivalent in healing magic) and must be carefully treated with clean dressings and salves to keep them from becoming infected.

Severe Blisters

Characters with inadequate or improper footwear often blister their feet. If left unattended, blisters can become infected. This severely limits a character's mobility, not to mention hurting a lot! Blisters impose a –1 penalty to all Action Tests based on an affected character's Dexterity and take at least 1 day to heal.

Strained Arm or Wrist Muscle

Much like a sprained ankle, a strained arm or wrist muscle can occur when a character missteps and falls or over-exerts themselves. In game terms, this kind of strain occurs when a character rolls a Rule of One result on a Strength Test to lift a heavy object, or while performing some other Strength Test where the possibility of injury exists, such as breaking down doors, raising fallen tree trunks, lifting (or trying to lift) an unconscious or semi-conscious troll, and so on. A character who strains a muscle suffers a –1 penalty to all Action Tests based on Strength. The muscle takes at least 2 days to heal.

Sprained Ankle

Characters can sprain an ankle when traveling in rough or rocky terrain. To cross a stretch of rough ground, the Gamemaster may have all the characters make Dexterity Tests against a Target

Number between 4 and 6, depending on the specific terrain. Characters whose Tests fail sprain their ankles and receive a –1 penalty to all Action Tests based on Dexterity. A sprained ankle takes at least 2 days to heal.

Sunburn

Characters who spend a lot of time in the sun without wearing protective clothing or using the proper lotions, or both, can get badly sunburned. A badly sunburned character suffers a –1 penalty to all Action Tests based on Strength or Toughness, at the Gamemaster's discretion. Extremely severe sunburns can also result in heat stroke (see **Heat Exposure**) and Burn injuries. A sunburn takes at least 2 days to heal.

Recovering From Injuries

Characters can heal a minor injury with one night's uninterrupted sleep (8 hours) and a Recovery Test. Before healing, however, the character must wait the minimum number of days listed in the appropriate injury description. For example, a character who suffers a sprained ankle must wait at least 2 days before making a Recovery Test to heal it.

After the required sleep, a character can make a Recovery Test and heal one injury. The character must spend a Recovery Test to heal the injury even if they have taken no other damage. Injuries do not affect the healing of Wounds, nor do Wounds prevent the healing of injuries.

Characters using magical or technological healing aids need not wait to sleep before healing themselves. The healing aids speed up the healing process. Unless noted otherwise, a character can automatically heal one injury for each booster or healing potion used. Specialized medical devices will heal at rates given in their descriptions. Generally, Weird Science medical devices will use the Heal spell as their mechanic.

Poison

Many creatures in the Gruv and on Earth use poisonous bite and sting attacks. Those of less honor, who do not follow the Gentlemen's Code, sometimes use poison on their weapons. The game mechanics of poison depend on three parameters: effect, onset time, and duration.

Effect

Poisons can have a number of different effects. Most commonly, the poison directly inflicts damage on its victim. Other poisons paralyze, debilitate, or instantly kill their victims. Most poisons have an Effect Step. A poison's Step Number is used for Effect Tests, and is also used as the Target Number for the poison to resist treatment by healing Skills, medication such as antivenin and antitoxin, or magic. When poison affects a character, either by injection, ingestion, or contact, the Gamemaster makes an Effect Test for the poison and interprets the test result according to the poison's type of Effect: paralysis, debilitation, damage, or instant death.

Paralysis

For a character affected by paralytic poison, compare the poison's Effect Test result against the victim's Mystic Defense. One success causes a –1 penalty to the victim's Action Tests for the poison's duration. A second success causes a –2 penalty to the victim's Action Tests for the poison's duration. Three or more paralyzes the victim for a number of hours equal to the Test Result (or longer or shorter as the Gamemaster wishes).

Debilitation

Debilitating poisons create more severe adverse effects than paralytic poisons. For a character affected by a debilitating poison, make an Effect Test for the poison against the victim's Toughness Step. If successful, the victim suffers a –1 penalty to their Action Tests for each success achieved for a number of days equal to the Test Result. The Gamemaster may lengthen or shorten the duration.

Damage

Most poisons used cause injury rather than creating a disadvantage for the affected character. The Effect Test result is the number of Damage Points the victim takes. Armor does not usually provide protection against poison, though the Gamemaster may allow Mystic Armor to protect against certain magical poisons.

Death

Poisons that cause instant death must be handled in a different way to other toxins. In this case, the Toughness Test a character makes to resist a poison determines whether the character lives or dies, rather than determining how severely the poison affects them. For death poisons, the character makes a Toughness Test against the poison's Effect Step.

If the test fails, the character dies. With a single success, they remain alive, but take 2 Wounds from the poison. With two successes, the character takes 1 Wound, but otherwise remains unharmed. If the character gets three or more successes, the poison does not affect them.

Some poisons that cause death take a long time to kill their victims. A character affected by this type of poison begins to die when they fail their Toughness Test (as described above). Each day the character becomes weaker and weaker, suffering from effects similar to a debilitating poison, until they are dead. Poisons that cause instant death should be very rare.

Onset Time

The onset time describes how quickly a poison affects a character. Most poisons affect the character immediately upon exposure. Other poisons take longer to affect a character. For example, many debilitating poisons have onset times as long as several days.

Duration

Some poisons affect characters over a prolonged period, referred to as the poison's duration. For example, many poisons that cause damage affect a character for a number of combat rounds. A debilitating poison might affect a character once a week for 4 weeks. Though most death poisons affect characters immediately, some death poisons can be used to slowly kill the victim over several days. The description of the poison should include each type's typical duration.

Methods of Exposure

Characters can be exposed to poison in a variety of ways. The most common is through the bite or sting of a poisonous creature. Weapons covered in poison must normally cause a Wound for the poison to take effect. Some poisons work only when ingested. The poison must be mixed with a person's food or drink in order to affect them. Other poisons work on contact, taking effect when a character touches the toxin.

The **Poison Table** suggests standard Step Numbers, onset times, and durations. This list is not exhaustive. It only gives the Gamemaster a guideline for dealing with poison in the game.

Poison Resistance Tests

When a poison enters a character's body, the character must make a Toughness Test against the Effect Step of the poison. If successful, the character has resisted the effects. If the character fails the test, the character suffers the effects of the poison. The Gamemaster makes an Effect Test for the poison, interpreting the results according to the poison effect types described below.

If a poison affects a character for more than a round, they may make a Toughness Test each round to resist the effects of the poison. Poisons that affect a character for a number of hours or days allow a character to make a Toughness Test each hour or day, respectively. As soon as the character makes a successful Toughness Test, the poison no longer affects them.

Antidotes, Antivenin, and Poultices

Fortunately for the characters, antidotes exist that counter the effects of many poisons. Characters usually use one of three types of concoctions to counter poisons: antidotes, antivenin and poultices. Antidotes are medications that halt the effects of a specific type of poison, such as cyanide or hyoscyamine. Antivenin medications work against specific animal or insect poisons, such as snake venom or scorpion venom. Poultices work as salves to counter the effects of several types of poisons. See the **Goods and Services** chapter in the ***1879 Players Guide*** for the effects of specific antidotes, antivenin, and poultices.

Poison Table

Poison Type	Step Number	Onset Time	Duration
Damage	5-9	Instant/1-2 Days	1-6 Rounds
Debilitation	5-7	Instant	Effect Test Days
Paralysis	5-9	Instant	Effect Test Hours
Death	10-13	Instant/1-2 Days	Instant

Prostheses

Cost and game statistics of powered prostheses are largely left up to the Gamemaster, as each one will be a one-off device custom built for the individual. The following text provides some guidance as to how to design powered prostheses.

The following is an abridged excerpt from Mr. Edward "Ned" Daubernon's "Guide to the Construction of Powered Prostheses". While Mr. Daubernon has proven himself to be quite skilled in the field of mechanical engineering, the reader should keep his profession in mind as they make their way through this piece. Gifted as he is with construction and crafting in regards to metal and machines, the same skills do not translate into a facility with words and language. I have annotated where it will be most useful without detracting from the value of the existing information.

– Dr. Genevieve Mansfield, M.D.

War always has been quite the dangerous proposition. Blokes charging into battle trying to hack each other to pieces are always going to end up with a few that can't quite finish the job, which means you're going to have lads coming home with pieces left behind. This, my mechanically minded friend, is where you come in. We fine folks have got much farther ahead from the old days where your only option to replace a limb was to put a stick at the end and send the patient hobbling on his way. Nay, we've come a long way in making machines and power, and we're at a glorious age where we can not only make a limb move, but make it sized so that it can closely fit the vacancy left behind. Now, ol' Mother Nature has had a lot longer to figure out her work, and we're not at the same level she is just yet, but we're catching up right quick, and it'll only be a matter of time before we're teaching her a thing or two.

Build to Fit the Need, Don't Make the Need Fit the Build

Now, first thing you've got to remember about building a limb is that each one is different. You've got different folks that do different things getting banged up in different ways. You couldn't lop off the flesh and bone arm of an accountant, stick it on a blacksmith, and expect him to work metal the same. Oh, his mind will know his trade well enough, no disrespect to him there, but that arm of his has had just as many years as his mind working the forge. It's shaped to it, suited for it, and even among other blacksmiths, there's no other person in the world that's got an arm exactly like it. Same goes for building a replacement. You've got to bear in mind what your customer is going to be using your limb for while you're building it, and make sure your work will fill their need.

Crude as his example is here, Mr. Daubernon is correct. A replacement limb must not only be crafted to fit the injury, but also the unique needs of the patient. Restoring the patient to as close to their normal function as possible is the heart of the matter, which those in this line of work must not forget.
– Dr. Mansfield

Common Ground

Even though every limb is going to be different, there are a few things that are going to make them similar. Just like all custom machinery, you're going to have a common framework to base each one on. Say I'm working for a lumber mill and they need me to build a powered saw to cut the logs and a powered fan to blow the sawdust away. Both machines are going to have different tolerances, speeds, sizes, and so on, but the basic build is the same – a flywheel with a power source being used to spin something around.

Sticking It to Them

First thing to consider is how the limb is going to attach to the rest of the body. No limb is going to fit absolutely one hundred percent perfectly all the time without ever needing repair. At some point, it's going to need to come off and go back on. If you're still dealing with one of the old style simple replacements, you can get away with a padded cup for the stump and straps or tension to hold it on. When you start dealing with the powered stuff, however, there's a lot more weight to consider. To deal with this, you're going to need a surgeon to put a cap on the stump that attaches to the bone that's left. It sounds grisly to be sure, but metal is a lot heavier than flesh, and you've got to have enough structure to support it.

A mechanic would do well to bear in mind that when their machine will be interfacing directly with bone, proper precautions are necessary for patient comfort and safety. Adequate shock absorption is vital to preventing pain or bone breakage, and vibration must be kept to a minimum. I have had numerous amputee patients come to me with severe pain caused by sub par construction of their replacement limb, each incurring a great deal of cost bringing their prostheses up to acceptable standards.
– Dr. Mansfield

Control

The cap is where you're going to attach the replacement, and is usually where your controls are going to mount. The controls going to the body will have to be done by the surgeon, though you'll need to be involved to know what's going where and how many controls you have to work with. Figure out ahead of time with the patient what muscles they can move individually, bearing in mind that they will get weaker over time if they aren't worked. The surgeon will then attach end points for control cables, which will run down to levers mounted on the side of the cap. The levers are where you attach the control cables from the replacement you build. Make sure you map out ahead of time which muscles can do what, since you're going to need to gear the levers to the right range for your controls.

More likely, the surgeon will decide which muscle groups to map to the controls. A surgeon will have much more knowledge of what muscles control which areas of the body than an engineer, and would thus be better suited to determining what will feel most natural for the patient.
– Dr. Mansfield

Power

Of course, we're mostly here to talk about steam powered limbs. They're the most interesting, the most functional, and the most challenging. Before we get in to them full on, however, I do want to mention clockwork power.

Clockwork just isn't as capable as steam, which means it's going to be a lot more limited in what you'll build with it. It's going to be run by a wound spring, which means it can really only provide power in one direction. You're going to release the wound tension slowly with gears, and wind the spring up again when it gets low. It works great for feet, which aren't too interesting either, and it can work for hands if you only want to make it grab and let go. The only real advantage it has over steam is that it's lighter and simpler, but if you don't have anything too complicated to replace, why make it harder on yourself?

Despite Mr. Daubernon's disinterest, clockwork is a highly viable option if it can be implemented to suit a patient's needs. In addition to being lighter and smaller in bulk, it's much less expensive, especially in long term costs. With clever engineering, clockwork mechanisms can be made to provide effort on all three axes, a surprising omission on the part of such an otherwise competent engineer. As has been noted, the patient's needs must come above all other concerns, including one's own preferences.
– Dr. Mansfield

Steam power has a lot more going for it. It runs longer, produces better ranges of power, and has a greater variety of things it can power. In the case for limbs, you're most likely going to be using a micro steam engine to power an air pump, which is then going to charge one or more pressure tanks. The air pressure is then going to be used to move pistons on the limb, which causes the various bits to move around. You can also use the air power to run a rotary motor in order to drive a cable based system. I myself most often use this for knees, but I've seen some of my fellows

use it for fingers as well. It tends not to work for elbows unless you keep the hand from rotating, as that will foul up where the cables align.

Steam power does have some concerns to work out. Primarily, you've got to have somewhere to vent the heat. This is most often done with an exhaust that is pointed away from the body, and fitting the water reservoir with aluminium fins to pull the heat out away from any fleshy bits so it can vent off safely. If you return your hot steam to the reservoir, you also have to worry about the tank pressure getting too high. Adding a condenser helps with this, but then you've got extra bulk to manage in the power train. Trying to run a cooling system for the tank just adds more weight, so the usual option is to vent the extra steam through a blast pipe into the stack. That causes your engine to go through its water supply faster, so your patient is going to have to top off regularly. With the standard micro steam engine, the fuel is powdered coke, which means you have to get the engine going before it will run the blower to supply the fuel and power itself. You either need a secondary heat source to get the steam started, usually another burner fueled by paraffin, or a hand crank for the coke blower. If you aren't familiar with the micro steam engine, read up on it further in Symonds' "*Practical Manual of Boilerless Steam Engines*" before using it in your own limbs.

One other power source that I should make mention of, though again I don't put much stock in it. The Prussians, and a couple people over in the Union, have been putting a lot of work into electricity, making lights and motors and magnets with it. Electricity itself doesn't have exhaust or heat to worry about, so I can see why it looks so attractive. The trouble is trying to bring the power along with you. They do have storage for it, but the batteries don't hold the kind of power

you would need for moving parts of a limb around, at least not very long. I suppose you could use a steam powered generator, but then you're still going to have to deal with the by products of steam, so what's the point? Maybe they'll figure out how to make electric gadgets stronger at some point and use them to replace air pressure for the pistons, but I don't see steam being replaced any time soon.

A point that Mr. Daubernon fails to make here is the inherent risk in using electricity with this design. Interfacing the control and structure cap directly to the body means that if the electrical system has a short, the patient will be shocked directly. Material advancements will need to be made to ensure protection against this type of failure.
– Dr. Mansfield

Where's the Cut?

When you try to lump different replacement limbs together, the most obvious way to group it is going to be arms and legs. You can break it up a little further and still have it make sense by looking at replacements above and below the knee or elbow. You're going to have to change the structure of the limb you build by how much you have to replace, but the joints are the most complicated parts, and it makes the most sense to divide the instructions there.

Legs

One of the key points to remember with legs is that they're going to have the most weight to support, not just themselves, but the rest of the body too. They're easier to make since they don't move in as many ways, but you've got to make sure your structure is strong. While this means they'll be heavier, the good news for the patient is that a powered leg is going to support its own weight, so they won't feel how heavy it is once it's steamed up and going.

Below the Knee

These are the replacements that are least likely to get power. If the knee is still there, the only joint lost is the ankle, and it's possible to walk without a foot that can move, though running is another matter. As I made mention of earlier, the best way to add power here is with a clockwork foot. Here, the spring is going to provide pressure to the foot in order to make it push off like a springboard, similar to a normal running foot. When the foot is in the air, the spring hyper extends it just a bit and pushes the lock past a ratcheting gear. The lock then slips in to the next ratchet position, which pulls the foot up, ready to hit the ground for the next pace. Most important for feet on replacements of any scale is shock absorption. Even the standard peg leg can be improved by putting a properly measured absorbing spring into the limb. This will reduce the wear on the user and keep the structure of the leg intact.

Above the Knee

Generally, once you get above the knee, you'll have to use power to replace the back and forth swing of the knee and to keep support of the body at rest. Regardless of where the cut is, once you get above the knee, you will need to include powered pistons going up to the hip in order to support the weight of the system. This will unfortunately require additional control cables to be

established, leaving fewer available for other controls. Very rarely you can get away with skipping this, but the patient will need to have exceptional strength.

> *Also remember that muscles will atrophy over time if they are not exercised. Even if a patient has the strength to support their weight and move the heavy metal replacement leg, depending on the pattern of muscle use, they may not be able to in the future. Those that have succumbed to Looking Glass Fever and become trolls or snarks have a decent chance at retaining the necessary strength, but most patients will eventually require extra support, such as a cane or crutch.*
> *– Dr. Mansfield*

The lower you go on the leg, the more motion it undergoes when walking. You will want to keep the water reservoir as high as possible to keep the fluid from unbalancing the leg, since it will keep sloshing inside the tank. This will also give you a gravity assist for the water flowing into the engine, but you can't scrimp on your pump because of it. People have got the tendency to do things you don't expect, like hang upside down or climb a mountain or such-like. The pump has to deliver water at the right pressure to the coil all the time or the engine can seize or melt. The coke fuel doesn't shift around as much in its container as water, so placing it lower on the leg will not have a serious impact on balance.

The engine itself should always be in the lower section of the leg, for several reasons. First, it should be placed in with the suspension system, which will keep the engine itself steady and protect the limb and the body from its vibration. Secondly, you will want to keep the fire as far away from the contact point as possible to guard against any stray heat that doesn't get handled by the stack or fins. Third, this will have the most consistent volume available, as the size of the engine isn't going to vary as much as the size of the patient.

Your next largest piece is going to be the water reservoir. There is a fine balance here. You want to make sure the patient will be able to carry enough water so that they don't have to top off constantly, but not so much that it increases the weight more than necessary. The ideal will again depend on the patient's tolerance, but you should generally strive for a reservoir that only needs topping off once per day.

The remaining components are going to be adjustable depending on the size and shape of replacement you need to build. You will need to make sure your frame can support the weight of the system and the body, with enough tolerance to handle expected shocks, such as a fall or being struck. If your patient will be in combat, you'll need to account for those hazards, and make sure to protect your components and joints. You'll need tanks to store pressurized air to work the pistons. Air is light and will change shape as needed, so you can get away with breaking up the storage into multiple tanks. Using multiple air tanks will also give you some amount of backup in case of a failure, but remember that you will need to include tubing and emergency releases for each tank. Split the pressure storage into only as many as absolutely necessary, and no more. My preference is to put them mostly on the outside of the limb, and shape them so they look as close to a normal leg as possible. This also gives some extra protection against wear and tear. An air tank can handle a dent without losing much function. A piston or an engine will be knocked out of alignment and rendered useless.

Arms

Arms don't have to worry about supporting the weight of the body, but they have their own engineering challenges. Arms and, most specifically, hands, will require the most control modules, due to the higher number of points of articulation. Even with just a hand replacement, it is difficult to set up enough control modules to control a full five fingers, and even more so the further up the arm you go. Arms are also much smaller than legs and often go through many more degrees of motion, making it harder to fit in an engine and give it the stable environment it needs. It is often far better, therefore, to externalize the power, generally on a backpack.

Including the engine on the arm will also increase the weight borne on the patient's stump, which generally causes the prosthetic to be too painful to use. Again, those Boojums who have become trolls or snarks can tolerate the weight, but very few others can.
– Dr. Mansfield

Now, in your design, you can include more systems on the arm as you have space. Personally, I prefer to put the majority on the backpack. Water reservoir above the engine, again for gravity feed, fuel alongside it, and stack, blast pipe, and fins going out the back away from the body. Aside from keeping the weight down, it also means that I can standardize my pack design and build them ahead of time, leaving me more time to customize the arm. Again, I tend to leave the air tanks for last, and mold them on the outside of the arm to give it the right shape.

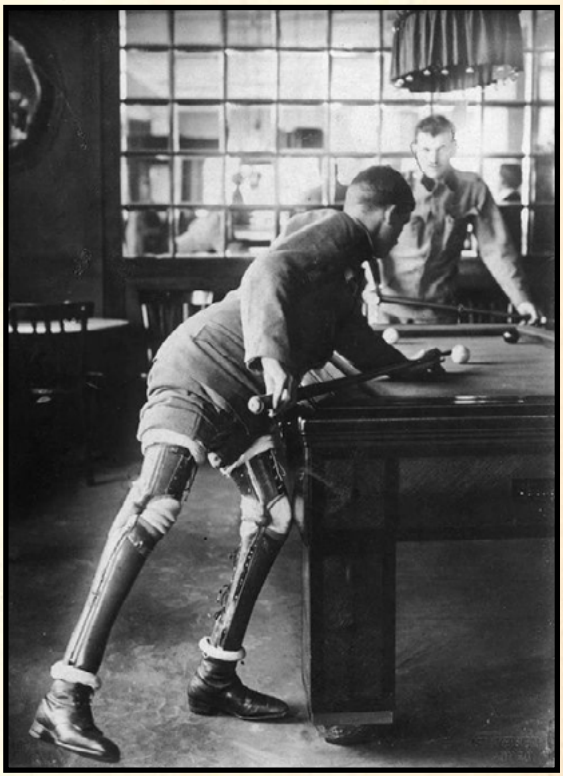
Below the Elbow

While feet are often easier to make without power, hands have a lot of motion to them, and are arguably what benefit most from getting power. Hands are also without a doubt the most complicated limbs to make. They require the most points of articulation with the smallest area to work in. Hands are one of the areas where Mother Nature definitely has the edge in design, and we've got a hard time ahead trying to match her. The end result will depend on how many control modules you can have and what your patient needs, but most often they will do better having fewer digits with higher degrees of control rather than five with less. I find three is usually a good number; two fingers and one thumb. This allows the user to handle most objects without special modification, while still making the control set up manageable.

Less thought is often given to the wrist and forearm. Trying to include rotation here can weaken the end points that secure the hand, leaving it vulnerable to breaking off with a heavy blow. Wrists and hands tend to take a lot of abuse, especially for those in combat. If there is enough flexibility left to the arm for the patient to get by, whether it's natural or if you're replacing it, try to leave the wrist more rigid to keep it strong. If you are dealing with someone that needs the flexibility restored, make sure to either protect and reinforce your joints, or include a failure point that is easy and cheap to replace and repair, and won't damage the rest of the unit when it breaks

Above the Elbow

Unlike legs, additional support pistons are to be avoided on arms if at all possible. An arm does not need as much structure as a leg, since it does not have to support as much internal weight with the power externalized, nor does it have to support the rest of the body. Lighter is better with arms, and the fewer parts you can get away with, the better. Shoulders are particularly difficult to get the same function out of without having to make a lot more difficult attachments. Below the



shoulder, you have the ribs to press on, and individually they are fairly weak. If you do have to press against ribs, you'll want to make a wide, padded surface to push against all of them. Above the shoulder, you have the collar bone and the shoulder blades for bones to attach to, neither of which are particularly strong. Very often if you have to do a full shoulder replacement, you'll need to include straps that extend around the neck and opposite ribs to take some of the weight. This can result in painful pressure points, which is all the more reason to keep the arm as light as possible.

For the elbow itself, trying to match the same flexibility nature has made is also difficult, but generally not necessary. Pistons have a minimum distance they can contract before the end point meets with the housing, and a maximum it can extend without needing to shift where the end points attach. You can push the angles it can flex through towards one extreme or the other, but you will still be limited when compared to a natural elbow. Hyper extending won't be possible without a bent end piston, in which case you will further limit the minimum range it can contract, and the shorter piston needed to provide a closer inward flex will not be able to extend as far. It is possible to extend the range with a different control system, such as one that is cable based. However, these will not have as much strength as a piston, and will need protection to make sure the cable isn't damaged. If you need to build a more flexible and delicate arm though, you do have that option.

Game Statistics

For game purposes, prosthetic limbs provide a method of reflecting the dangerous elements of the world of *1879* in a palpable way. Losing a limb is a severe trauma to the body and the mind, and will have a significant impact on the person. Powered prosthetic limbs show the significant advancement of technology in the game world, including advances in medicine, mechanics, engineering, and materials.

For role playing purposes, a prosthetic limb not only fills in a character's background, it alters the focus of the character's attributes. Prosthetic limbs cost mobility, replacing it with increased strength and endurance. While the overall attribute adjustments may be positive for a character, there are significant drawbacks. The character must have regular access to water and fuel, and needs to do regular maintenance to keep the limb functioning. Obtaining and carrying tools and supplies creates significant cost and inconvenience. In addition, there is a lot of character development involved in

having a prosthetic limb. The character underwent the trauma of losing the original limb, then had to relearn how to perform basic tasks with the replacement, and struggle with its limitations and the social stigma around it. In short, players should consider all of this before deciding to equip a character with a prosthetic limb, and both players and Gamemaster are encouraged to play out these difficulties.

Prosthetic limbs have the same Physical Defense as the person wearing them. They have Physical Armor, but no Mystic Armor, relying on the natural Mystic Armor of the wearer, and a Barrier Rating. Weight assumes the limb is fully loaded with all necessary supplies, such as fuel, water, and lubricants.

Fuel Requirements

Powered limbs need fuel, water, and regular maintenance. Most limbs are built with enough of a reserve for standard continuous operation for 20 hours, allowing for some fluctuation and the occasional long day. Legs require approximately 0.7 pounds of coke per mile. On average, people walk about five miles per day. The prosthetic leg therefore has an average daily use of 3.5 to 4 pounds of coke. The Gamemaster should adjust these numbers according to character activities. Arms operate at a similar efficiency, though due to the lesser amount of motion have an average daily use of about 2.5 to 3 pounds. Hands and forearms use much less power, but the engine capacity generally isn't reduced. Instead, these can go up to three times longer between refueling.

These numbers represent the average expected consumption for standard prosthetic equipment. The actual amount of fuel consumed will depend upon usage and any special modifications to the equipment. The Gamemaster will provide the final ruling on how much fuel is consumed in a given situation.

Maintenance

Prosthetic limbs require regular maintenance. Both clockwork and steam powered limbs should be cleaned and lubricated at least once per day, more often under adverse conditions and heavy usage. This does not require any special Skills or Tests, only the time to complete, which is generally about half an hour. The training required to do the maintenance is part of the rehabilitation process.

Steam powered limbs require a routine checkup at least once per month in a well equipped workshop. This includes purging the water tank and removing sediment, adjusting the size and controls on the limb for any growth changes in the user, tightening loose connections, clearing build up in the stack, and a thorough lubrication and cleaning. A user can perform maintenance on their own limb if they have the Mechanic Skill. A standard checkup requires a Mechanic (10) Test and takes at least two hours to complete. The Gamemaster may decide increase the Target Number if the prosthesis has been through heavier than standard use or hazardous conditions.

If daily and monthly maintenance are not done, the limb either loses function or stops functioning entirely. Penalties are noted in the limb descriptions. A limb that stops functioning will no longer support its own weight, which must then be borne by the character.

Leg Prostheses

Below the Knee

Prostheses for limb losses below the knee are rarely powered by steam. There is not sufficient space to house an engine below the knee on most people, and the joint for the foot is simple enough to be powered by clockwork alone. A clockwork below-the-knee prosthesis is powered by a large spring with a hinged pendulum mechanism. When the user shifts their weight forward to walk, the pendulum disengages a ratchet gear, and the spring pushes the foot downward, propelling the user forward. At the end of its motion, the ratchet gear re-engages and the foot returns to its resting position. This does not add to the user's attributes, but does allow them to retain their standard mobility. They can run, jump, and move with the same Tests as they would naturally. The spring needs to be rewound regularly, requiring a Sustained Action for one combat round. During a chase on foot, combat, or a similarly dramatic task, if the player gets a Rule of One result on any Dexterity or movement-based Test, the Gamemaster may rule that the spring has lost power and needs to be rewound to regain function. Loss of power halves the user's movement rate, and they suffer a -2 Step penalty to any Dexterity based Tests that involve the legs.

If a player chooses to use a steam powered limb for a prosthesis below the knee, which can only be done for a troll due to size considerations, include the appropriate fuel consumption and maintenance costs, and note that the limb is heavier. If a below the knee prosthesis is not maintained, it seizes and incurs the same penalty as if it had lost power until repaired.

Armor Rating: 6
Barrier Rating: 5
Weight: 8 lbs clockwork, 12 lbs steam

Above the Knee

Limbs to replace amputations above the knee are almost always steam powered. If the character has a Strength attribute of 12 or less, their prosthesis will require supporting pistons going up to the hip, regardless of where the amputation is. Characters with a Strength attribute of 13 or higher may choose to leave the supporting pistons out of the design. This difference does not have an effect on game mechanics, being solely a role-playing choice.

A character with an above the knee prosthesis takes a -1 penalty to their movement rate and a -2 Step penalty to their Initiative.

For the loss of speed, a powered leg adds significant strength. The character gains a +4 step bonus to any Strength-based Tests involving the leg, including the damage Test for kick attacks. With the engine providing some of the energy required for movement, the character can walk for an extra two hours per day without becoming fatigued. The prosthesis has its own Barrier Rating and Armor Rating. Damage to the prosthesis does not go against the character's Death or Unconsciousness Ratings.

If not properly maintained, the leg can continue to function for a brief time before it ceases to function. After three days without daily maintenance, the character loses the Strength bonus, but can continue to move at the same rate, and the leg will support its own weight. After two weeks of missed daily maintenance, or two weeks after monthly maintenance was due but not done, the leg falls into disrepair. The character's movement rate drops to 1. They suffer a -5 Step penalty to Initiative, and a -3 penalty to Physical Defense due to lack of mobility. In addition, the leg will no longer support its own weight, which must then be borne by the character. These penalties also

apply if the leg stops working due to damage or loss of power.

Armor Rating: 7
Barrier Rating: 6
Weight: 30 lbs

Arm Prostheses

Clockwork Hand

This is a mitten configuration powered by a spring, and only capable of gripping and releasing. The character can use most simple-grip items and two-handed items without special modification, but suffers a -2 Step penalty due to the lack of Dexterity in the hand. A similar -2 Step penalty applies to actions requiring two hands. Regardless of the player's Strength, the hand on its own has a Strength value fixed at 8 (Step 4).

Armor Rating: 4
Barrier Rating: 3
Weight: 2 lbs

Steam Powered Hand

A steam powered hand requires its power to be mounted elsewhere on the body, as there is not sufficient room for the necessary components. Generally, the power supply is carried in a backpack, with pneumatic and/or hydraulic lines run along the arm to supply power.

The character suffers a -1 Step penalty to any Dexterity-based tests involving the hand. They receive a +2 Step bonus to any Strength-based tests involving the hand. The hand provides a +1 bonus to Physical Defense, as it can be used to deflect blows like a buckler. If the character uses a shield with the prosthetic hand, the bonus does not apply.

If the prosthesis includes the forearm, the Dexterity penalty increases to -2 Steps due to the lack of flexibility at the wrist. The Physical Defense bonus increases to +2.

If daily or monthly maintenance is not done, the hand operates at reduced capacity for one week before failing completely. The Dexterity penalty increases by 1 Step, and the Strength bonus is lost. When power is lost or the hand stops working due to lack of maintenance or damage, the character loses all function of the hand. They receive no bonuses, take no penalties, and cannot make Dexterity-based Tests with the hand.

Armor Rating: 4
Barrier Rating: 3
Weight: 15 lbs (2 in hand, rest in backpack)

Steam Powered Arm

Like the powered leg, a steam powered arm may require additional supports to handle the increased weight. Characters with a Strength attribute of 9 or less will need to incorporate supporting pistons into the design. Characters with a Strength attribute of 10 or more may choose to not use them. Again like the leg, this does not affect statistics, but is solely a role-playing element.

Only trolls, snarks, and Saurid Hulks have arms thick enough to have enough space to include the engine in the replacement. To do so, they must have a Strength attribute of 16 or higher, and must include supporting pistons in the design to stabilize the engine. This does not affect the statistics, but does allow them to use the arm without having to wear an external power supply.

Full arm replacements have much less muscle tissue available for control. Characters take a -3 Step penalty to all Dexterity-based Tests involving the arm. The arm provides greater Strength, providing a +4 bonus to Strength Tests made with the arm. Characters also gain a +2 bonus to Physical Defense and a +1 bonus to Physical Armor. If the character uses a shield, they can use either the shield's bonus or the arm's bonus to Physical Defense, but not both. The arm supports some of its own weight, reducing the effective carry weight by half.

If daily or monthly maintenance is not done, the arm functions at reduced capacity for one week before falling to disrepair. The character loses the Strength and Physical Defense bonuses, and the Dexterity penalty increases by 1 Step. When power is lost or the arm stops working due to lack of maintenance or damage, it ceases to function. The character receives no bonuses, cannot make Dexterity-based Tests with the arm, and must bear the full weight of the arm.

Armor Rating: 6
Barrier Rating: 5
Weight: 25 lbs (minimum 8 in arm, rest in backpack if used)

A.L.
ASHBAUGH
.15

1879 GAMEMASTER'S GUIDE

Steam Powered

I am opposed to the laying down of rules or conditions to be observed in the construction of bridges lest the progress of improvement tomorrow might be embarrassed or shackled by recording or registering as law the prejudices or errors of today.
– Isambard Kingdom Brunel

One of the most fundamental aspects of the steampunk genre, inherent in its very name, is the use of steam as a motive power. We're not talking about the vapor you get from a teakettle. To move a locomotive, you need superheated "dry" steam, at a minimum pressure of eighty pounds per square inch. That's hot enough to take the skin right off in a scalding injury, and enough pressure to put a rivet through your skull if the boiler lets go. We're talking about serious industrial steam, the kind that pushes three tons of water up a mineshaft with each stroke of the pump.

This chapter covers the basic concepts of steam power, gets into the alternatives and details, and goes on to talk about applications. If you're playing a Brassman or a Scientist or an Engineer, you'll need to know something about this just to be able to speak knowledgeably in character. Learn a little more about it, and you'll be able to design new equipment for your character, your party, and the game world in general.

Why Steam?

It all comes down to translating heat into motion. Fire has been humanity's most portable form of energy since before recorded history. The trick was to figure out how to make it do work.

Other power sources from the natural world had already been harnessed. Wind drives mills and ships, but it's unpredictable. The Dutch built their windmills on circular tracks, so they could turn the entire building round to face the sails into the wind. Sailors use tacking, a zigzag course back and forth across the wind, in order to move in a direction other than the one the wind is going. No wind at all, however, means these tricks become useless. All the clever engineering in the world cannot move a sailing ship if the wind isn't blowing.

Water power works well enough for factories and mills that can be located next to a river or waterfall, or have a supply of running water brought to them. In the last part of the 19th Century, some firms in England still used water power to drive their machinery. The Gayle Mill in Wensleydale, Yorkshire, powered all the machinery in the sawmill with a single water turbine of advanced design. Not every firm could manage to be located on a high-volume, fast-moving river. The best locations were already in use, and the engineering needed to bring smaller streams together into enough water power to drive a factory often cost more than the expected factory profits.

Fires can be built wherever you need them. Blacksmiths have put this to use for centuries. Heron of Alexandria figured out how to use a fire to make a ball spin with steam jets back when the year only had two digits. Hundreds of years passed, though, before the aeolipile matured into the engine we know today.

The History of Steam

Thomas Savery built a steam pump in 1679 that condensed steam back into water through cooling, creating a partial vacuum that pulled water into a chamber. The valve then opened, letting live, pressurized steam into the chamber to push the water further down the pipe. It worked, more or less, but because the steam made direct contact with the water, a lot of heat was lost, and with it a lot of potential work. Thomas Newcomen improved this idea in 1712, creating the atmospheric engine. It condensed steam under a piston, creating a partial vacuum, and moving the piston by atmospheric pressure. Since the steam didn't come into direct contact with the water being pumped, heat was conserved and the engine became efficient enough that Newcomen engines became commonplace at coal mines.

James Watt figured out how to expand steam into a piston cylinder, using the pressure of the steam as the driving force instead of atmospheric pressure against a partial vacuum, and how to use a crank to turn the back and forth motion of the piston into rotational motion. He patented the idea in 1781, and then sat on the patent, refusing to license it, and litigating savagely against anyone proposing an improvement to his work for much of his life, preventing advancement in steam technology. Edward Bull added a condenser to the design in 1792, recapturing spent steam and sending it back to the boiler, but Watt sued him out of business, along with twenty or more customers, on a patent whose underlying validity was never conclusively proven. Just settling out of court was ruinous, given the fees Watt charged. Watt's company had enough funds in its war chest

to field more barristers than anyone else, so going to court was an even worse idea than settling.

Finally, in 1800, Watt's original patent expired. Watt promptly retired, having performed no innovation in the last decade. Within the next two years, Robert Trevithick and Oliver Evans independently produced high-pressure steam engines, leading to the Cornish Engine. While the Cornish Engine used expanding high pressure steam, a condenser on the low pressure side of the cylinder, and achieved considerably more horsepower and fuel efficiency than Watt's low-pressure engines, it ran rough, rendering it unsuitable to anything more than pumping water out of mines.

Over the following years, designs changed, once inventors were free of the fear of Watt and his patent lawsuits. Cylinders rotated from vertical to horizontal. The Corliss engine of 1849 added separate inflow and exhaust valves, counter-flow, and automatic variable steam cutoff, which leveled the power output, a significant problem with the earlier Cornish engine. The Corliss engine could be used in textile mills to drive spinning jennies, Jacquard looms, and other equipment that required a steady, even flow of motive power. Compound engines followed, using double or triple expansions – extra cylinders past the first that allowed the steam to expand more than once. These captured substantially more power from the steam before turning it over to the condenser to be returned to the boiler.

Steam Locomotives

Mobile engines had been tried as early as 1784, with William Murdoch's road locomotive. Research in this field was shut down for many years by Watt's constant litigation. Robert Trevithick – remember him, the Cornish engine fellow? – built the first steam railroad in 1804, running from the Pen-y-darron Ironworks to Abercynon. Ever since then, the narrow gauge rail and correspondingly small engines have been referred to as Welsh railways, regardless of where they are built or by whom.

George Stephenson brought out the *Locomotion* for the Stockton and Darlington Railway in 1825, the first public steam railway in the world. Stephenson surveyed the line himself, and set up a firm in his son's name, Robert Stephenson and Company, to manufacture the locomotives under strict secrecy and tight control of the patents. The rails were wrought iron, supplied by Bedlington Ironworks, which broke a verbal agreement between Stephenson and William Losh of Walker Ironworks for cast-iron rails. This breach of trust damaged Stephenson's reputation as a businessman, as well as that of his son. The elder Stephenson retreated back to engineering, while Stephenson *fils* left for the Continent.

Three years later, Robert Stephenson returned to England, where he designed and oversaw the building of the *Rocket*, the first multi-tubular locomotive. The draft from the firebox passed through multiple steel tubes running through the boiler instead of just one, collecting at the far end into a single pipe leading to the smokestack. This created greater surface area and passed more heat from the fire into the boiler's water supply. The *Rocket* won the 1829 Rainhill Trials, being the only entry to successfully complete all of the tests, and set a new standard for locomotive design. Robert Stephenson went on to design the *Planet*, which moved the cylinders to a position inside the wheels. Robert and his father had a very public falling out over the design, made worse when *Planet* proved to be substantially more efficient than *Rocket* and did not break its crank axles like George predicted. Robert subsequently moved to the United States to supervise the Camen and Amboy Railway. He would not return until 1846, when he took a commission with the Suez Canal project.

By 1830, passenger and cargo railways with steam locomotives were opening all across England and on the Continent. Gauge, or the distance between the rails, began to be an issue, and

then a very large issue. Locomotives and cars designed for one gauge of rails could not travel on another. Isambard Kingdom Brunel implemented the broad gauge for the Great Western Railway, partially because it added to passenger comfort, partially for stability at higher speeds, but also because George Stephenson held a patent on the so-called standard gauge and would not license it to a rival company. Between the Stockton and Darlington issue, and an eighteen year row with Humphry Davy over the design of a miner's safety lamp, Stephenson had become embittered against Parliament, the scientific community, and the south of England in general, whose elitism against the north and Stephenson in particular he felt to be a large part of the problem. Parliament offered to standardize British rail to Stephenson's gauge in 1846, but Stephenson demanded huge payments for licensing and had a very public row with a few of the Lords, putting an end to the effort. Stephenson died in 1848, at which point Robert offered to license the rail patents he had inherited. By that time, though, multiple standards had been developed, and the distrust of the Stephenson family was too highly ingrained. The year before, Robert had been found culpable when the Dee bridge collapsed, killing five people and seriously injuring nine others. Robert never gained another design contract, spending the rest of his days as a conservative member of Parliament, voting against change of any sort.

Britain's railroads had become a hodge-podge of Stephenson's standard gauge, Welsh narrow gauge, and Brunel's broad gauge, with some one-off railways here and there that didn't (and couldn't) connect to anything else. Finally, in 1855, Sir Isambard Brunel, knighted the previous year for his work on the Clifton Bridge and other achievements, was named chief engineer of Britain's railways and charged by Parliament with standardization. He began a project that replaced all but the Welsh gauge with broad gauge rail. The initial cost was staggering, but the increase in passenger and freight traffic, and the higher speeds the locomotives were able to achieve, massively increased the revenues of the railways, resulting in the outlay being paid off in eleven years. The Welsh or narrow gauge remains in use in mountainous areas throughout the British Empire and in other nations, notably in India, where Welsh gauge passenger and cargo service has proved the only feasible option.

France, meanwhile, had implemented the standard gauge, taking advantage of international borders and a lack of patent treaties to avoid payment of Stephenson's exorbitant license fees. Other European nations followed suit. The conflict between Britain's broad gauge, used not only in Britain itself but British possessions, colonies, and protectorates around the world, and in the Gruv, and the European standard gauge, has yet to be resolved. Building bridges between England and France requires overcoming a good deal more than just political rivalry.

Steam on the Road

Dozens of inventors in many countries worked toward the goal of a steam-powered vehicle that would run on existing roads. Numerous approaches were tried, from Dederick's Steam Man of the Union to the road locomotives of Britain to the steam velocipede in France. British road travel suffered a regulatory setback in 1861, when the Locomotive Act was passed, restricting road locomotives to speeds of 5 miles per hour in cities and 10 miles per hour in the country. The 1865 Locomotives Act, better known as the Red Flag Act, would have cut that in half, and required a man with a red flag to travel ahead of every road vehicle, but was defeated in Parliament after Prince Albert called it "a load of arrant nonsense penned by men who would hobble the progress of the Empire". Nobody wanted to be seen as unpatriotic, and the Act died a merciful death. The Revised Locomotives Act of 1868 increased the allowable road travel speeds to 10 miles per hour in the city

and 30 in the country, with official vehicles such as police, fire engines, and the military allowed to travel at double those rates.

Even with legislative allowances, the railways provided such tremendous service that interest in road vehicles remained low. The primary market for such developed in two directions. The first moved large numbers of people or considerable amounts of freight, and resulted in the steam omnibus and the steam truck, or freight wagon. The second moved small numbers of people in high style and with alacrity and elegance, making inroads in the Carriage Trade with steam carriages and coaches for the wealthy and progressive. The Union Steam Man hasn't quite caught on in the British Empire, and no one has yet built a satisfactory steam horse. Considering the crowded streets of London, this may be a good thing, as it's resulted in a more compact vehicle, better able to maneuver with less length to contend with and a sharper turning radius.

Steam at Sea

Parallel developments in nautical steam power put paid to the age of sail. Brunel's own ship the *Great Western* sailed from Bristol to New York in 1838, not the first steam crossing but the first successful one, as the crew of the rival *Sirius* had to burn one of their masts for fuel, while the *Great Western* made the crossing three days faster and arrived with a third of its coal bunkers still full. The *Great Britain*, launched in 1843, became the first iron hulled propeller driven ship to cross the Atlantic. When the Confederacy unveiled the *CSS Virginia* in 1862, and the United States brought out the *USS Monitor* in response, the era of wooden hulled warships powered by the wind came to an end. Sailing vessels still ply some routes, where replacement parts are hard to come by or the use of steam is not economically efficient, but an entire generation will now grow up with their closest experience of sail being Mr. Forester's novels.

Sadly, that same year, Sir Isambard Brunel, having suffered a stroke in 1859, and having spent three years in a state of increasing frustration over his physical limitations, fell out of bed trying to get up on his own, fracturing his neck. His body lay in state in Westminster Abbey before being interred in the family plot at Kensal Green in London. Queen Victoria gave permission for the cortege to pass through Hyde Park. Over three thousand tickets were sold for spectators. In his eulogy, he was called 'the greatest engineer of the present century'.

A year later, Thomas Briggs, a well to do banker, was murdered in a first class compartment of the Fenchurch to Hackney line, becoming the first victim of a murder aboard a train in English history. The suspect, Hans Muller, was captured in New York, debarking from a sailing ship, by a Scotland Yard detective who outran him aboard a steamship. Muller was convicted and hanged, his alibi, a known prostitute, discredited by her reputation. The tabloids made copy for weeks on the race between steam and sail, trumpeting the news from one end of the Empire to the other when steam triumphed in the cause of justice.

In 1864, The *Great Eastern* Steamship Company was formed by Daniel Gooch, Thomas Brassey, and John Pender. They purchased the *Great Eastern*, never financially successful as a passenger liner, and began converting it for cable laying, chartering the ship to the Telegraph Construction and Maintenance Company. Over the next two years, the Great Eastern completed laying the second successful transatlantic line, a cable that, in 1866, carried information at the speed of eight words per minute.

Steam on the Farm

As early as 1852, Richard Garrett and Sons had implemented an assembly line, at the Long Shop in Leiston, Suffolk, to produce steam tractors for agricultural use. These tractors were massive, heavy beasts, suitable for drayage and as self-propelled generators, but bogged down quickly in the soft earth of the fields when trying to draw a plow. John Fowler found a solution, and in 1863 used paired steam tractors to drag an unpowered multiple-harrow plow back and forth across a field by cable, cutting the time needed for plowing down substantially. The heavier, more heavily powered steam plow could also break up ground that a horse-drawn plow couldn't cope with, putting more acreage under cultivation. Over subsequent years, powered tractors became lighter, moved from wheels to treads to solve the weight distribution problem, and replaced oxen and horses on all the larger and more well to do farms.

Steam at War

The first military kettles were built by the simple expedient of armoring a steam tractor and adding a gunnery emplacement. The added weight tended to overstress the frame, and the crew couldn't see where they were going well enough to position their guns effectively, but the idea was there. Over the next several years (and wars), kettle design advanced rapidly, with constant battlefield testing readily available. Metal treads gave the kettles the ability to churn through the most forbidding landscape. Supplying power independently to the treads got rid of the need for a nosewheel, allowing the kettles to turn rapidly by reversing one tread. Mirrors and tempered glass created periscopes for the crew, granting them clear vision of their path and their targets without exposing them to incoming fire. Kettles remained hideously expensive both to build and to operate, and generals were slow to commit to them both in terms of the expense and the huge shift in tactics that they required, tending to use them as mobile artillery instead of front-line units. With the Samsut War, however, a great many cherished rules of combat have had to be heaved out the window, and kettles may yet turn the tide against the undead hordes of the enemy.

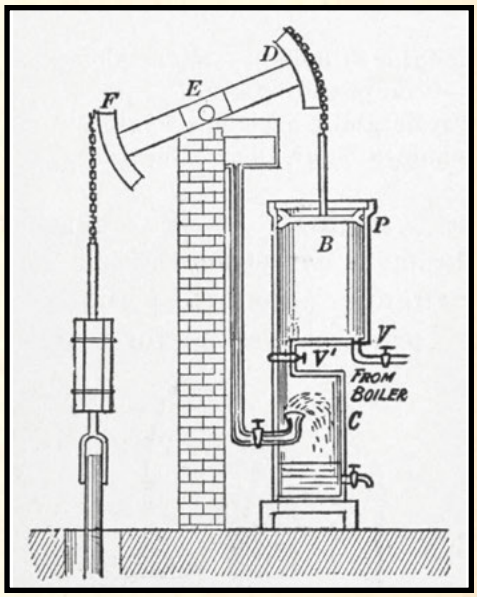
Stationary Engines

Not all steam engines are mobile. Mines, factories, and other facilities use steam engines for a variety of purposes. Stationary engines share several things in common with vehicular engines. First, every steam engine has a driver, whether it's on a train or a ship, or stationary at a coal mine or a pumping station. When dealing with mobile engines, the operator may sometimes be called an engineer instead of a driver. Depending on the size of the engine and the number of staff required to maintain it, the driver sometimes doubles as the stoker and maintenance man. Second, the engine requires water, fuel, and routine maintenance. Without the first two, the engine simply will not run. Without the last, eventually the engine will seize up and come to an abrupt halt, or explode, or fail in some other potentially lethal way.

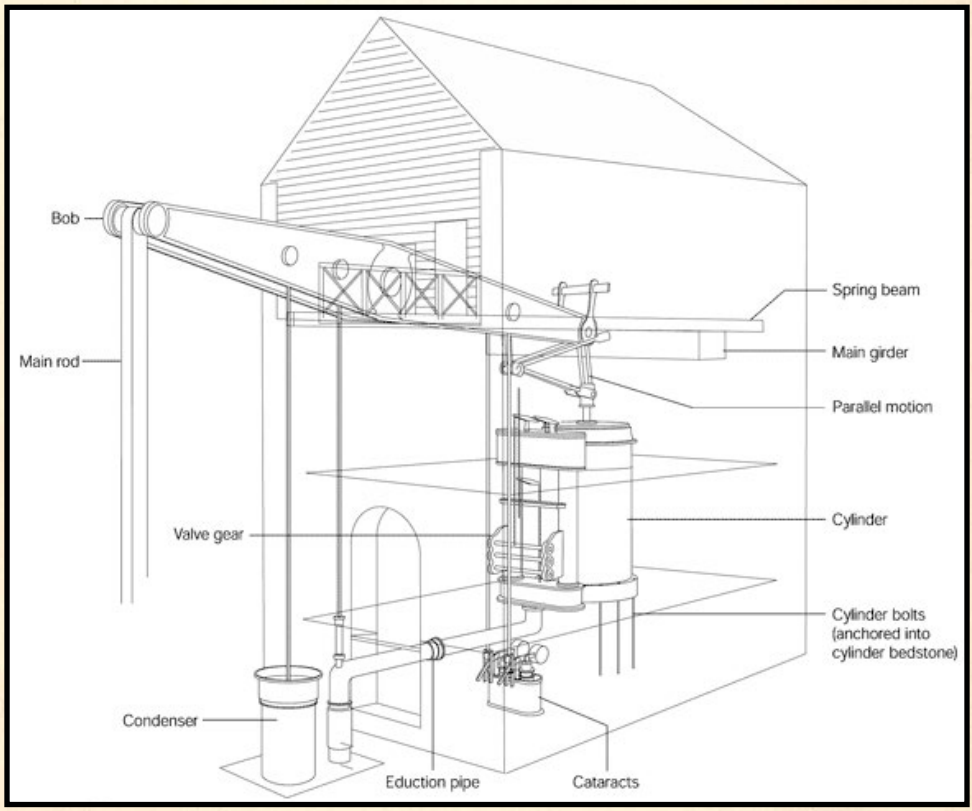
Types of Engines

The Newcomen-type atmospheric engine, more commonly referred to as a **beam engine**, finds work in pumping systems and other applications where the power requirements are low and the work

can ebb and flow with the stroke of the engine. Beam engines aren't terribly efficient, and have to be fairly large to generate any sort of respectable horsepower, but they're cheap to build, easy to operate, and require only minimal maintenance. When they fail, they tend to just shut down rather than blow up, as their operating steam pressure does not rise high enough to cause an explosion. Fort Alice uses beam engines to pull water from the Perth River into the fort's reservoirs at the upstream end, and to push sewage and effluent out of the fort and into the river at the downstream end.

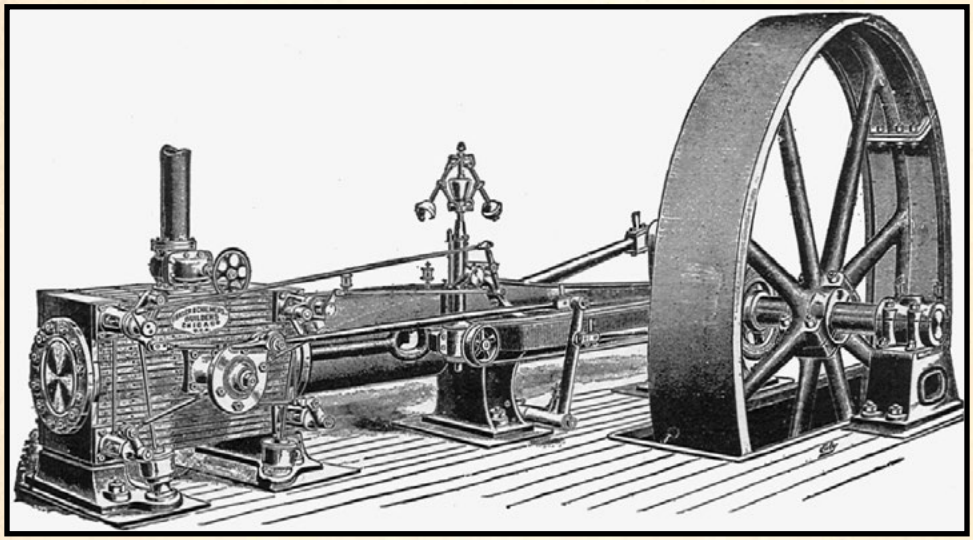


Many of the older **Cornish engines** have been replaced with Corliss engines, but some are still in service, in some cases because the owners couldn't afford a newer model, in others because they didn't see the sense in it. While the Cornish engine produces a somewhat erratic

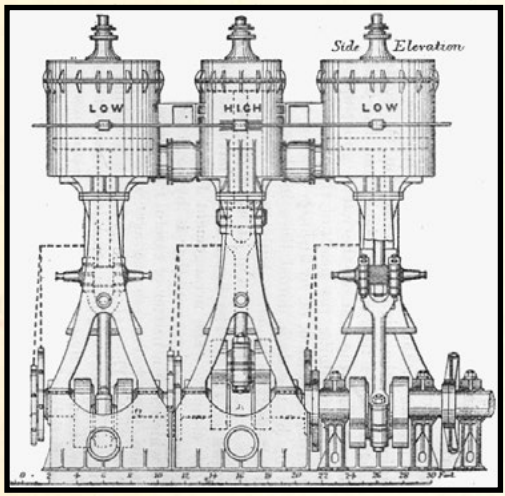


power take-off, it's sufficient for a number of tasks, including pumping operations where there isn't room for a beam engine, and rack-and-pinion industrial railways where steadiness of the ride isn't so much a concern. Running at high pressure, the Cornish engine does present a danger of boiler explosion if maintenance is lax, especially in the older models built before 1849, when the Industrial Boiler Safety Act was passed. The Act requires boilers to be pressure tested to a decent safety margin, safety valves to be installed, and pressure gauges to be calibrated and connected before boilers are allowed into operation. Even with the Act in place, boilers still explode if they aren't regularly inspected for corrosion, or if one of the hand-peened rivets gives out, or if the iron plating isn't to spec. Nobody builds Cornish engines these days, and very few firms even make parts for them. The ones that do still use iron instead of steel for compatibility reasons. Proper safety requires a steel boiler with welded seams and machine-peened rivets, and even there, a weld can fail.

Most applications in the modern era use **Corliss engines**. Factories require a smooth power take-off to drive their tools and manufacturing equipment. The London Hydraulic Power Company, chartered in 1873, uses a row of Corliss engines to maintain a constant pressure in their water lines. The Corliss requires more maintenance and careful attention from its driver, but its fuel efficiency and reliability more than make up for the extra effort required. The Corliss design came out the same year as the Industrial Boiler Safety Act, and so only a handful of the very first Corliss engines used iron boilers, none of which are still in service.



Double or triple expansion **compound engines** are normally found only in mobile use, as locomotives and ship engines. Only the largest and most prosperous manufacturers, or substantial military or civil engineering projects, would go to the considerable expense of installing a triple-expansion compound engine and hiring the staff required to drive, stoke, and maintain it. Papplewick Pumping Station, one of the primary sources of drinking water for the city of London, uses a truly massive triple expansion compound engine to drive its three story high pumps. A staff of seven operates the station around the clock and around the calendar, keeping the engine and pumps going and doing maintenance in the wee hours of the morning. The more prominent shipyards of Britain



use triple-expansion compound engines to drive their hull presses, machines four stories high capable of rolling out the plating for a steamship's hull from sheet steel in just a few quick passes.

Micro Steam

By far the most significant advance in steam technology, the micro steam engine was invented in 1869 by Charles Parsons, a young engineer at W.G. Armstrong. This revolutionized steam power and headed off later work in petroleum fuels and internal combustion. The following speech by George Herbert Symonds, chief engineer, Symonds Steam Works, at the presentation of his firm's newest model of microsteam engine, summarizes microsteam.

"Before we start the demonstration, I'm going to take advantage of having a captive audience to explain a few things to the members of the press one more time, in the probably vain hope that they might actually get a few of the technical details right this time. Microsteam engines are not coal burning. They are fueled with powdered coke. You should know what coke is, but I'm going to tell you in case you missed that bit. You take low sulfur bituminous coal, and you bake it in a closed container at two thousand degrees on the Fahrenheit scale. You run the gases that come off of the coal through a condenser, and that gives you coal tar and coal gas. Coal tar is the waterproofing in your Mackintosh coat, the precursor to several of the colors found in paint and fabric dye, and the active ingredient in delousing shampoo. I can see from the head-scratching in the audience that some of you may be familiar with that product. Coal gas you would know better as town gas. It's what fuels your gaslights, in your homes and on the streets. Coke is what's left behind in the oven. It doesn't smoke when it's burned, because the effluent has already been driven out of it. It doesn't leave tar deposits in the engine or the stack, because the tar has already been cooked out. We pulverize the coke, down to about the consistency of women's face powder, mixing it with water in the processing, and then press it into cakes for ease of storage. Once those are dry, then they're ready to be used in a microsteam engine.

"The engine either has a fueling apparatus that grinds the fuel cake back into powder as it's needed, or a powdered coke reservoir that can be removed and replaced with a full reservoir as needed. Trust me, you don't ever want to try to refill a powder reservoir in the field if you don't have to. Powdered coke is so fine that the slightest breeze can set it into motion, and once it gets on you, nothing short of mineral spirits will get it off. Wretched stuff gets everywhere in an instant. The powdered fuel is blown into the engine through a venturi by compressed air, which is provided by a piston, which requires the engine to be in motion. This would be why you start a microsteam engine with a hand crank. The fuel is ignited initially by an electrical spark, provided by a dynamo also driven by the hand crank. Once you've got the engine lit,

as long as fuel keeps spraying into the combustion chamber, it'll keep burning, Stopping it is as simple as shutting off the fuel. There is no boiler, no great tank of water with fire pipes running through it. There is instead a flash boiler, a pipe or set of concentric pipes wrapped around the combustion chamber. Water, driven by a pump, enters the boiling jacket, and is driven into steam in an instant by the fierce heat, producing a jet of steam out the other end of the pipe. We pass that through a regulator to maintain a constant pressure, and on into the driving piston. In some engines, the outlet from the driving piston goes to the water reservoir, where the steam condenses back down to water. This has the beneficial effect of preheating your water, so that once your engine warms up, you can get just as much work out of it for less fuel. Recirculating engines normally include a thermocouple that regulates the fuel supply, cutting back on the coke as the engine heats up and needs less. The problem with this, of course, is that you run the risk of your water supply superheating in the reservoir, and the engine going bang in a rather spectacular fashion. To avoid that, you either vent your output steam through a blast pipe that exits in the stack, so that you're continuously steam-cleaning your exhaust port, or you provide a secondary cooling system for the recirculating water. In the first case, you have to top off your water supply regularly or risk running out of steam quite literally and your engine melting down. In the second case, if you use the traditional large engine method, you no longer really have a microsteam engine because of the added bulk of the water and piping and so forth of the secondary cooling system. The most common solution in microsteam is to put aluminium cooling fins on the reservoir. Aluminium transfers and radiates heat much more efficiently than steel or copper, and so your fins will get rid of quite a bit in short order. You do have to remember to provide adequate clearance and air flow, however, so that the fins work properly and don't themselves cause a problem.

"Did you get all of that? I can repeat it if need be. I can guarantee that I will repeat it at our next demonstration if you make a dog's breakfast of the details in your articles again. Right then? Jolly good. Now, let's have a look at the Symonds Mark Five, shall we?"

The Future of Fuel Sources

William Stanley Jevons, in his 1865 book *The Coal Question*, raised the issue of peak coal. Jevons pointed out that it took energy to raise coal to the surface and distribute it. There would come a point, Jevons said, where the energy required to clear any particular mine of water, dig out the coal from the seam, raise the coal to the surface, and ship it to the end user would exceed the energy contained in the coal itself, at which point the mine would shut down as an economic failure. There might still be coal left in the mine, but the effort required to obtain it would cost more than the result would be worth. He pointed also to working conditions in the mine, that due to the rise in heat as depth increased, men and machines would not be able to work effectively at any depth beyond four thousand feet. Jevons noted that a simple rise in cost of coal from a particular mine could be enough to send manufacturing elsewhere. When the cost of the local energy supply exceeded the cost of relocating the factory to an area where energy was cheaper, the factory would move, taking with it the capital the factory put into the local economy. He illustrated this with examples of factories converting from water power to coal, taking advantage of a more abundant and more easily delivered energy source, and relocating in the process, and with the closure of coal fields whose price per tonne had risen past what the manufacturers were willing to pay.

Jevons predicted that as Britain's coal reached peak levels and fell off, manufacturing would

move to North America, where new coal fields were opening in Pennsylvania at the time of publication. He of course did not know that an entire new world would open up, with its own coal reserves, but the rapid construction of factories in the Gruv proves out Jevons' case. Manufacturing, with all the economic, social, and infrastructure impact it carries, will move to the point where the costs of raw materials and distribution of finished goods balance out to the cheapest. A world dependent upon coal for its primary source of energy must eventually run out of places to move to, as the mines play out and the cost of coal rises to untenable levels.

Very little research is underway as of 1879 on alternative fuels. Petroleum has been experimented with, as have distilled spirits, in the internal combustion engine. The installed base of steam power and coal fuel, the cost of replacing coal-fueled steam engines with liquid-fueled internal combustion ones, and the need and expense to create a new fueling infrastructure, have severely dampened support for internal combustion in the British Empire. The Prussians are rumored to be tinkering with it, but that's another story entirely.

Attempts to produce electrical engines that can do the same amount of work as microsteam have run into a brick wall with battery weight and size. At the current state of the art, to carry as much power as contained in a standard ammunition-box-sized coke cartridge, a battery must be the size of a locomotive's coal tender. Batteries also lose capacity over successive uses, recharging less each time and quickly going from power source to encumbrance. While some Weird Scientists have overcome this problem, their work does not appear to be commercially replicable, their power storage devices only working when they build the batteries themselves. No solution to this has yet been found.

Vehicle Statistics

Vehicles have the following game statistics. Not all statistics will apply to all vehicles. For example, Draft only applies to boats and ships. The term "vehicle" in this section is used to mean any conveyance, whether an airship, a seagoing vessel, or a land vehicle.

Cost: The price of the vehicle in pounds sterling (£).

Fuel Charge: The cost per mile for fuel in pounds sterling. This is based on an average coal price of twelve shillings per ton, a fairly high value for the period and assuming considerable transport costs from the mine to the fueling site. The Gamemaster is free to adjust this for the player characters' current location.

Availability: How easy it is to locate one for purchase.

Speed: A Step number that reflects optimal cruising speed under normal conditions. See the **Vehicle Speed Step Table** below for corresponding values in yards per combat round and miles per hour. Situations that affect the Speed of the vehicle will cause a Step adjustment. Exceeding the Speed Step, up to double the vehicle's cruising speed, is possible, but requires Pilot Tests against the vehicle's Maneuverability plus its increased Speed to maintain control, and Crew Tests against the vehicle's Critical Threshold plus the Speed increase to avoid damaging the vehicle with the strain. These Tests are made each round during combat, or every ten minutes during non-combat scenes.

Maneuverability: How easy it is to control the vehicle, and how agile the vehicle itself is. Make a Pilot Test against the Maneuverability to attempt anything beyond normal maneuvers. For

example, a Pilot Test is not required to go round a street corner at low speed, but a Pilot Test is required to guide the vehicle around a hairpin turn on a mountain road, especially if traveling at the vehicle's Speed Step or faster.

Draft: The distance the boat or ship extends below the surface. This determines what waterways the vessel will find navigable.

Armor: The physical armor of the vehicle's chassis, if any. This reduces damage done to the vehicle in the same way as personal armor.

Armament: Vehicle-mounted weaponry, if any. This ranges from pintle mounts, essentially large metal pins that weapons can be dropped onto for stability, to fixed mounts, weapons engineered into the design of the vehicle, to turrets, armored weapons emplacements capable of fire in any direction from atop the vehicle.

Ramming: The Damage Step done when a vehicle is driven into another vehicle at speed. Use the pilot's Pilot Airship/Ship/Vehicle Skill for the Attack Test. Civilian vehicles are not normally outfitted for Ramming, and will take the Ramming Damage Step themselves as well as doing damage to their target (separate rolls). The vehicle description will note this. Military vehicles equipped for Ramming do not take damage themselves when making a Ramming attack. When a vehicle rams a non-vehicle, such as a creature or an infantry formation, it does double its Ramming in damage. Vehicle impacts ignore personal armor. In the case of a vehicle driven into a crowd, swarm, or other group, damage is applied to one individual at a time, with any surplus carrying over to the next individual until all damage is applied. Thus, a kettle driven into a swarm of insectoids with a Death Rating of 46, doing 106 points of Damage, would kill two of the creatures and leave a third injured. Ramming a vehicle stops the attacking vehicle. Ramming a non-vehicle slows the vehicle by the Damage done in yards per round. In the case of our kettle, with its Speed Step of 12, the impact would slow it from 107 yards per round to 1 yard per round. The vehicle pilot of course can spend their next action to bring the vehicle back up to speed.

Passengers: The number of human-sized people that can comfortably be carried by the vehicle. Trolls effectively count as two people for purposes of this statistic.

Cargo: The number of pounds and cubic feet of freight the vehicle can carry, in addition to its passenger complement (if any). For using passenger space as cargo space, assume 250 pounds and five cubic feet per person. This may be expressed as towing capacity in tonnage, for example in the case of locomotives, which are not outfitted with cargo space themselves.

Crew: The number of people required with the Crew Skill in order to operate the vehicle.

Damage: Vehicles have two Damage Ratings, **Disabled** and **Destroyed**, corresponding to the Unconsciousness and Death Ratings of people. Vehicles also have a **Critical Threshold**, corresponding to the Wound Threshold. When a vehicle reaches its Disabled Rating in damage taken, it can no longer move. When it reaches its Destroyed Rating, it can no longer be repaired, and is only useful as spare parts and scrap. Each Critical Hit done to a vehicle reduces its Speed, Maneuverability, and Armor by one point each, and inflicts the Damage taken to one of the Crew as an armor-defeating hit. If Speed is reduced to zero, the vehicle halts. If Maneuverability is reduced to zero, the vehicle cannot change course. If the Crew are all killed, the vehicle is effectively Disabled.

Vehicle Speed Step Table

Speed Step	Yards /Round	Miles /Round	Miles /Hour	Miles in 8 Hours	Miles in 16 Hours
0	5	0	1.7	13.6	27.2
1	9	0	3.1	24.8	49.6
2	13	0	4.4	35.2	70.4
3	19	0	6.5	52	104
4	25	0	8.5	68	136
5	32	0	10.9	87.2	174.4
6	40	0	13.6	108.8	217.6
7	49	0	16.7	133.6	267.2
8	59	0	20.1	160.8	321.6
9	69	0	23.5	188	376
10	81	0	27.6	220.8	441.6
11	93	0.1	31.7	253.6	507.2
12	107	0.1	36.5	292	584
13	121	0.1	41.3	330.4	660.8
14	136	0.1	46.4	371.2	742.4
15	152	0.1	51.8	414.4	828.8
16	169	0.1	57.6	460.8	921.6
17	187	0.1	63.8	510.4	1020.8
18	205	0.1	69.9	559.2	1118.4
19	225	0.1	76.7	613.6	1227.2
20	245	0.1	83.5	668	1336
21	267	0.2	91	728	1456
22	289	0.2	98.5	788	1576
23	312	0.2	106.4	851.2	1702.4
24	336	0.2	114.5	916	1832
25	361	0.2	123.1	984.8	1969.6
26	387	0.2	131.9	1055.2	2110.4
27	413	0.2	140.8	1126.4	2252.8
28	441	0.3	150.3	1202.4	2404.8
29	469	0.3	159.9	1279.2	2558.4
30	499	0.3	170.1	1360.8	2721.6

Land Vehicles

Steam-powered vehicles have traversed the land for nearly a hundred years. From steam coaches to trains to special-purpose kettles and assault vehicles built by the military, steam carries as many passengers across land as it does across the sea. This section discusses steam power in ground transport, and provides game statistics for typical vehicles.

Steam Coaches

The steam coach has not yet replaced the horse-drawn carriage, but is gaining in popularity. If nothing else, maintenance of a steam engine is easier and less expensive than tending to a horse, and disposing of the ash from the engine is both less onerous and less unpleasant than cleaning up the widespread deposits on the streets that horses casually make. The initial investment is similar, with a steam coach or carriage being priced similarly to a brougham and pair. In London, some of the omnibus companies have switched from horse-drawn carriages to steam coaches.

Personal Steam Coach

Cost: £400
Fuel Charge: 2d
Availability: Unusual
Speed: 10
Maneuverability: 5
Armor: 0
Armament: None
Ramming: 4
Passengers: 4
Cargo: 600 / 10
Crew: 2 (Driver, stoker); footman optional
Damage:
Disabled: 32
Destroyed: 39
Critical Threshold: 10

The personal steam coach is roughly equivalent to a carriage and pair in terms of cost and passenger/cargo capacity. It moves at a considerably faster speed, the average coach-horse doing well to manage 14 miles in a day, and can cover vastly more distance before needing maintenance. The ride is not the most comfortable, as the springs and interior are also roughly equivalent to a carriage and pair.

Luxury Steam Coach

Cost: £800
Fuel Charge: 5d
Availability: Rare
Speed: 8
Maneuverability: 6
Armor: 0
Armament: None
Ramming: 4
Passengers: 6
Cargo: 800 / 13
Crew: 2 (Driver, stoker); footman optional
Damage:

Disabled: 38
Destroyed: 46
Critical Threshold: 12

The luxury coach not only adds passenger and cargo capacity, but considerably more comfort. With heavier leaf springs made of better steel, padded wheels, and seats covered with mattress-quality cushions, the luxury coach ensures that the well-off will not arrive at their destination disheveled from the journey. Speed and turning ability are sacrificed in the process, as the large, heavy coach simply will not move that quickly, nor is it suitable for maneuvering in the narrow and crowded streets of the lower-class neighborhoods.

London Omnibus

Cost: £600
Fuel Charge: 3d
Availability: Unusual
Speed: 8
Maneuverability: 3 (12 for railbus)
Armor: 2
Armament: None
Ramming: 3
Passengers: 20 (ten in the cabin, ten in the rooftop seating)
Cargo: None
Crew: 3 (Driver, stoker, conductor)
Damage:
Disabled: 42
Destroyed: 50
Critical Threshold: 13

The free-ranging London Omnibus is slowly becoming a thing of the past, as many now operate on steel rails put down the middle of the street. The railbus carries two to three times as many passengers, but cannot divert from its route without causing considerable damage to the rails and its wheels, and potentially the street. Riding an omnibus, either street or rail, generally runs tuppence a mile, with the toll collected by the conductor upon boarding.

Freight Coach

Cost: £700
Fuel Charge: 5d
Availability: Unusual
Speed: 9
Maneuverability: 6
Armor: 5
Armament: None (Gruv-deployed coaches may be equipped with pintle mounts)
Ramming: 6
Passengers: None

Cargo: 3000 / 60
Crew: 3 (Driver, mechanic, stoker); guards optional
Damage:
Disabled: 52
Destroyed: 62
Critical Threshold: 15

The massive freight coaches rarely venture into central London, and then only by special arrangement, as streets have to be cleared for them to maneuver. Most often, they are seen at the outskirts of the city, and on the roads in the countryside, moving bulk goods from manufactories to markets, or livestock and produce from farms to slaughterhouses and greengrocers' distributors. Some have been converted for duty as rolling barracks and mess halls for navvy teams, traveling along with the rail construction project. The Alice and Gruv Railway owns several of these, partly because their fuel is the same as the trains whose rails the navvies build, partly because steam coaches do not attract large predators the way teams of horses do, and partly because the solidly built coaches can be used as fortifications in an emergency.

Trains

For moving truly massive amounts of people, animals, or goods overland, the locomotive has yet to be surpassed. Powered by coal in its raw form, taking on board water two thousand gallons at a go, the steam engine has become synonymous with the locomotive and its immense hauling capacity. Across the Earth, through the Rabbit Hole, and into the Gruv, railways and the trains that travel them form the backbone of Western civilization.

The passenger and cargo capacity of a locomotive are both effectively zero, as they have no space allocated for such. Rail cars specifically built for passenger or cargo use supply this capability. The locomotive therefore is rated for its draw weight, the amount of tonnage it can pull at cruising speed under normal circumstances. The rail cars then provide the statistics for passenger count and cargo capacity.

The Ramming Step is determined by the design of the cow-catcher, the device on the prow of the locomotive designed to deflect animals that stray onto the tracks. British locomotives rarely have to deal with more than a few sheep or a stray dairy cow. Their cow-catchers are thus light, with a low profile, although solidly built enough to withstand an impact with a 2000 pound beef steer without needing much in the way of repair afterward. American locomotives were designed to deal with bison, substantially larger animals that tend to occur in large herds, and so the cow-catcher is larger, longer and set lower to the rails, and reinforced to withstand multiple impacts with beasts weighing upwards of 3000 pounds. In the Gruv, the cow-catcher has turned into a wedge-shaped ramming prow, with military-grade structural reinforcing, capable of hurling aside a thorny molecrab and doing considerable damage to a mordslanger. The locomotives themselves are armored based on what they may reasonably expect to encounter. Gruv locomotives more closely resemble kettles than civilian transport vehicles, with heavy plating, and sometimes gun emplacements. The fact that the leading design in use by the Alice and Gruv is called the *Dreadnought* class speaks volumes.

Rail cars have no motive power and move at the speed of the locomotive to which they are hitched. They normally have independent brakes, usually of the manual or active type which have to be applied by turning the brake wheel or applying pressure to a pneumatic or hydraulic line. Getting from one to the next may involve stepping across from the platform on the end of one passenger

car to the platform on the beginning of the next, or may require lunging across the gap over the hitch from ladder to ladder on freight cars.

There are a few points that should be considered in terms of safety. Rail travel in this era is dangerous. Boilers explode. Trains derail from going too fast or because the track needs repair. Thieves may board trains while they are in motion, or block the tracks to force a train to stop for robbery. Some issues are larger and require more extensive discussion.

Signals do not interlock. This means that the flags and wooden paddles raised and displayed to the drivers are all independently operated, sometimes by levers in a control booth at the railyard or station, sometimes manually by railway personnel at the site. There is no automatic checking in place to make sure that conflicting signals haven't been given. Early designs for this sort of control system are still in the experimental stage and have not yet been deployed to the railways on the larger scale. Further, there is no law in Britain, Europe, or the Americas requiring such an interlocking system of signals.

Similarly, there is no blocking system to prevent trains from occupying the same stretch of rail. Collisions can and do occur because of lack of communication between points on the railway, or because errors are made. When trains collide, people die. Locomotives and rail cars are reduced to scrap and tinder in a matter of seconds.

Brakes are generally non-automatic, applied by creating vacuum or air pressure rather than from the loss of same, and so if the locomotive detaches from a continuous brake car, the brakes come off. Only manual brakes stay on when the car is decoupled. Manual brakes only work if rail workers remember to set them.

Despite all of this, thousands of people and hundreds of thousands of pounds' worth of goods travel the rails each and every day. The risk may be considerable, but the reward is great enough that it's accepted.

British "GNR Stirling" Class Locomotive

Cost: £1500
Fuel Charge: 6d
Availability: Rare
Speed: 15
Maneuverability: 6
Armor: 5
Armament: None
Ramming: 10
Passengers: None
Cargo: 275 tons
Crew: 2 (Driver, stoker); train may also have conductor, brakemen, and other crew
Damage:
- **Disabled:** 90
- **Destroyed:** 106
- **Critical Threshold:** 25

Also known as the Eight Footer because of the large driving wheels amidships, the GNR Stirling is a 4-2-2 design, meaning it has four non-motive wheels (a "four wheel bogie") at the front, a pair of drive wheels in the center, and

another pair of non-motive wheels (a "two wheel bogie") at the back. Built specifically for the Great Northern Railway, the designer, Patrick Stirling, borrowed a design from the Great Eastern Railway and produced a reliable, high capacity workhorse for the GNR. The design has been copied extensively by other railway companies and locomotive manufacturing firms, and is the type of locomotive most extensively used for passage through the Rabbit Hole by the Alice and Gruv Railway.

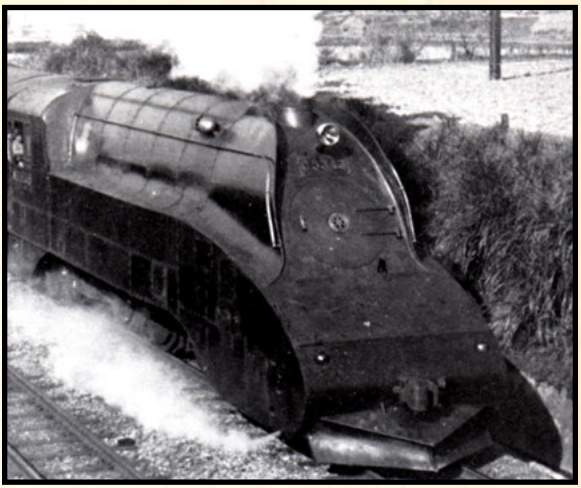
American "Leviathan" Class Locomotive

Cost: £1700
Fuel Charge: 7d
Availability: Rare
Speed: 16
Maneuverability: 5
Armor: 5
Armament: None
Ramming: 9
Passengers: None
Cargo: 300 / 60
Crew: 3 (Driver, mechanic, stoker); train may also have brakemen, conductor, guards, etc.
Damage:
Disabled: 88
Destroyed: 104
Critical Threshold: 24

Representative of western American design in general, the Leviathan class is built on a 4-4-0 design with a balancing tender. This gives it four non-motive wheels on a single suspension (a "four wheel bogie"), two pairs of drive wheels with the fore and aft wheel on each side driven by a single crank from an externally mounted cylinder, and an attached support vehicle that balances the locomotive from the rear, as well as carrying its fuel and water supply. The boiler holds two thousand gallons of water (cold measure), and the tender another two thousand gallons, doubling the locomotive's range before needing to replenish. The oversized conical stack serves as a spark arrestor, necessary as the Leviathan class is built to burn wood instead of coal. The large headlamp casing holds a carbon-arc lamp with a polished reflector, capable of projecting a dazzling beam through heavy weather. The cow-catcher rides low to the rails, and projects further than that of the Leviathan's British cousin, with more reinforcing in the supporting frame. This compensates for the larger mass and greater prevalence of the American bison, requiring the locomotive to be able to shunt aside a dozen three thousand pound animals without slowing. Designed for running across vast distances between railway stations in hostile weather, the Leviathan class has moved cargo and passengers across the American west for a generation with great success.

Alice and Gruv "Dreadnaught" Class Locomotive

Cost: £3200
Fuel Charge: 11d
Availability: Very Rare



Speed: 14
Maneuverability: 6
Armor: 12
Armament: LMG port/starboard fixed mounts on crew cab and on tender, ammunition locker for each with 500 round capacity
Ramming: 16
Passengers: None
Cargo: 350 tons
Crew: 3 (Driver, mechanic, stoker); train may also have brakemen, conductor, guards, etc.
Damage:
Disabled: 110
Destroyed: 130
Critical Threshold: 30

Looking more like a military assault vehicle than a civilian locomotive, the Dreadnaught has been engineered to deal with the worst the Gruv has to offer. Its designers sacrificed speed for power and structural integrity, producing a locomotive that will never win a speed trial, but can push aside a flock of harpies with little effort, and protect its crew from a mordslanger attack. Customarily painted iron grey with none of the gold leaf or brass trim found on its Terrestrial cousins, this locomotive presents a forbidding appearance that is all business and no frippery. The Dreadnaught class runs on a 4-6-4 configuration, with four-wheel bogies fore and aft, and three independently powered pairs of drive wheels amidships, each with their own pair of dual-expansion internally mounted cylinders, the cranks operating behind the protection of the wheels, hearkening back to Robert Stephenson's Planet. The armor that protects the boiler and the crew cab has been streamlined for wind resistance reduction, but should not be mistaken for decoration. Made of the same plating as the hull of a battleship, the Dreadnaught's armor can fend off a 3pdr cannon at close range. With a three thousand gallon boiler and a coke-cartridge fuel supply system connected to a vacuum-driven venturi, the engine matches the Leviathan for endurance with ease. The tender connects to the locomotive with a flexible armored tube, forming a safe passageway for the stoker and mechanic. Quick-release mechanisms allow the tender, and the rest of the train if need be, to be disconnected and discarded in a matter of minutes. Engine Number Seven, the *Estrella Del Norte*, had this function put to use in the incident at Rath Plain just a few months ago. Hostile Saurids blocked the track with boulders and awaited the train with a war party, intending to raid the train in retaliation for the British having ridden to the aid of an enemy tribe. Spotting the blocked track from a distance, the engineer opened the throttle wide, then joined the rest of the crew on the tender, disconnected the locomotive, and applied the brakes, halting the main body of the train. The *Estrella Del Norte* collided with the blockage at half again its normal cruising speed, smashing the barricade. The locomotive derailed, and its boiler ruptured, scalding much of the war party to death in an instant. Those few that remained were quickly put down by the train's guards. For his quick thinking, which saved the train and all the people and cargo aboard, the engineer was awarded a promotion by the Alice and Gruv Railway. The *Estrella Del Norte* has since been recovered, and is being rebuilt at the Fort Alice railyard.

Wagon-lits

Long railway journeys may involve a need for overnight accommodation aboard the train. Given the cost of hotel rooms, the higher price of an overnight ticket on a train often turns out to be the better deal. To handle this, railways put on wagon-lits, called sleeper cars in North America. These range from convertible cars, where the seats fold up into berths screened off by curtains, to full service private room cars, with compartments roughly equivalent to a middle rate cabin aboard an ocean liner. The most famous are the Pullman cars made in the Union, painted a distinctive green and given names instead of car numbers. Few companies in Europe quite meet the same high standards for luxury, decor, and convenience of the Pullman. Prices range from 4d to 1s per mile, in addition to the ticket fee, based on the privacy of the accommodation and the space allocated to each passenger.

Wagon-Lit (Standard)

Cost: 700
Fuel Charge: 0
Availability: Rare
Speed: NA
Maneuverability: NA
Armor: 2
Armament: NA
Ramming: NA
Passengers: 60
Cargo: NA
Damage:
- Disabled: 60
- Destroyed: 71
- Critical Threshold: 15

Wagon-Lit (Pullman)

Cost: 1800
Fuel Charge: 0
Availability: Very Rare
Speed: NA
Maneuverability: NA
Armor: 8
Armament: NA
Ramming: NA
Passengers: 30
Cargo: NA
Damage:
- Disabled: 80
- Destroyed: 95
- Critical Threshold: 20

Flatbed Cars

Flatbed cars consist of reinforced platforms with tie down cleats set atop rail bogies. They're used for transporting cargo that will not fit inside a freight car. Some are equipped with cranes or winches so that they can load or unload themselves, but most rely on cranes at the railyard.

Cost: 400
Fuel Charge: 0
Availability: Unusual
Speed: NA
Maneuverability: NA
Armor: 0
Armament: NA
Ramming: NA
Passengers: NA
Cargo: 80 tons
Damage:
- **Disabled:** 50
- **Destroyed:** 60
- **Critical Threshold:** 18

Goods Wagons

Goods wagons, called freight cars in the Union and the Confederacy, are effectively rolling warehouses, massive enclosed spaces for holding and transporting goods. Most are of sturdy construction, both to protect the goods inside from environmental damage and to prevent casual theft. The sliding doors can be outfitted with any sort of lock, depending upon what the railway is willing to provide and what the customer is willing to pay for. Likewise, the Barrier Rating and Defense Ratings of the car tend to be determined by what's inside. Make adjustments to the statistics as required.

Specialized types of goods wagons include refrigerated and freezer cars with their own power supplies and cooling equipment, livestock cars designed with ventilation, feeding, watering, and cleaning in mind, tanker cars for hauling large amounts of liquids, and bulk transport or hopper cars for carrying large quantities of loose goods, such as grain or coal.

Cost: 800
Fuel Charge: 0

Availability: Unusual
Speed: NA
Maneuverability: NA
Armor: 10
Armament: NA
Ramming: NA
Passengers: NA
Cargo: 50 tons
Damage:
Disabled: 70
Destroyed: 83
Critical Threshold: 23

Brake Van

The brake van, or in North America the caboose, provides shelter and accommodation for the train crew involved in switching and shunting, and an observation point to watch for shifting cargo, overheating axles, and in some cases a defensive point for dealing with attacks coming up on the train from behind. On a passenger train, the brake van also serves as the conductor's office. European brake vans differ from the American caboose design in that they provide additional braking and brake power supplies, and help keep the chain couplings taut along the length of the train.

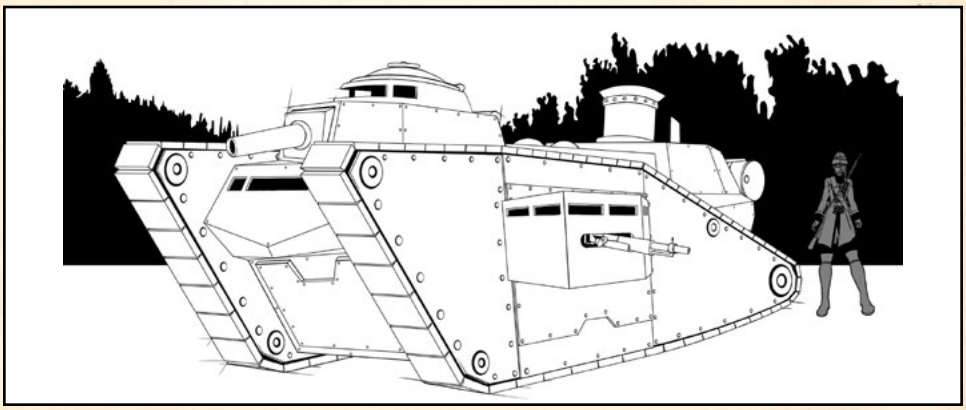
Cost: 1200
Fuel Charge: 0
Availability: Rare
Speed: NA
Maneuverability: NA
Armor: 8
Armament: NA
Ramming: NA
Passengers: 8
Cargo: NA
Damage:
Disabled: 60
Destroyed: 71
Critical Threshold: 16

Military Vehicles

A far cry from the first armored tractor, today's modern steam kettles carry substantial firepower, protect their crew while allowing rapid egress in case of structural or mechanical failure, and provide considerable maneuverability and towing capacity. The related assault carriers allow rapid insertion of shock troops into hostile environments, with armor to keep the troops safe until deployment and machine guns to keep enemy forces at bay. The British Army has also fielded armored cargo vehicles, for delivery of supplies into active battle zones, and command carriers, so that senior officers can direct the flow of battle from close quarters without being an easy target for the enemy. All of these as a rule feature independently driven treads, armor plating across the underside as well as around the sides and over the top, and some form of defensive weaponry to keep infantry from getting close enough to toss a Molotov or a grenade.

"Gordon" Class Light Kettle

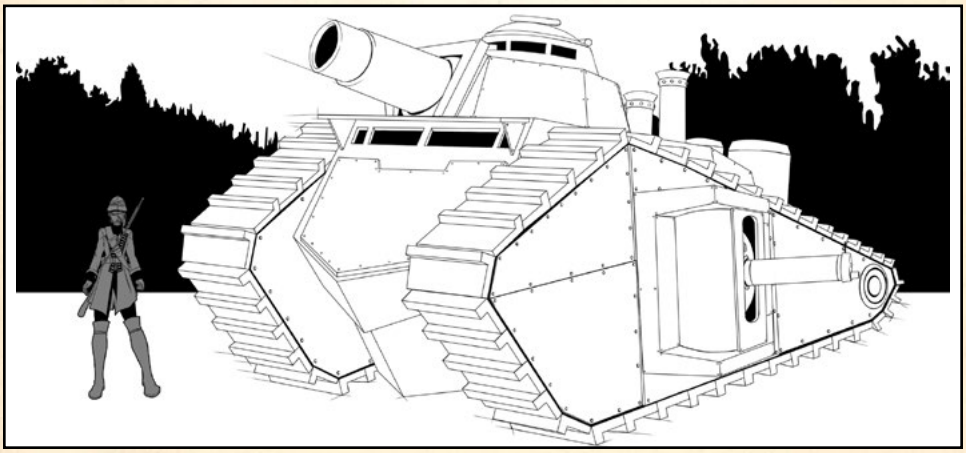
Cost: £1100
Fuel Charge: 7d
Availability: Very Rare
Speed: 13
Maneuverability: 6
Armor: 14
Armament: LMG fixed mounts port/starboard, ammunition lockers for each with 1000 round capacity. Single 7pdr cannon in turret mount, breech loading with 30 rounds each ball and canister. Optional flamethrower can be paired with 7pdr, but fuel supply line from aft tank has a high chance of leakage and subsequent loss of vehicle and crew.
Ramming: 16
Passengers: None
Cargo: 2 tons (towing capacity)
Crew: 5 (Driver, commander/turret gunner, mechanic/stoker, 2 LMG gunners)
Damage:
- **Disabled:** 106
- **Destroyed:** 125
- **Critical Threshold:** 29



The Gordie was designed to serve as a primary front-line unit, ideally traveling in pairs or threes with screening infantry, able to engage the enemy with heavy firepower and relative impunity. Thus far, it has seen only light service as such, with most generals treating it as a self-powered and highly mobile cannon. Kept to the rear with the artillery, the Gordie has not been given a chance to prove itself in a decisive engagement. The kettles deployed to the Gruv were hastily outfitted with flamethrowers in an attempt to bring a more effective weapon to bear against the Samsut undead. Poor design in the retrofit has led to leakage in the fuel line running from the supply tank in the aft compartment of the vehicle to the weapon barrel in the turret, and in a few occasions, severing of the fuel line when the turret was rotated. In the latter instances, the spray of fuel into the interior of the vehicle led to the immolation of the crew and the loss of the kettle when the ammunition lockers exploded. A better design is supposedly under development. In the meantime, barring direct orders from the high command to deploy the Gordie to the front, it remains in a support capacity instead of directly contacting the enemy.

"Havelock" Class Medium Kettle

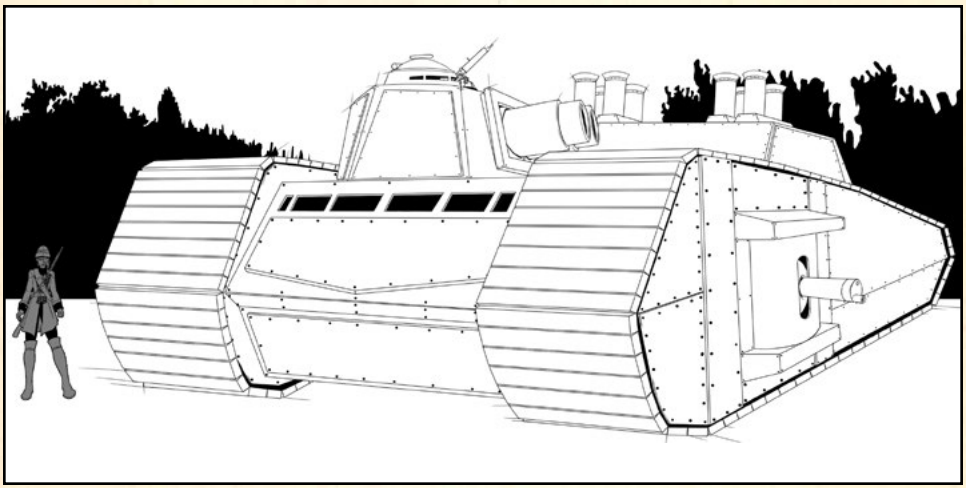
Cost: £1600
Fuel Charge: 9d
Availability: Very Rare
Speed: 12
Maneuverability: 7
Armor: 17
Armament: LMG fixed mounts port/starboard, ammunition lockers for each with 1000 round capacity. Single 9pdr cannon in turret mount, breech loading with 30 rounds each ball and canister.
Ramming: 18
Passengers: None
Cargo: 3 tons (towing capacity)
Crew: 6 (Driver, commander/turret gunner, turret loader, mechanic/stoker, 2 LMG gunners)
Damage:
Disabled: 114
Destroyed: 134
Critical Threshold: 31



A recent addition to the British Army's vehicle complement, the Havelock has seen service in only three battles, two in South Africa and one in the Gruv. In the first, the kettle was deployed as mobile artillery against a Boer uprising on the border with the Transvaal, and acquitted itself well enough, although the kettle battalion commander stated that the vehicles' full armament was not tested by being kept at such a distance. In the second, a squadron of six Havelocks were employed against the Ali Masjid fort, driving up within fifty yards and taking down the southern wall in the mid afternoon while enduring a dispirited barrage from the Afghani cannon, which had trouble targeting the kettles at such close range. The Third and Fourth Brigades were then able to storm the fortress before nightfall, capturing the fortification and taking a large number of Afghani prisoners. Battle reports gave favorable reviews to the Havelocks, despite the difficulty of operating them at the high altitude and so far from resupplies of coke and water. In the third, three Havelocks were being transported by flatcar to Fort Wellington, when a Samsut forward unit that had managed to infiltrate considerably past British lines attacked the train. The Havelocks had been kept idling for faster unloading upon arrival at the fort, and thus were quickly crewed and powered up. While chained to the flatcars and unable to maneuver, the Havelocks nevertheless could bring their cannon and LMGs to bear, and did considerable damage to the attacking force. The Samsut, apparently not having expected the fighting machines to take part in the defense, withdrew in disorder, and the train was able to continue to its destination. British Command holds great hopes for the Havelock in the trench lands of New Taranaki, its length being sufficient to bridge an entrenchment and carry its cannon directly to the enemy.

"Roberts" Class Heavy Kettle

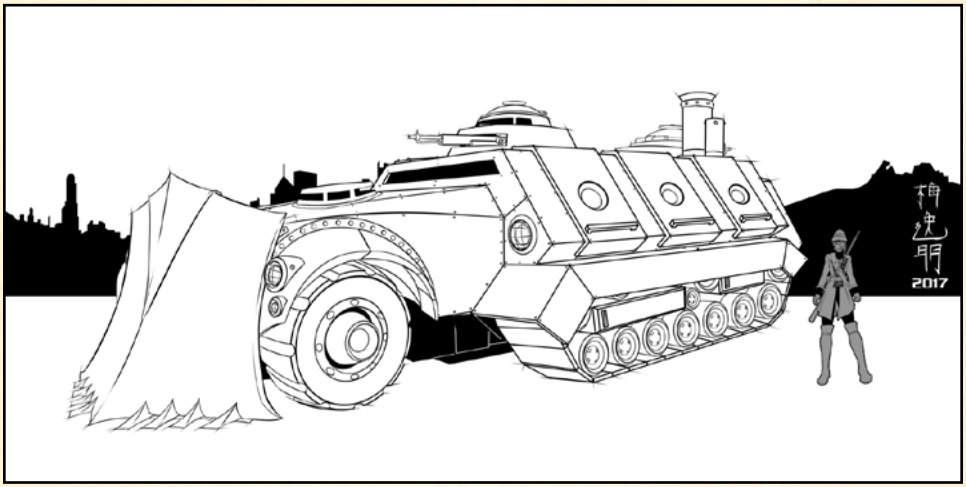
Cost: £2200
Fuel Charge: £-/1/5
Availability: Very Rare
Speed: 11
Maneuverability: 8
Armor: 20
Armament: HMG fixed mounts port/starboard, ammunition lockers for each with 1000 round capacity. Twin 9pdr cannon in turret mount, breech loading with 20 rounds each ball and canister. LMG fixed mount atop turret, controlled by kettle commander.
Ramming: 20
Passengers: None
Cargo: 4 tons (towing capacity)
Crew: 7 (Driver, commander, turret gunner, turret loader, mechanic/stoker, 2 HMG gunners)
Damage:
- **Disabled:** 124
- **Destroyed:** 146
- **Critical Threshold:** 33



Only five of the Roberts class have been thus far constructed, and none have seen front line service. However, having two of the land dreadnoughts deployed in a support capacity, and firing only two rounds each, was sufficient to convince the Russians to back away from the Ottoman fortification at Plovdiv. The other three have been sent to the Gruv and to Fort Wellington as part of the armor build-up in progress. Whether the Roberts class will turn the tide against the Samsut, or prove to be as profligate a waste of steel and coke as some of the High Command say, remains to be seen. If the kettles are held to the rear and used as mobile artillery, as previous tacticians have insisted on doing, they will not receive a fair trial, although that may not be what some senior officers want. As ever, politics determines the victor in battle as much as strength of arms.

"Harbinger" Class Breaching Carrier

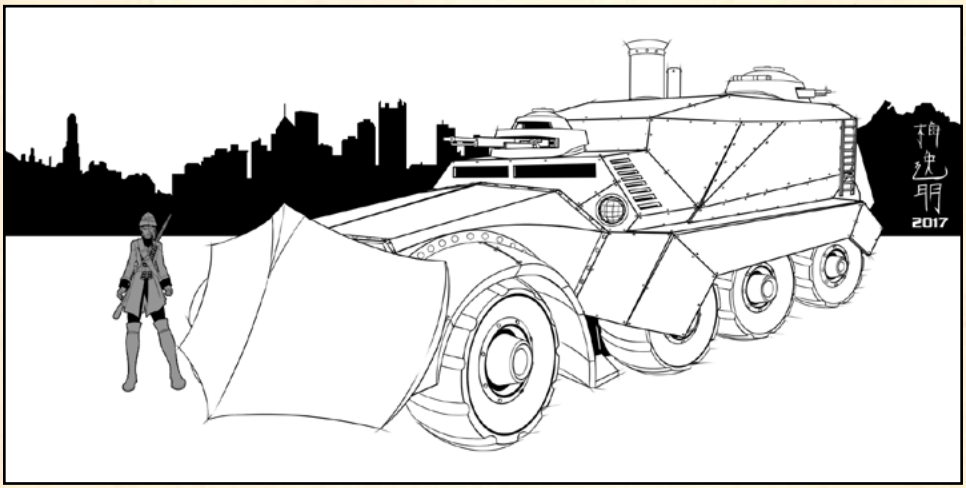
Cost: £1400
Fuel Charge: 10d
Availability: Very Rare
Speed: 12
Maneuverability: 7
Armor: 13
Armament: LMG fixed mounts fore/aft, ammunition lockers with 200 rounds for each
Ramming: 15
Passengers: 6
Cargo: 1 ton (towing capacity)
Crew: 4 (Driver, mechanic/stoker, 2 gunners)
Damage:
- **Disabled:** 92
- **Destroyed:** 109
- **Critical Threshold:** 25



Delivering troops to critical strike points can turn the tide of a battle. The problem has always been getting the unit to the location alive and in shape to fight. The Harbinger puts armor between the strike unit and enemy fire, and moves faster than a galloping horse. The troop compartment holds six rear-facing, padded seats with side doors for quick egress. With even a halfway decent running start, the Harbinger's ramming prow can break through the standard wooden palisade wall or light stone construction, and have a decent chance at breaching a stone fortress wall if artillery has softened it up first. Once through, the driver decides which pair of the four side hatches to open, allowing the troops to exit the carrier on the side away from the enemy if possible. The six shock troop soldiers are customarily armed with lever-action shotguns with fixed bayonets, and frequently carry demolition charges to open more holes in fortifications for the regular troops to exploit.

"Duncarraig" Class Assault Carrier

Cost: £1900
Fuel Charge: £-/1/2
Availability: Very Rare
Speed: 11
Maneuverability: 8
Armor: 13
Armament: LMG fixed mounts fore/aft, ammunition lockers with 300 rounds for each
Ramming: 13
Passengers: 20
Cargo: 2 tons (towing capacity)
Crew: 4 (Driver, mechanic/stoker, 2 gunners)
Damage:
- **Disabled:** 98
- **Destroyed:** 116
- **Critical Threshold:** 27

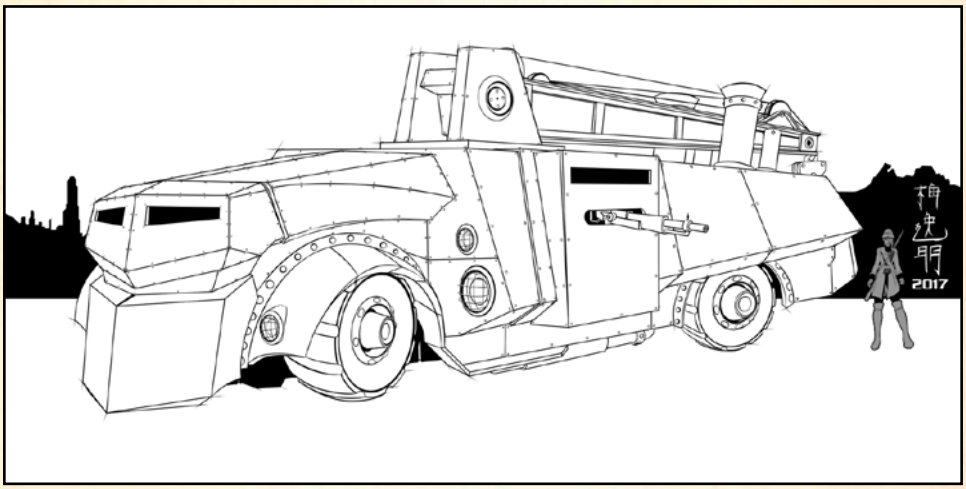


Where the Harbinger is designed to insert a small cadre of shock troops into an enemy position, establishing a beachhead, the Duncarraig brings reinforcements and the capability of extended battle. Its main compartment is lined with bench seats on either side of a central aisle. Its aft hatch is hinged at the bottom, allowing it to drop down and form a debarkation ramp. Once the vehicle halts and the driver pulls the release lever, the troops can be out of the vehicle and engaged with the enemy in a matter of seconds. The Duncarraig's ramming prow does not have the strength or cleaving power of the Harbinger, but then the Duncarraig is designed to be the second vehicle to arrive. Ideally, pairing Havelock medium kettles with Duncarraig assault carriers would allow a substantial hole to be made in an enemy fortification by the Havelock's cannon, followed by breaching and troop insertion using the Duncarraigs, all the while ignoring enemy rifle fire thanks to the vehicles' armor. This tactic has been proposed, but not yet implemented, partly due to the scarcity of the vehicles creating difficulty in fielding the combination, and partly due to resistance on the part of some of the senior field staff. Somehow, it just doesn't seem gentlemanly to ride up in an armored vehicle, blast a hole in the wall, then offload soldiers like Vikings coming off their longships to storm a village.

"Barbican" Class Heavy Deployment Supply Carrier

Cost: £1500
Fuel Charge: 9d
Availability: Very Rare
Speed: 10
Maneuverability: 9
Armor: 12
Armament: LMG fixed mounts port/starboard, 300 round ammunition lockers each
Ramming: 9
Passengers: None
Cargo: 3 tons / 200 cubic feet plus 2 tons towing capacity
Crew: 4 (Driver, mechanic/stoker, 2 gunners)
Damage:

Disabled: 84
Destroyed: 99
Critical Threshold: 23

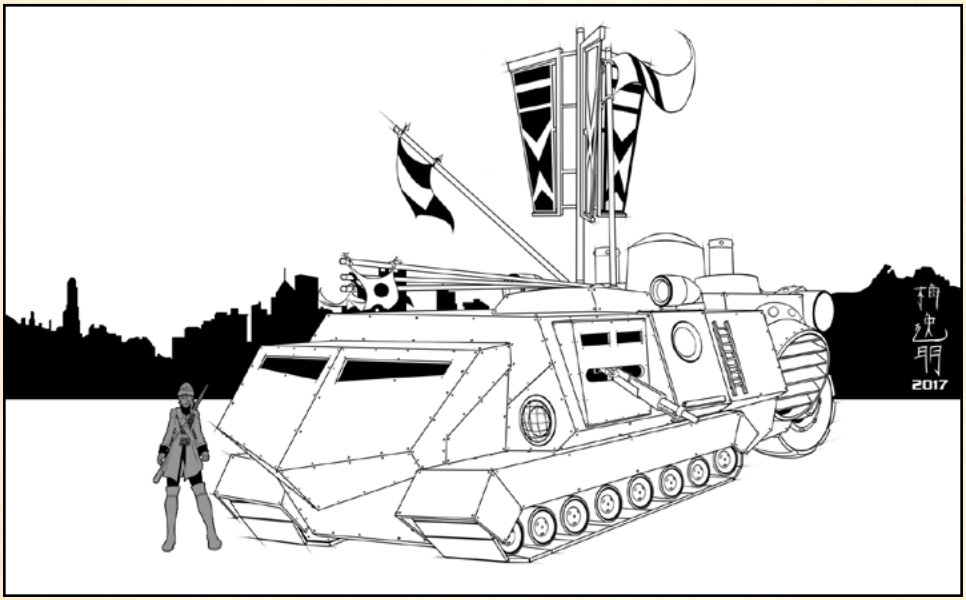


Delivering resupply to troops under fire has been a problem since the beginning of warfare. The Barbican is not the best solution, but it does seem to be the best currently available. A bit of a pig in terms of speed and maneuverability, the Barbican makes up for its tendency to wallow with the ability to carry multiple tons of cargo in its main compartment, safe behind sidewalls of deck plate-grade steel. A steam-powered winch at the aft main hatch, drawing power from the vehicle's boiler, speeds the process of loading and unloading, so that such a tempting target doesn't sit still long enough for enemy artillery to sight in. The War Office has commissioned five Barbicans thus far, and is holding off allocating funds for any more until a series of promised design improvements are delivered by the manufacturer. Four of these have been sent to the Gruv, with the fifth on its way to South Africa and the Orange Free State border.

"Conway" Class Command Carrier

Cost: £2100
Fuel Charge: 3d
Availability: Very Rare
Speed: 16
Maneuverability: 6
Armor: 11
Armament: LMG fixed mounts port/starboard, 150 round ammunition lockers each
Ramming: 11
Passengers: 8
Cargo: None (not equipped for towing)
Crew: 5 (Driver, mechanic/stoker, 2 gunners, signalman)
Damage:
Disabled: 80

Destroyed: 95
Critical Threshold: 22



Designed as a mobile armored command post rather than an assault vehicle, the Conway's main compartment features a map table, padded seats, a signalman's board, and a series of periscopes along both sides, outfitted with interchangeable lenses for varying distances. The senior officer in command may have a staff of up to seven others. Often this will include a civilian journalist, being offered a forward view of the hostilities. When possible, it includes a Seer of the Order of Britannia Victorious, to allow for telepathic communication with other command units. The engine compartment to the aft, and the driver and gunners' compartment at the forward end, have armor plating and thick cotton batting between them and the main compartment, for soundproofing as well as additional protection. The top of the vehicle bristles with signaling apparatus, flags on hinged masts and metal paddles like railway or traffic signals that can be raised or lowered by the signalman at the board.

Rivers and Oceans

Travel across the water has been augmented by steam power for a hundred years. From the first crude attempts with paddlewheels to commercial success and the creation of the packet line, to ironclad warships and screw-driven ocean-going vessels with steel hulls, the advance has been rapid and inexorable. Sail has given way to steam.

Ship Terminology

The following table provides definitions for nautical terminology, used both in water-bound vessels and airships.

Ship Terminology Table

Term	Definition
Forward	Toward the front of the ship
Aft	Toward the stern, or rear, of the ship
Bow	The front of the ship
Stern	The rear of the ship
Starboard	The right side of the ship when looking forward
Port	The left side of the ship when looking forward
Astern	Behind the ship in terms of position; going backwards or towards the rear of the ship in terms of movement
Ahead	In terms of position, out in front of the ship; in terms of movement, going forward
Lay	To go, given as a command. "Lay below" - go down to the lower deck
Above	Up on the main deck
Aloft	Up in the rigging
Below	On a lower deck
Avast	Stop that, halt what you're doing

Riverboats: the Sidewheeler and the Sternwheeler

Boats and ships designed to travel in freshwater may have screws, but the preference has been for the paddlewheel. (For reference, if you can put a boat on it and it does not sink, it's a ship.) Screws tend to foul more easily in the often luxuriant growth of water plants, or the debris of civilization. Paddlewheels require less draft, which is the measure of how far down into the water the vessel extends. They also put considerably more motive surface in contact with the water, producing considerable thrust by effectively automating the work of rowing.

Riverboats divide into two classes, based on the placement of the paddlewheel or wheels. The first designs placed a single wheel amidships, protruding down through the hull, but this was quickly abandoned due to the obviously bad idea of putting a hole in the center of the hull. Sternwheeler riverboats put the paddlewheel at the stern, customarily using a broad wheel that extends across the entire width of the ship's beam. Crank arms like those of a locomotive extend from the cylinders to the wheel, sometimes on one side only, sometimes on both sides where dual cylinders are used.

This design puts considerable thrust behind the hull, but results in arguments as to placement of the rudder or rudders. (Some ships use a single rudder, while some use a pair of them.) Whether to put the rudder ahead of the paddlewheel, so as to direct the flow of water reaching the wheel and steer ahead of the propulsion, or behind the paddlewheel, pushing the water against the rudder to provide more power to the steering gear, remains a matter of debate among naval architects.

Sternwheelers also do not have sufficient lateral stability to proceed out of the confined channels of rivers and into large expanses of open waters. To address this, the sidewheeler design places a narrow paddlewheel on either side of the hull, customarily in the aft third of the hull, with the engine sitting between the wheels and driving them both via axles. Sidewheelers gain considerable stability from this placement, allowing them to sail across large lakes and inland seas, and even to venture out into the open ocean, although the flat-bottomed design of most riverboats does not provide sufficient stability to handle ocean waves. If the engine can power the wheels independently, like the treads of a kettle, the sidewheeler gains maneuverability, and can turn much more sharply by backing water with one wheel while driving forward with the other.

Both designs have their advantages and disadvantages. The sternwheeler puts the engine and drive wheel far aft, leaving a considerable expanse of unbroken space for a large, continuous cargo deck. This allows it to haul very large objects, but extends loading and unloading time due to the necessity of crossing the deck space in order to stow and retrieve cargo from the furthest reaches. The sidewheeler puts the engine and drive wheels amidships, breaking up the deck space into fore and aft sections. This precludes the carriage of cargo larger than half the ship's length. It does, however, put the considerable weight of the engine closer to the center of gravity of the ship, helping it stay balanced. Figuring the placement of cargo by weight to keep the ship in trim becomes easier – the heaviest items are put just forward of the engine, the lightest out toward the bow or at the stern.

Since riverboats travel on fresh water, they tend to be equipped with a vacuum pump and hose for taking on water for the boiler directly from the river. This may not be the preferred method of filling the boiler, depending on where the riverboat is operating. Boats cruising the Thames, for example, must either carry a multiple-stage filtering apparatus, or take on their boiler water from a shore-side facility, else they risk fouling the boiler with the sediment, garbage, and other noxious content of the Thames.

Narrow Boat

Cost: £900
Fuel Charge: 3d
Availability: Unusual
Speed: 5
Maneuverability: 5
Draft: 3 feet
Armor: None
Armament: None
Ramming: 8 (taken by both target and canalboat)
Passengers: None

Cargo: 1500 to 2000 / 12 to 17 tons

Crew: 4 (captain, 2 deckhands, mechanic/stoker), although this will vary wildly for "family boats"

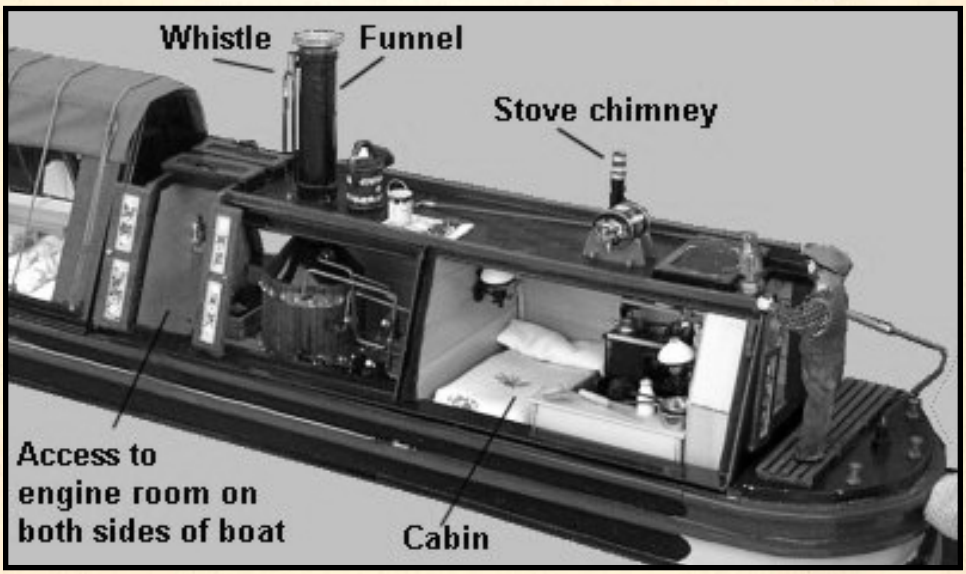
Damage:

Disabled: 42

Destroyed: 50

Critical Threshold: 13

Plying the canals of the United Kingdom, the narrow boat is specially built for the close confines of the canal system, where locks and bridges have a minimum width of seven feet. Ranging in length from 40 to 72 feet, narrow boats average sixty feet stem to stern, allowing them to fit readily into most of the locks in the canal system. Much of the boat's length is taken up by cargo hold, but the boatman's cabin and engine compartment, aft, provide crew quarters and propulsion respectively. The cabin provides sleeping and cooking arrangements for the crew, sometimes a group of hired sailors, but in some cases the boatman/owner and their family who live and work aboard the vessel, known in such cases as a "family boat". The engine compartment lies forward of the cabin and is accessed by a four to six inch wide walkway known as a gunnel, because it lies atop the gunwale of the boat. Just aft of the rear doors that lead into the crew cabin, the counter, or small aft deck, provides a single step from the doors to land or dock. While the steersman can and sometimes does stand on the counter, this puts the steersman directly above the screw, a dangerous position should the steersman slip and fall into the water. In good weather, the steersman typically closes the rear doors, leaves the top hatchway open, and sits up on the top edge of the doors, granting a clear view over the boat and down to the water in all directions. Many narrow boats are brightly painted in a style reminiscent of Romany caravans, or with a motif of roses and castles. Some are fitted with a tow-rope ring at the stern, for hauling a buttyboat, or unpowered barge, for additional cargo capacity. While having no engine, and being effectively all cargo space, the buttyboat nevertheless has its own tiller and requires a steersman at its stern.



The standard living cabin of a family boat is about 10 feet long and 6 feet 6 inches wide. On the left of the cabin entrance is a heating and cooking stove, sometimes raised above deck level on a low platform, surrounded by pots and pans hung on the bulkheads. The stovepipe passes through a hole in the roof, bound at the top with brass rings or rims. Opposite the stove is a lengthwise bench that doubles as a child's bunk at night. A crossbed lets down from the side wall at the upper end of the cabin. This part is divided from the living quarters at night by lace curtains and is known as the bedroom. The table-cupboard fits into an angle between bed and stove, the table letting down from the front of a crock cupboard with drawers and cupboards underneath. The interiors of most boat cabins are grained and varnished, with ornamental panels displaying the traditional roses and castles. Typically, there are also lace and crochet work hangings and lace plates or brass ornaments filling every possible corner. Some boats have a small fore cabin which can accommodate other children at night.

Riverboat

Cost: £24,000
Fuel Charge: 5d
Availability: Rare
Speed: 6
Maneuverability: 6 (sidewheeler), 7 (sternwheeler)
Draft: 12 feet
Armor: None
Armament: None
Ramming: 10 (taken by both target and canalboat)
Passengers: 150
Cargo: 5000 / 50 tons
Crew: 14 (captain/pilot, engineer, 4 engine crew, 8 deckhands)
Damage:
- **Disabled:** 64
- **Destroyed:** 76
- **Critical Threshold:** 18

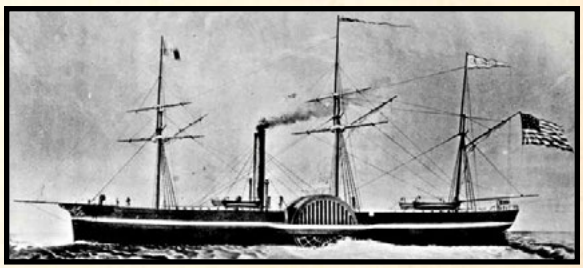
Seen more in the Union and the Confederacy than in the United Kingdom or any of the European nations, the riverboat turns the Mississippi River from a dividing line into a well-traveled highway. Generally, the lowest deck provides space for cargo and the engine or engines. Larger ships will carry multiple engines, sometimes feeding off a single boiler, sometimes with multiple boilers. The ship pictured, with two stacks, has two boilers, one port and one starboard, each with its own set of expansion cylinders and condenser. Keeping the engines synchronized, so that the cylinders drive the Pittman arms, the long crankshafts that turn the paddlewheel, in unison, is a primary duty for the engineer. Passengers board at the bow while cargo is loaded and unloaded amidships or at the stern. A manual or steam-powered winch may be present at the cargo hatch. Steerage passengers are berthed both in the nooks and crannies of the cargo deck, and on the first deck up, squeezed in between the crew quarters, the galley, and the upper reaches of the engine compartment. The second

deck up has the saloon that gives premium passage its name, with its bar and recreational facilities, and the more comfortable passenger cabins. Above that rises the captain's cabin, the wheelhouse, and the stacks. If the riverboat has a calliope, as the fancier ones tend to do, it will be located out in the open behind the wheelhouse, and kept under a tarp or wooden housing when not in use. A steam calliope can be heard for two miles or more on the open river, and is often used to announce the impending arrival of the boat well before the destination comes into view. Riverboats are not designed for warfare, and thus do not have ramming prows or gun emplacements, or anything more offensive than a badly played calliope.

Big Ships: Crossing the Oceans

Whether ocean-going vessels are driven by sidewheel or screw largely depends on their hull construction. Screws put tremendous pressure on the stern of the ship, focused on a relatively small area where the shaft attaches to the engine, which transfers to the engine mounts. This works better in ships with iron or steel hulls. Paddlewheels mounted port and starboard distribute the load to two points, their axles, which can be secured at multiple points along their length, transferring the thrust to the hull across the length of the axle. The stresses can be readily handled by a wooden hull. The length of the ship also helps determine the material. All ships flex when waves pass, a phenomenon known as hogging. Iron and steel hulls hog much less than wooden hulls, allowing ship length to exceed 300 feet, the maximum length that wooden ships may attain without risking the keel breaking when the ship hogs. Hull shape follows the same basic design regardless of the material or propulsion method: a steeply wedge-shaped hull with a deep draft, for better stability in the heavy waves of the open sea. All that then remains is a question of size and horsepower.

Steam Packet



Cost: £35,000
Fuel Charge: 6d
Availability: Very Rare
Speed: 6
Maneuverability: 9
Draft: 14 feet
Armor: None
Armament: None
Ramming: 12 (taken by both target and ship)
Passengers: 60 Saloon, 150 Steerage
Cargo: 1000 tons
Crew: 36 (captain, officers, deckhands, engineer, engine room crew)
Damage:
- **Disabled:** 92
- **Destroyed:** 109
- **Critical Threshold:** 25

A packet is a combined passenger and cargo vessel providing long distance service and mail delivery, the most common type of civilian steamship plying the ocean. Many of these ships still

have masts, as backup in case the steam engines fail or the ship runs out of fuel, but most of them only raise sail in the occasional drill to keep the crew in training. These ships generally have a range of approximately 3000 miles between refueling stops, carrying upwards of 500 tons of coal in their fuel bunkers. The engines take up a considerable amount of space, being two to three decks high. Instead of connecting the cylinders to a flywheel to turn the axle, the typical engine uses a walking-beam design that requires less operating space. Sea-going vessels are normally fitted out to use salt water in their boilers, with the operating parts made of stainless steel and other non-corroding metals. Packet ships typically have passenger decks for part of their length, with the saloon passengers in comparatively large cabins on the well ventilated upper deck, and the steerage passengers in cramped quarters below. The cargo hold takes up the central section, reaching down from the main deck twenty feet or more into the depths of the hull. The engine room and fuel bunkers, crews' quarters and supply storage occupy the aft section. Ships of this size normally require a tugboat to maneuver them into and out of harbor and dock, as their steering gear and engines simply aren't capable of the precise guidance at low speeds required.

Military Vessels

This section covers ships designed for freshwater naval engagements, with a specific focus on ironclads and steam-driven vessels. Before describing the ships, a brief discussion of guns, gun emplacements, ship design, and the naval arms race is in order.

By 1879, the increasingly complex hydraulic systems that allowed muzzle-loading weapons to be reloaded without running the guns in or exposing the gun crews to enemy fire had become unworkable, with fire rates reduced down to one round every ten to fifteen minutes. The de Bange "mushroom obturator", developed in France in 1872, solved the problem of getting a good seal and locking down the breech sufficiently to allow for successful breech-loading cannon. In a rare show of tactical sense, the British Navy swiftly adopted the obturator, and breech-loading guns replaced muzzle-loading cannon throughout the fleet. The three-part obturator system, consisting of a screw locking mechanism, a grease-soaked ring-shaped asbestos pad, and a sealing cone, became known in the British Navy as a shampinyon, a poorly pronounced version of the French word for mushroom. When the gun is fired, the back blast drives the sealing cone against the pad, forcing it to expand and seal the breech, preventing the hot gases from escaping out the wrong end of the weapon. The screw locking mechanism cannot be opened against a pressure build-up in the barrel, and so prevents the problem of the locking bar being sent flying through the gun deck by a misfire.

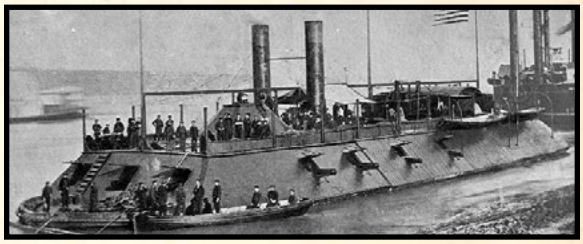
Further developments included the turret, an armored enclosure on tracks or rails allowing the guns to be repositioned to fire to either side without having to turn the ship, and the barbette, a fixed armored position with the gun itself mounted on tracks or a turntable inside. Both presented challenges to naval architects and tacticians. The turret required a clear deck so that the rotation of the guns was not blocked by masts or rigging, another nail in the coffin of sails. Turrets also put a substantial weight above the waterline, requiring either a balancing weight in the keel or placement of the turret low to the waterline, neither of which contributed to the maneuvering capability of the ship. Barbettes required no machinery, but generally had no top armor, leaving the gun crew vulnerable to fire incoming from above, such as arced fire from shore emplacements or bombs dropped from airships. Building the ship with low freeboard to help prevent capsizing requires reducing the size of the hull, which in turn means less room for fuel and ammunition storage. Currently, no optimal solution has been found. Naval architects still struggle to design a vessel optimized for ship to ship

combat, resistance to shore bombardment, and effectiveness against airships.

For a period of approximately ten years, starting in the 1860s with the introduction of the casemate ironclad, ramming prows were thought to be a critical weapon. After a few demonstrations, however, it became painfully obvious that an ironclad was simply too slow to ram an enemy vessel that was itself in motion. As well, attempting to ram an enemy ship required breaking the line of battle, taking at least one ship out of formation and putting it out in the open and thus vulnerable to concentrated enemy fire. The weight and poor hydrodynamics of the ramming prow interfered with the agility and balance of the vessel, resulting in ships that were hard to steer and tended to go down by the bow at speed. Despite the spectacular example of the Austrian flagship *SMS Erzherzog Ferdinand Max* sinking the Italian vessel *Re d'Italia* at the Battle of Lissa, the loss of *HMS Galvanard* by taking on water when she went bow-down at ramming speed put paid to the ramming prow. Some older ships still have ramming prows, while others carry the marks of having had them at launch with subsequent removal. Very few captains will elect to attempt ramming an enemy.

The Whitehead self propelled torpedo, introduced in 1868 and becoming more widely deployed, has also changed the game considerably. Ironclads may be floating fortresses, but as a result they move slowly, and make easy targets for missiles traveling (and potentially launched from) underwater. Later torpedo designs have attempted to add powerful magnets to draw the torpedo against the iron hull of a vessel, but the slightest amount of seawater leaking into the torpedo shorts out the electromagnet. Many ironclads now carry depth charges, bombs with pressure sensors designed to explode at a specific depth below the waves, as a counter-agent to submarines and a way of deploying flak against torpedoes. As with any arms race, the designers continue to refine their offensive and defensive capabilities, and the situation evolves from month to month, with last year's state of the art ship being tomorrow's ready victim.

Casemate Ironclad



Cost: £44,000
Fuel Charge: £1/6/-
Availability: Very Rare
Speed: 4
Maneuverability: 10
Draft: 6 feet
Armor: 32
Armament: 12pdr breech loading bow and stern chasers (two each fore / aft), 32pdr breech loading main guns (six each port / starboard), HMG fixed mounts port and starboard at bow and stern (total four) to repel boarders. Shells and ammunition for all weaponry sufficient to fight a four-hour engagement. Torpedoes and depth charges may be carried, but are not standard equipment.
Ramming: 21
Passengers: None
Cargo: None (not equipped for towing)
Crew: 250 (Captain, officers including mates and pilot, engineer, engine crew, gunners, gunnery crew)
Damage:
Disabled: 106

Destroyed: 125
Critical Threshold: 29

Built on an iron-bound wooden hull, with a wooden superstructure covered with three layers of two-inch steel armor plating, the casemate ironclad first went into service during the American War of Secession. The design has been improved over the years, but the general shape of the vessel still follows that of her predecessors, with the hull above water angled back to deflect incoming shot upward and away. The guns are mounted on heavy trucks, themselves mounted on wheels locked into curved rails built into the deck. This allows a small crew of gunners to reposition the gun quickly, so that the ship itself does not have to turn to bring its guns to bear. Casemate ironclads are normally dual screw-driven, with between four to eight boilers each driving a walking beam, in turn connected to one of two screw shafts. Reversing one of the screws increases the turning speed of the vessel, but takes a skilled pilot and engineer to perform the maneuver without shearing the axle or otherwise damaging the ship's propulsion. Just forward of the stacks, the pilot house rises as a miniature of the ship, a slope-sided armored structure with small portholes made of thick tempered glass. Even with the ventilation blowers at full, the interior grows hot and smoky within minutes of the start of battle, producing difficult conditions even for experienced sailors.

Turreted Ironclad

Cost: £47,000
Fuel Charge: £1/6/-
Availability: Very Rare
Speed: 6
Maneuverability: 9
Draft: 8 feet
Armor: 28

Armament: Paired 32pdr breech loading guns in two turrets, one fore and one aft; paired 12pdr breech-loading guns in two turrets, one at the bow and one at the stern; HMG fixed mounts port and starboard at bow and stern (total four) to repel boarders. Depth charge launcher usually mounted at the stern. Optional torpedo launcher fitted at the bow. Shells and ammunition for all weaponry sufficient to fight a four-hour engagement.

Ramming: 20 (may be increased with optional ramming prow, but Speed and Maneuverability drop by half the point value of the additional ramming damage)

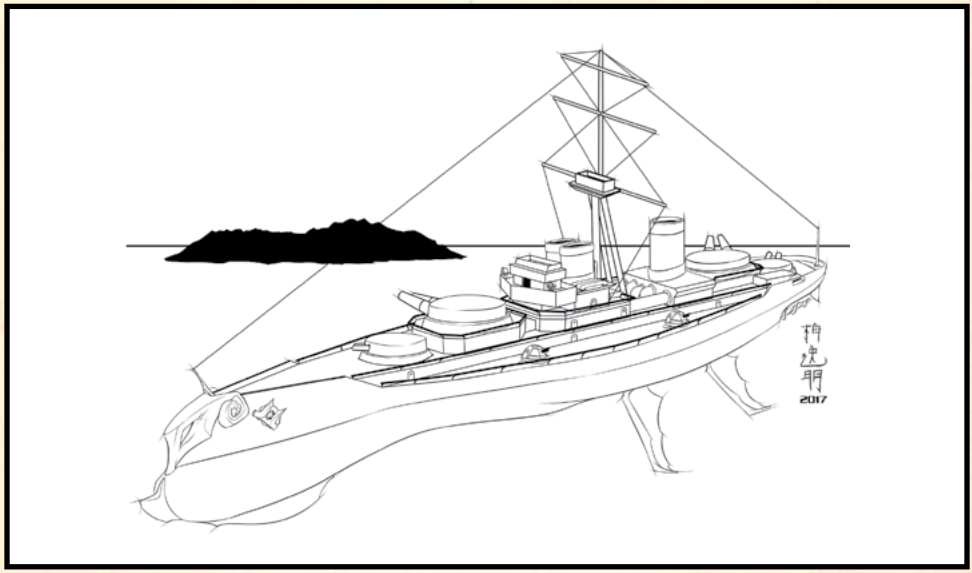
Passengers: None

Cargo: None (not equipped for towing)

Crew: 220 (Captain, officers including mates and pilot, engineer, engine crew, gunners, gunnery crew)

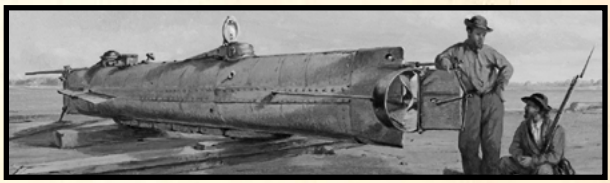
Damage:
Disabled: 110
Destroyed: 130
Critical Threshold: 30

The most common design in European navies, the turreted ironclad is somewhat broad of beam and low of freeboard, with the bow and stern chaser turrets riding only a few feet above the waves, and the main turrets positioned toward the center of the vessel and a few feet higher, to be able to fire over the chaser turrets. The turret tracks do not describe a full circle, so that the turrets cannot be cranked round too far and bring the guns to bear on the ship itself. Generally, these



ships are screw-driven, both because their predominantly iron and steel construction allows it, but also because the housing of a sidewheel presents a tempting target for the enemy. Armoring the paddlewheel housing puts a considerable weight of steel well above the waterline and can result in capsizing. Earlier vessels of this design were equipped with ramming prows; some still carry them, while others have had them removed, leaving only the mounts at the bow to tell of their presence. Later designs have incorporated steam-driven turrets, replacing the manual cranks and the necessity of several people in the gun crew dedicated to repositioning the turret by muscle power with a single wheel to apply motive force to the turret in either rotational direction, and a lever to control the brake. While these ships carry considerable amounts of ammunition and coal, the rate at which they consume these supplies in battle requires tender ships to be readily available after the engagement.

"Singer" Class Manual Crank Submarine



Cost: £1500
Fuel Charge: £0
Availability: Very Rare
Speed: 4
Maneuverability: 8
Draft: 6 feet (surfaced); requires 15 feet of water for submersion and maneuvering, with a maximum operational depth of 50 feet
Armor: 18
Armament: One spar torpedo or two self-propelled torpedoes
Ramming: 8 (taken by both target and submarine)
Passengers: None
Cargo: None (not equipped for towing)
Crew: 10 (pilot/torpedo operator, captain/diving officer, 8 crew)
Damage:

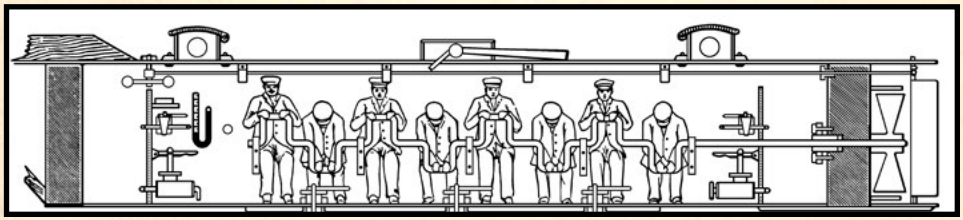
Disabled: 56
Destroyed: 67
Critical Threshold: 16

Direct descendants of the *CSS Hunley*, that served with distinction in the American War of Secession, manual crank submarines rely on tender ships to tow them to the conflict area, and then the muscle power of their crew to propel them to the target and back again. The Singer class is an older design, developed by the Singer Submarine Corps of the Confederate Navy late in the war, after the success of *CSS Hunley's* mission against the *USS Housatonic*. While antiquated, the design is still reasonably effective. Some older vessels remain in service, and new ones are commissioned from time to time by nations desirous of a silent underwater attack.

The pilot stands at the bow, under the forward conning tower, steers the vessel, and operates the armament. The spar torpedo has no propulsion of its own. Instead, the submarine carries it on a long pole extending from the bow, and positions the torpedo near the hull of the target vessel. The torpedo relies on magnets to attach it to the hull, and an electrical signal sent by wire to detonate it once the submarine has withdrawn to minimum safe distance. Alternatively, two self-propelled torpedoes may be carried, in launching cradles attached to the exterior of the hull port and starboard. The pilot aims them by lining up the bow of the submarine with the target, then releases the clamps holding the torpedo in its cradle and sends an electrical signal to start the torpedo's screw and arm its warhead. There have been instances where the clamps failed to release, and the submarine has had to return to its tender with an armed torpedo in the cradle. Disarming the torpedo requires two divers and a very careful set of operations.

The commanding officer, standing at the aft conning tower, also serves as the dive officer, controlling the ballast, diving planes, hatches, and air systems. Interlocks prevent the diving planes from being set to a downward angle while the hatches are open, a relic of *CSS Hunley* and the near-death of its crew while training for its first mission. The submarine's ballast consists of iron weights attached to the keel that can be dropped for emergency surfacing by pulling a series of release levers at the dive control station. The air systems remain primitive, battery operated fans and a tank of phlogisticated air that must be carefully rationed. Over pressurizing the interior is avoided by venting the atmosphere through valves in the conning tower hatches. This cannot be done while within visual range of an enemy vessel, as sailors have learned to watch for rising bubbles. The recent invention of the Garret Pneumatophore by Rev. George Garret of England has to some extent alleviated this, as the device removes the waste gases from the air, freshening it and reducing the atmospheric pressure slightly. If the pneumatophore and the phlogisticated air tank are kept in balance, which can be done with clever clockwork, the submarine may remain submerged for several hours without emitting telltale bubbles.

The remainder of the crew sit on alternating sides of the central crank, and operate it with their hands and feet. The commanding officer calls cadence for the rotation, as if directing a marching infantry unit. Reversing the screw simply requires a command of "pull now!", and resuming



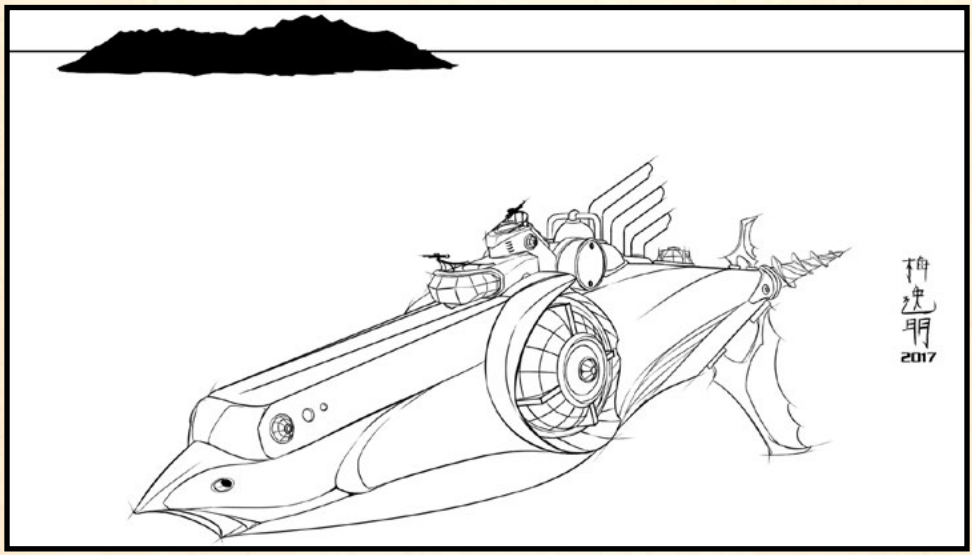
forward motion a command of "push now!". The center seats are known as the dead mens' chairs, due to their being the furthest from the bow and stern hatches, and their occupants the last to be able to evacuate if the ship sinks.

By tradition, the commanding officer of a manual crank submarine carries a gold coin in their left trouser pocket. Lt. George Dixon, who commanded *CSS Hunley*, had a $20 gold piece, given to him by his fiancee as a good luck token, in his pocket at the Battle of Shiloh, where he was shot in the thigh. The coin deflected the bullet, saving Lt. Dixon's leg and probably his life. He had the coin smoothed out and inscribed with the date and the name of the battle, and kept it in the same pocket for the rest of his career. Lt. Malcolm Fisher, commanding *CSS Alligator* in 1868, used his coin to close a gap in the air system battery contacts when a depth charge knocked them out of alignment, allowing his vessel to escape. Other stories abound. The coin is presented by the spouse, fiancee, or close loved one at the commanding officer's commissioning ceremony, and supplied by the Department of the Navy if the family cannot afford to provide it.

Submarine (Steam/Electrical)

Cost: £24,000
Fuel Charge: £0/4/-
Availability: Very Rare
Speed: 6
Maneuverability: 7
Draft: 10 feet (surfaced); requires 30 feet of water for submersion and maneuvering; maximum operating depth 100 feet
Armor: 24
Armament: Self-propelled torpedoes with internal launch tubes (normal complement of 12); LMG pintle mounts on the conning tower for self-defense at the surface (LMGs stored in the conning tower armament locker when submerged)
Ramming: 18 (taken by both target and vessel)
Passengers: None
Cargo: None (not equipped for towing)
Crew: 21 (captain, pilot, three mates, engineer, engine crew, torpedo crew, general crew)
Damage:
- **Disabled:** 96
- **Destroyed:** 113
- **Critical Threshold:** 26

Successor to the *Hunley* submersible and *David* semi-submersible designs, the hybrid steam/electrical submarine sails at the surface under steam power to the target area, then douses her fires and switches to batteries for the attack. Submersion time is sharply limited by battery life and air supply. Releasing phlogisticated air into the interior freshens the atmosphere, but the excess pressure must be released, and a trail of bubbles can be spotted by the enemy. Attempts have been made to compress the interior atmosphere into exhaust tanks at the stern while releasing fresh air at the bow, but while this does work reasonably well, it is of limited utility due to exhaust tank capacity and battery life for the compressor pump. In an emergency, manually cranked generators can be used to recharge the batteries, but use of these depletes the atmosphere due to the increased respiration of the crewmen operating them. The recent invention of the Garret Pneumatophore, as previously mentioned, alleviates a good deal of this problem, but retrofitting existing submarines with the



pneumatophore system takes considerable time in drydock, taking the ship out of service for longer than is tactically desired. Thus, the progress of fitting existing submarines with pneumatophores is proceeding slowly. New ships are being designed with the pneumatophore already in place.

The torpedo launch system uses a flooded-tube design. Gunnery crew load the torpedo into a launch tube inside the submarine, attach the arming and propulsion start pins to wires within the tube, dog down the loading hatch, then flood the tube with seawater and open an exterior hatch. The torpedo is then launched from the tube using a burst of compressed air, which pulls the pins that arm the warhead and start the torpedo's motor. Aiming torpedoes has not changed since the manual-crank era. The pilot lines the bow of the submarine up with the target, then notifies the mate. The order to fire is then relayed from the bridge to the torpedo chamber. Attempts have been made to use springs, clockwork, or other mechanisms to eject the torpedo from the launch tube, as the compressed air system creates a cloud of bubbles that marks the submarine's location, but thus far none have succeeded. Lives have been lost when the mechanism failed and the torpedo chamber was flooded by a leaking tube.

As with a surface vessel, water-tight doors stand between each compartment. Water-tight vanes in the air ducts can be closed either manually or electrically to prevent seawater from moving through the air system. The galley cannot be operated during submerged running. The crew either subsist on cold rations or "Neptune stew", a generally meatless concoction kept in Dutch ovens or other heavy cast-iron cookware to retain heat. Sleeping arrangements for the officers consist of quarters barely large enough for a bunk, while the crew sling hammocks wherever space can be found.

Air Travel

Toward the end of the American War of Secession, the Confederacy obtained the designs of Henri Giffard, the first person to successfully fly a powered air vehicle. Desperate for a way to

deal with the Union naval blockade, the Confederacy threw its limited resources at Giffard's design. The resulting airship, known as a Giffard (accent on the second syllable, it's French) in honor of the inventor, gave the Confederacy the ability to drop bombs on the Union blockade ships from an altitude where naval guns could not reach, and to move bales of cotton out of the country and critical supplies, such as medicines and rare elements, in. The decade since the end of the war has seen some advancement in Giffard design, and a few attempts at other approaches to powered flight. This section discusses both the Giffard and the alternatives.

Giffard Design and a Quick Lesson in Chemistry

Thus far, no one has produced a functional rigid frame gasbag. Most materials that would stand up to the wind and the pressure are too heavy, or present a danger of sparks, or are prohibitively expensive. Thus, the Giffard continues to use a flexible gasbag, generally shaped somewhat like a fat cigar. A rope net over the gasbag keeps it contained, and provides cables from which to suspend the gondola.

Generally made from the lightest materials available, airship gondolas range from a single deck somewhat resembling an open-top narrowboat to multiple-deck affairs requiring dual gasbags for support. Regardless of the number of decks, some parts of the design cannot vary, including the placement of the Kipp and the engine.

The Kipp apparatus generates hydrogen to fill the gasbag. This must be done not only before flight, but sometimes during, in order to boost the lift of the airship, or to compensate for the inevitable slow leakage of hydrogen through the gasbag's fabric. Nothing has yet been found that hydrogen cannot permeate. Consisting of three squat cylindrical tanks stacked one atop the other, the Kipp creates hydrogen through a simple chemical reaction. The top tank contains hydrochloric acid, in a strength sufficient to dissolve human flesh in a matter of seconds. Any solution more dilute would just add water weight to the airship. The middle tank contains zinc chips, squares of nearly pure zinc about the size of a sovereign. The operator opens a valve and allows acid to pour down onto the zinc. The chemical reaction between the two releases large quantities of hydrogen, which is then sent through a flexible tube up into the gasbag. Another valve allows the effluent to drain down into the bottom tank. A skilled operator can control the reaction by opening and closing the valves, halting the flow of acid into the zinc chamber and leaving the effluent drain closed in order to keep the hydrogen pressure up and force the gas up into the gasbag, then closing the gas valve and opening the effluent drain and the pressure release to take the Kipp back down to inactive. Do it wrong and there's at least five ways for the Kipp to explode, taking the entire ship with it. Customarily, the Kipp is kept inside an armored enclosure, one of the few uses of steel plating aboard the ship. A rope ladder, hardly more than ship's rigging, extends up the side of the Kipp and beyond to the upper gas hose connection. Anyone other than the ship's engineer attempting to climb the ladder under any but the most dire circumstances will be hauled roughly down, and should count themselves fortunate if all they receive is a thrashing.

Giffards use microsteam engines for weight issues and efficiency. Having no boiler, just a water supply tank, and using powdered coke cartridges, the microsteam engine takes up less room aboard the ship as well. The engine must be located aft, and on a multiple-deck gondola is put below. Wherever the engine is located, aluminium cooling fins protrude from the water recirculator through the hull. The fuel bunker, with its stacks of powdered coke cartridges, must be located next to the engine, usually on the far side of a fireproof bulkhead. The stack goes directly out astern

from the engine, a long pipe with a conical spark suppressor at the end like one sees on American wood-burning locomotives, and with the blast-pipe routed into the stack as usual. The water tank for the recirculator tends to be the size of the engine or larger, taking up half the engine compartment all on its own. The engine turns a shaft that in turn drives a flywheel, with a transmission gearbox between it and the propeller shaft or shafts allowing the propeller(s) to be reversed without having to reverse the engine itself.

Giffard Operation

Flying a Giffard requires a pilot and an engineer at the very least. Having a captain who can direct the efforts of the crew and navigate helps considerably. Some airship captains are themselves pilots and will take the helm depending on circumstances. Larger Giffards need a few deckhands to see to general operation, assist the engineer with swapping out the coke cartridges and engine maintenance, and perhaps a gunner or two if the ship has weaponry. Given the criticality of the lift ratio, the lifting power of the gasbag to the weight of the gondola and its contents, no person serves aboard a Giffard in only one capacity, with the possible exception of the pilot.

Climb Rate and Stalling

Airships may climb or descend at half their Speed step. Attempts to climb or descend more quickly require Pilot Airship Tests against the vessel's Maneuverability plus the Speed Step being used. Failure results in random movement off course and the potential for a stall, or loss of lift and maneuverability. Roll 1d8 and consult the **Airship Random Movement Table**. Any movement aft causes an immediate stall. A Rule of One result on the Pilot Airship Test also causes an immediate stall. If the airship does not immediately stall, the Pilot takes the Stall Penalty on the next Pilot Test made. Stall Penalties are cumulative as long as the ship is being pushed beyond its normal limits. Once an airship has stalled, or is in danger of doing so, crew members may make Crew Airship Tests against the (Maneuverability + Speed) Target Number, and contribute +1 per success to the Pilot's next Test.

Airship Random Movement Table

Result	Direction	Stall Penalty	Damage
1	Forward	-1	None
2	Forward and Starboard	-2	None
3	Starboard	-3	¼ of Speed Step
4	Aft and Starboard	-4	½ of Speed Step
5	Aft	-5	Speed Step
6	Aft and Port	-4	½ of Speed Step
7	Port	-3	¼ of Speed Step
8	Forward and Port	-2	None

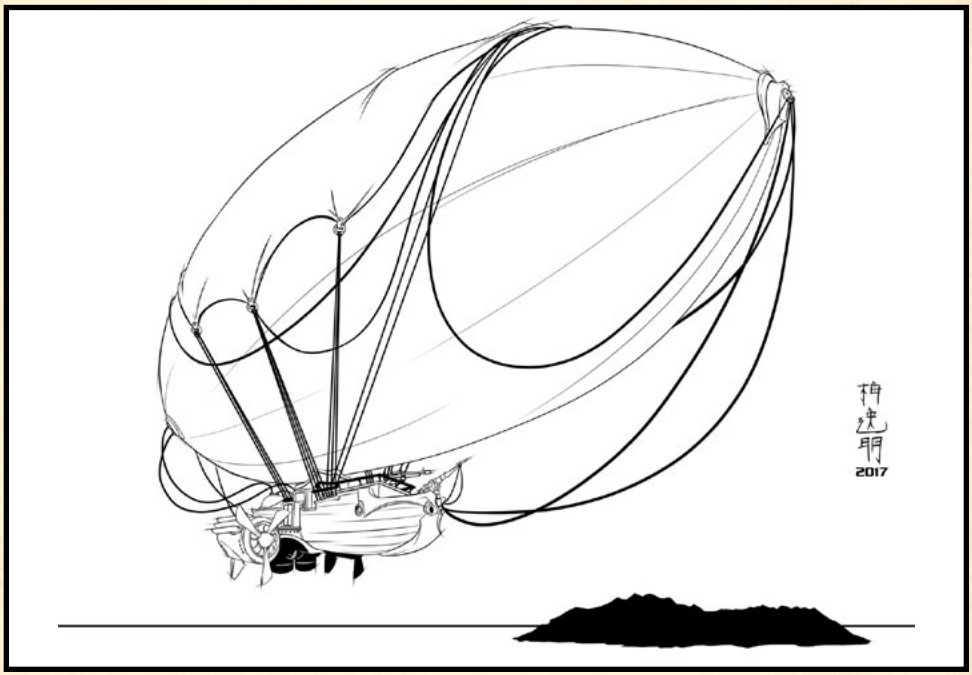
When an airship stalls, it stops climbing and descends abruptly, at double its Speed Step. Whether this causes the airship to reach the ground or not must be determined by the Gamemaster, as the mechanic for altitude is not exact. The airship takes structural damage according to the Damage column of the **Airship Random Movement Table**. This damage ignores armor. If the airship

takes its Disabled Rating in damage, it crashes. Any crash from an altitude of over 200 yards is likely to be fatal for all aboard.

Each round that the airship is stalled, roll again on the **Airship Random Movement Table.** The ship will continue to descend and veer off course until the pilot makes a successful Pilot Airship Test, which regains control of the airship and clears all penalties.

Paolo Minghetti, pilot of Fiore di Firenze, has just left a town in rather a large hurry. The people of the town object to his departure, so much so that they fire rifles at his receding airship. This might have something to do with the three hundred year old paintings in the hold, for which Paolo has no receipt. Paolo, anxious to exceed the range of the townspeople's firearms, pushes Fiore to climb faster than her usual rate of 40 yards per round, being half of her Speed Step, which is 12. He attempts to climb at a Speed Step of 9, being 69 yards per round. Fiore's Maneuverability is 8, and so Paolo must make a Pilot Airship Test against a TN of 17. He rolls a 12, adds karma, and still only has a 14. Fiore stalls. The Gamemaster rolls a d8 on the Airship Random Movement Table, and gets a 1. Fiore lurches forward, and drops 24 yards (double her Speed Step of 12). The good news is that this spoils the aim of the townsfolk, and their shots pass astern of the airship. The bad news is that the airship is now dropping like a stone, and Paolo is at a -1 Step penalty to his next Pilot Airship Test, at which he must succeed to pull Fiore out of the stall. Sadly, Paolo has no crew aboard his tiny vessel, as otherwise they could make Crew Airship (17) Tests, and contribute bonuses to his next Pilot Airship Test with their successes. Paolo's situation may significantly interfere with further attempts to dodge gunfire, and cause problems with trying to pass safely over the town wall.

Scout Giffard

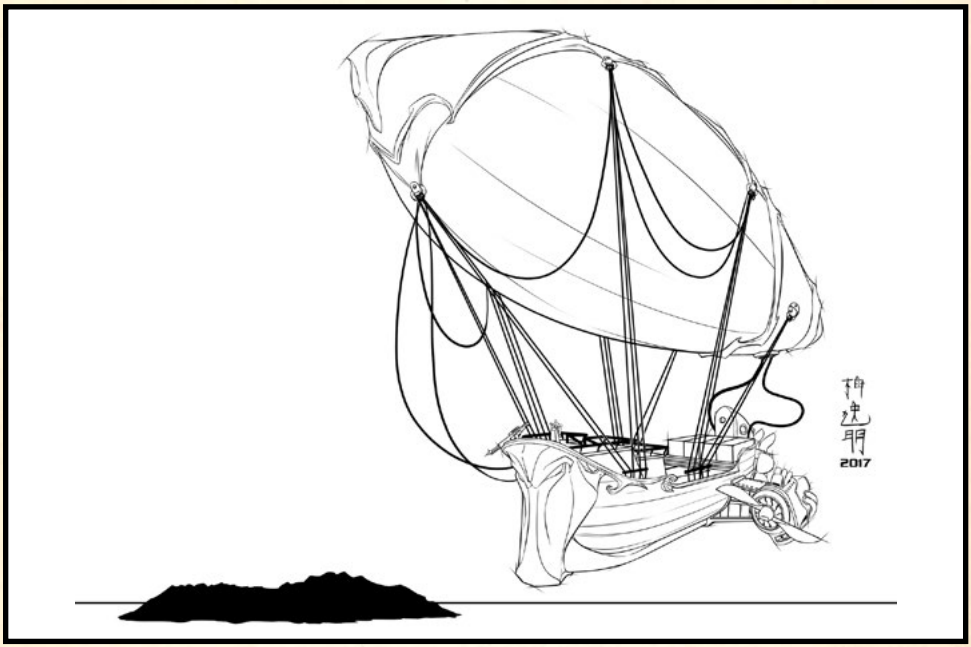


Cost: £8,000
Fuel Charge: 7d (includes acid and zinc as well as coke)
Availability: Very Rare
Speed: 12
Maneuverability: 7
Armor: 11
Armament: LMG fixed mount bow/stern, harpoon gun fixed mount bow
Ramming: 7 (taken by both target and vessel)
Passengers: 4
Cargo: 2500 / 50
Crew: 4 (captain, pilot, engineer, gunner)
Damage:
Disabled: 96
Destroyed: 113
Critical Threshold: 26

Carrying a two-deck gondola, the scout Giffard puts the engine and fuel compartments below, along with the minimal cargo hold and broom closet sized passenger cabins, and the Kipp, wheelhouse, and guns on the open main deck, with the Kipp customarily in an armored enclosure. Built more for range and agility than speed or combat prowess, the scout Giffard tends to be pressed into service for quite a few duties it wasn't originally designed for, largely based on its ready availability. Larger vessels have to be brought through the Rabbit Hole piecemeal, or constructed on the Gruv world, whereas the scout Giffard can be brought through on a flatbed car with its gondola intact and its gasbag packed up and stored in a following freight car. Given the ready availability of zinc and hydrochloric acid at the mining settlements, scout Giffards find use as survey ships in the Gladstone mountains. Bush pilots, those private, enterprising individuals who fly into the far reaches of the wilderness, tend to prefer the scout Giffard partly because they can afford it, partly because they can fly it into distant or tightly confined areas that larger ships, with their higher fuel and hydrogen requirements and greater size, might have trouble reaching.

Cargo Giffard

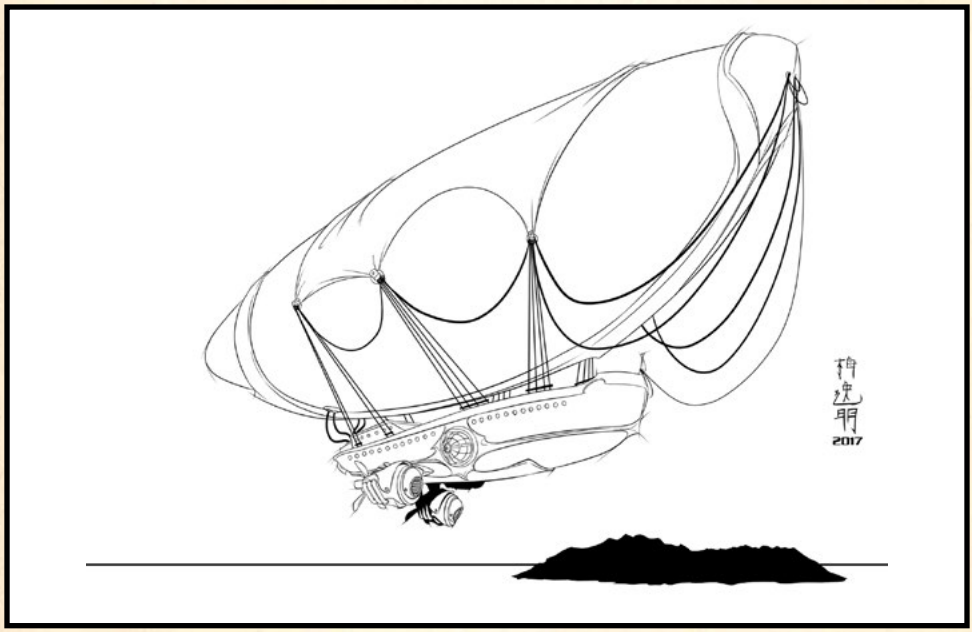
Cost: £11,000
Fuel Charge: 8d (includes acid and zinc as well as coke)
Availability: Very Rare
Speed: 10
Maneuverability: 8
Armor: 12
Armament: LMG fixed mount bow/stern, pintle mounts along rail port/starboard
Ramming: 9 (taken by both target and vessel)
Passengers: None
Cargo: 10,000 / 200
Crew: 7 (captain, pilot, engineer, gunner, 3 deckhands)
Damage:
Disabled: 106
Destroyed: 125
Critical Threshold: 29



Built for capacity, not for speed or agility, the modern cargo Giffard is the descendant of the airships that saved the Confederacy. Generally consisting of a three deck gondola, much of the interior space is given over to a multi-deck cargo hold, a vast open space lined with cleats for tie-down of goods in transit. The crew cabins and supplies are shoehorned into the bow, and the engine, fuel, steering gear, galley, and captain's cabin compete for space at the stern. Like the scout, the cargo Giffard's Kipp is on deck in an armored enclosure. Often the wheelhouse is at the bow, operating the rudder and propellers through cable connections running through conduit attached to the underside of the top deck. This allows the pilot a better view of where the ship is going, and does away with the need for a lookout and thus the weight of an extra crewman. Putting enough hydrogen into a single gasbag to lift more cargo runs into an inverse-square problem, with hydrogen outgassing across the increased surface area requiring more frequent top-up from the Kipp, which in turn requires carrying more acid and zinc and less cargo. Some experimentation has been done with double or triple gasbags, but controlling their tendency to flutter and separate as the wind blows in between them has been difficult. While the system does have increased safety in the redundancy of the gasbags, it decreases stability and makes piloting more difficult, which offsets the safety gain. Rumor has it that the Confederacy is experimenting with rigid-frame airships again, in an effort to integrate the gondola and gasbags into a streamlined whole. If they are successful, as so many before them have not been, cargo airships could theoretically increase in size to double or triple their current capacity.

Passenger Giffard

Cost: £19,000
Fuel Charge: £-/1/2
Availability: Very Rare
Speed: 11
Maneuverability: 7
Armor: 14
Armament: LMG fixed mount bow/stern, HMG fixed mount port/starboard
Ramming: 9 (taken by both target and vessel)
Passengers: 16
Cargo: 5000 / 100
Crew: 11 (captain, pilot, engineer, 4 gunners, 3 deckhands, 2 stewards)
Damage:
- **Disabled:** 102
- **Destroyed:** 120
- **Critical Threshold:** 28



While airship travel remains terrifically expensive, there's a thriving market for moving people of substantial wealth from place to place in comfort. Accommodations aboard a passenger airship compare favorably to those aboard a Pullman car or an ocean liner. The cabins are small, but cleverly engineered to put all the necessary facilities ready to hand, although not all usable at once. The bed must be folded up out of the way before the wardrobe can be opened, and that in turn closed before the washbasin can be deployed. Meals are served at tiny, lightweight tables in lounges along both sides of the hull, and prepared in a galley in between, that also serves the crew. The engine has the cargo hold and thick soundproofing mats in between it and the passengers. While the

Kipp remains on deck, its enclosure merges with the deckhouse where the crew compartments are, hiding it in plain sight in an area generally off limits to the paying customers. Officer uniforms are snappy and well tailored, the brightwork well polished, and the ship tidy and attractive. Shapeless tarps draped over light wooden frames hide the guns, readily discarded in the event of air pirates or other hazard. Most passengers never even see any sort of working machinery, with the crew performing maintenance at night when the customers are at dinner or playing cards in the lounge. Passenger airships tend to be owned by the same companies that own passenger trains or steamships, so finding the emblem of the White Star Line or the Confederate Pacific Railway on an airship comes as no surprise.

Other Designs

Thus far, only a very few ways of becoming airborne and remaining so have been discovered. The hot air balloon remains popular for a variety of purposes. Since its lifting gas is not explosive, it makes a good aerial observation platform at a battlefield, if tethered so that it does not wander off. The inability of the balloon to go anywhere except where the wind is going makes it unsuitable for passenger and cargo service. Gliders can fly against the wind, albeit with some difficulty, and a clever pilot can remain airborne for a considerable amount of time by finding updrafts of warm air and riding them to greater altitude, in imitation of birds of prey. Gliders, however, have very limited carrying capacity, and thus are also not useful for passenger or cargo service. They also require some means of gaining altitude in the first place. Catapult launchers have been used with considerable success by the military, although the violence of launch tends to shorten the lifespan of the glider. A powered winch that drags the glider against the wind, like a child running with a kite, works, but only if there is a considerable stretch of open ground leading into the prevailing wind direction.

Heavier than air machinery has been attempted by everyone since the ancient Greeks, with no success thus far. The Flaptopter of Orville Finch cannot be considered as a success, even though Mr. Finch has repeatedly demonstrated its ability to achieve and maintain flight. No person other than Mr. Finch has been able to successfully operate the machine, and duplicates of it likewise fail to achieve flight. Until Mr. Finch admits his use of Weird Science and finds a way to apply his technique to a machine that can be operated by the average person, the Flaptopter must be relegated to the realm of the one-off curiosity. Alphonse Penaud, Lawrence Hargrave, and A.V. Roe have all demonstrated the possibility of using twisted rubber cables to supply power to a propeller, but the question of how to continuously re-twist the cable to maintain powered flight remains unsolved. Political relations between Britain and France have thus far precluded any attempt by British microsteam engineers to work with Monsieur Penaud, to place a small and light enough power plant aboard a full-scale version of his Planophore, highly successful as a toy and working model. This has resulted in Monsieur Penaud's design languishing on the drawing board the past five years.

Perhaps someday the engineering problems will be solved, the political barriers brought down, and cooperation between aeronauts of many nations will take humanity to the skies in agile, free-flying aircraft not dependent upon explosive gases or the wind. That day, sadly, is not today.

1879 GAMEMASTER'S GUIDE

Secret Societies

There are dark shadows on the earth, but its lights are stronger in the contrast.
– Charles Dickens

Some Lodges and secret societies actually are secret, or at least discreet. Herein are presented a series of Secret Societies that may be powers behind the scene, opponents, or other challenges for the campaign.

Knights of the Grail

The Knights of the Grail provide arcane security and protection to the Royal Family of England, and by extension to the Cabinet, Parliament, and the government of the British Empire. The public sees the Knights in elaborate armor and fancy-dress uniforms, walking beside the Queen and the Prime Minister, and presenting a forbidding presence at official functions. Government officials are aware of the plainclothes Wardens who maintain magical security on the palaces, the Houses of Parliament, and 10 Downing Street. Those with a need to know have heard of the boffins in Research and Development, the Merlins who provide the Knights and Wardens with their kit, spells, and heavy firepower. Rumors are whispered of a clandestine unit that heads off trouble before it gets a start. A very select few know why the Grail are so far along in their mastery of the arcane in so short a time. England, it seems, has very old friends indeed.

Origins

Three days after the Grosvenor Experiment, while the nation still marveled at the gray disc that would one day become the Rabbit Hole, a tall, thin man in a well tailored but somewhat out of fashion suit paid a visit to Gold Stick, the colonel of the Life Guards entrusted with the personal safety of the Queen, more of a ceremonial office by this point that it used to be. That swiftly changed. The visitor presented a letter of introduction originally penned by the Privy Secretary to James I of the House of Stuart, and signed by every reigning monarch since, barring Her Majesty Victoria. Mr. Fairchild, for so the letter named him, apologized for not keeping in touch, but really, no one had expected things to start moving quite so early.

Gold Stick quickly arranged an audience for Mr. Fairchild with his counterpart, Gold Stick in Waiting, Silver Stick, Silver Stick in Waiting, the Prime Minister, the Home Secretary, and Her Majesty. Only those individuals know exactly what was said in the meeting, but the next day, a large appropriation was made from a military discretionary budget, and Baroness Seaford cleared out of Sefton House in Belgrave Square to make way for new tenants. Over the next several months, a considerable number of deliveries were made: chemicals and laboratory apparatus, a complete blacksmith's shop, rare books from the Bodleian, military practice dummies, candles and incense, three Maxim heavy machine guns, exercise equipment, a crate of live geese, the latest Prussian electrical battery system – the list ran on. Very few people, once again, were privy to the entire manifest.

The day after the Rabbit Hole opened, three artists came to Buckingham Palace and began touching up the ornamentation around all the doors and windows. They insisted on working by candlelight, something about the lighting for the original work. One of them added a few subtle touches to the Prince's steam walker. The following week, a new lady in waiting joined Her Majesty's personal staff, and spent her days reworking the embroidery on the Queen's wardrobe.

No one who knew of Mr. Fairchild's existence were the least bit surprised when he emerged from his chambers one morning having apparently turned elven in the night. He'd been somewhat reclusive, rarely leaving Sefton House except for meetings at the palace and Downing Street. The new ceremonial guard he placed with the Royal Family was passed off as a foible of Gold Stick, a bit of Tudor regalia and fancy armor to celebrate Britain's heritage. That is, until the first attack came.

Prince Albert had gone up to Ironbridge to inspect the latest innovations, showing the flag for morale and all that. A young man in the crowd that had gathered to see His Royal Highness disembark from the steam coach conjured up a ball of lightning in his hands. Before he could launch it, an armored Knight in a fancy tabard stepped out from behind Silver Stick and into the line of fire, raising an arcane shield over the Royal party. The would-be assassin's lightning ball sputtered out against the Knight's shield. With his first leap, the Knight cleared the intervening crowd and snatched up the young mage, slapping him nearly unconscious with a single open-handed blow. The Knight's second leap took him round the corner and out of range of the Prince Consort, where he put the mage in restraints both physical and magical. It was all over before the soldiers in the guard platoon could level their rifles.

The crowd had no idea how to react. Boojums and holes in the air were one thing, but dueling sorcerers? Well, of course the Crown had been ready, the official response said in the next day's Times. Magic has returned to the world, and while some were still doubting its reality, Britain, ever at the forefront of research, had tackled this new energy and mastered it. The Knights of the

Grail, now revealed, protected Britain from hostile magic the way the Navy kept her shores clear of hostile ships. The Prime Minister addressed Parliament, confirming that the Grail had already laid protections on the building, and were available just like any other government security service as needed. Additional information was available for those who truly needed to know, and of course no loyal subject would compromise the security of the Empire by asking for or revealing too much.

The Knights of the Grail took their place alongside the Army and the Navy, seeing to the well being of the Royal Family and the British Empire. The Knights proper became an accustomed sight. The Wardens kept watch from the background. The Merlins got the odd mention in the popular press, mostly in speculative terms. Nobody wanted to talk about the rumored fourth branch.

Goals and Methods

The Knights of the Grail protect the Empire from arcane threat. To accomplish this, they must perform three tasks.

First, they must identify the threat. This requires intelligence work, using not only the techniques developed in the Great Game but arcane methods as well. Undercover operations, information analysis, and scrying all form part of the arsenal. Grail agents watch the rare books dealers, monitor people and organizations known or suspected of performing magical research, and keep a close eye on legendary items and sites, such as the Fairy Flag and Glastonbury Tor. Given that any magician worthy of the title has learned to shield their workspace from scrying eyes, infiltration is often required to determine what the magician might be up to. Cultivating relationships through private clubs, bribery, and blackmail may also be found in the toolbox.

The second task requires research and training. The Grail must be prepared to handle whatever they find. The Merlins delve into spellcraft, enchanting, and augmentation, arming the field agents with the best spells, armor, and weaponry possible. The field agents themselves spend endless hours practicing their abilities, not only tossing lightning and fire, but rappelling down the sides of buildings, boarding ships under hostile conditions, and developing their marksmanship with bow, pistol, and rifle.

Third, the Grail must plan and carry out field operations to neutralize threats once they are identified. Not all of these require a platoon of armored warrior mages going in with guns and spells blazing. Sometimes it's a matter of finding the leverage needed to convince a book dealer to sell the rare volume to the Grail and identify the erstwhile customer. Preventing the delivery of the custom-blend incense until after the solar conjunction is just as effective at stopping the ritual sacrifice as shooting the priest. As with any intelligence organization, the Grail prefers to work with as little flash and bang as possible. Every now and then, though, something emerges from the astral plane or develops magical abilities that's going to require substantial firepower of both mundane and arcane nature to see off.

Organization

The Knights of the Grail are divided into four branches under a unified command, reporting up to the Minister of State for Arcane Security, who in turn reports to the Home Secretary. Gold Stick and Silver Stick have a relationship with the Knights of the Grail, granting them the right to summon the Knights and issue strategic orders on a situational basis. Each branch in turn maintains a compartmentalized command, with coordination and information exchange through liaison officers

and the branch heads. Ultimately, strategic command of the Knights of the Grail resides with Mr. Fairchild, who among his other duties determines policy and oversees long-term planning and operations. Tactical command lies with General Sir Ainsley Roke, who deals with daily operations and field missions.

The Knights are the branch most often seen and recognized as such. These are the men and women trained in arcane and physical attack and defense, kitted out with enchanted armor and the latest in automatic firearms, who act as bodyguards to the Royals and others as assigned. Selected for physical prowess, arcane talent, quick wits, and unswerving loyalty to the Crown, the Knights put themselves between Her Majesty and any threat, not just the odd discontented mage. With access to gear and magic well beyond what the military and the populace have available, the Knights can be counted on to be at least one step ahead of both friend and foe alike.

The Wardens take a quieter approach. Dressing in civilian styles, they maintain the arcane protections on individuals and buildings, and form a reserve fighting force if needed. These are the artists, the embroiderers, the people lighting candles and chanting softly in the corners, seeing to the safety of their charges by putting up and maintaining magical defenses. Some, but not all, of the Doorkeepers of Parliament are Wardens, adding arcane security to their duties as guides, ceremonial functionaries, and bouncers.

Behind the Knights and the Wardens stand the Merlins, the Research and Development boffins who create new spells, enchant armor, make protective talismans, and train the field operatives in spellcasting and other arcane techniques. At the back of the Merlins stands Mr. Fairchild, who's been around for a great deal longer than most people suspect. His insistence that the most senior researchers learn what he says is an ancient elven language, and his adoration of the tomato as the pinnacle of the vegetarian diet, lead some to believe he's more than a little daft. None can doubt, however, that he knows more about magic than anyone possibly could, and that he has the personal trust of Her Majesty, upon whom he pays a call every other week. In between, he's either at Sefton House, worriedly lecturing the lesser boffins on magic theory and chivvying them along, never quite satisfied with their rate of progress, or he's off at a private retreat in an undisclosed park in the vicinity of the Big Smoke.

The fourth branch Mr. Fairchild sees as a necessary evil, although Sir Ainsley and the Home Secretary decidedly approve of them. The Percivals operate from a clandestine base whose location is never revealed outside the command structure of the Grail. The Knights and Wardens go to Sefton House when they need kit or training. The Merlins go see the Percivals, to deliver whatever the pre-emptive strike team needs. Beyond the Home Secretary and a privileged other few, the Percivals' existence is kept quiet. Their tactical abilities are rumored to exceed those of the Knights by a considerable margin. What is known, at least to senior officials concerned with the defense of the Empire, is that the Percivals detect arcane threats and remove them before they become problems. To achieve this goal, the Percivals divide themselves into two groups. One gathers intelligence, identifies potential threats, and determines their capabilities. If possible, this group deters the threat through standard espionage tactics. The other group goes into the field and eliminates the threat, by whatever means necessary. They rarely take prisoners.

Resources

For all practical purposes, the Grail has unlimited resources. As the British Empire's first line of magical defense, they stand next to the Army and Navy in terms of budget and priority.

Sefton House contains one of the finest arcane libraries in the United Kingdom, a state of the art laboratory for work in chemistry, natural philosophy, and alchemy, a forge capable of turning out armor that Arthur would have been proud to wear, and a workshop where mages, engineers, and Weird Scientists collaborate to augment the latest firearms, among other facilities. The Grail maintains other research and development sites as well, far out in the country for both safety and security. There, they develop more dangerous spells, enchantments, potions, and tools. Some of those sites include proving grounds and training facilities. One site on the southern coast in East Sussex has a sort of zoological garden, where beasts of unusual nature are studied, or in a few cases simply contained. Individual members of the Grail may requisition pretty much what they like, although they will have to justify any particularly unusual or pricey request. A truly odd one may result in a visit from Mr. Fairchild, his curiosity piqued. The researcher who is able to explain to the chief Merlin a line of enquiry of sufficient potential may receive not only Mr. Fairchild's signature on the requisition, but advice and guidance as well. Requests that Mr. Fairchild finds frivolous or otherwise unwarranted meet with a disappointed shake of the head. Only once thus far has Mr. Fairchild expressed anything besides interest or disappointment. The researcher was told quite firmly to abandon his line of enquiry entirely. When he pressed for an explanation, Mr. Fairchild met his gaze, and told him, "We tried that once before. Five thousand years later, some still grieve." So shaken was the researcher that he closed his laboratory, archived his work, and is still on sabbatical.

Membership

The Grail does not accept applications, although expressing an interest may bring people to their attention and perhaps lead to recruitment. They prefer to locate candidates for their various departments on their own, perform extensive background checks, then make a quiet offer, with the understanding that the candidate will never speak of the meeting whether or not they join the Grail.

Recruits to the Knights, Wardens, and Percivals must swear a blood oath of loyalty to the Crown. This has the advantage both of testing the recruit's commitment, and providing a ready means of detecting betrayal, as the blood wound that opens if the oath is broken is located in the center of the forehead. The Merlins present a difficult problem. Blood magic can seriously interfere with some of the more delicate sorceries, or preclude them altogether. Thus far, Mr. Fairchild has personally interviewed each candidate for recruitment, and applied his own judgment and arcane skills to the decision. There will come a time, though, when there will be more candidates than are practical for this to continue. Mr. Fairchild has said that by that point there will be other ways of determining suitability and enforcing loyalty, but has not yet shared these with anyone.

Advancement in the Knights requires an extended training period as a Squire, followed by a vigil and a non-magical oath. Knights serve theoretically for life, although no Knight has served more than two years thus far. Men and women of exceptional ability are promoted to Knight Commander. No higher rank has yet been required, given the small number of individuals qualified to be recruited.

Wardens likewise spend a term of apprenticeship as Warden Trainees before passing a rigorous set of examinations to achieve full Warden status. A few of the more capable have been promoted to Senior Warden. The ranks of Chief Warden and Warden Commander have been proposed.

The Percivals use a military rank structure similar to the Army, but simplified down to Private, Sergeant, Lieutenant, and Captain. No higher ranks have yet been needed. Advancement in the Percivals largely depends upon achievement in the field and assessment by senior Grail personnel.

Advancement in the Merlins, like recruitment, relies on Mr. Fairchild's judgment, along with recommendations from Grail members, the proven capabilities of the person in question, and the needs of the organization. Rank in the Merlins is expressed less in titles and more in access to materials and assistants, prioritization of research, and latitude allowed in lines of enquiry and general behavior.

Regalia

Members of the Grail carry a representation of a chalice as insignia. Knights have the chalice chased into their armor on the left shoulder, and worked in silver on their dress tabards. Wardens wear a small silver lapel pin on the left side. (Women in the Wardens wear the same business suit, with pants, jacket, and tie, as the men, and typically keep their hair cut short, giving rise to the misperception that there are no female Wardens.) Merlins generally have the chalice embroidered on their labwear, although some wear a chalice tie or ascot pin. Percivals do not always carry the Grail's insignia, depending upon their current assignment. If they do, it's generally small and inconspicuous, and may be kept hidden.

Enemies / Allies

The Grail regards as its foe anyone who would do harm to the Royal Family or the British Empire by magical means. As with the Army and the Navy, this leaves the Grail with quite a few enemies. Ranging from agents of hostile governments to secret societies to the lone discontented mage, the Grail finds itself beset on many levels and from many directions. Such is the lot of the defenders of the Realm.

While the usual inter-agency rivalry exists between the conventional forces of the Empire and the Grail, and some find the Grail's arcane might off-putting, in a pinch all of Britain will stand together. The Grail has even provided advanced training for some of the more promising members of the Order of Britannia Victorious and the Drake Society, and has served alongside units of the Army and Navy as required. Gold Stick and Silver Stick regard the Grail as one more cannon in the battery, albeit a particularly fussy one. The four MPs who have objected to those peculiar magicians puttering about have quietly been reminded by more senior officials that the security of the Empire is at stake, and objections to protective measures might be interpreted as a sign of disloyalty, were they to continue.

Equipment

Knight's Pistol

Medium Revolver: Damage 9, Capacity 8, Range 80/140, Success Bonus +3

- Exploding Ammunition (as Skill) on command, with no Strain to wielder
- Bolt spell once per eight hour period, usually fire-based, but some have been known to throw lightning or ice
- Grip grows searing hot (Step 8 damage per round) in the hand of anyone but its designated Knight. Bonding the pistol to the Knight requires one point of Blood Magic damage.

Spell List

Spell	Tier	Known As	Style	Modifications
Bind	Initiate	Manacles	Glowing irons fasten to the target.	None.
Light	Initiate	Light	Mage uses an object to project the light from.	None.
Send Message	Initiate	Light Sprite	Mage snaps their fingers to summon the tasked spirit.	None.
Shield	Initiate	Shield	Mage conjures a transparent, ghostly wooden shield bound in iron.	None.
Bolt	Novice	Firebolt	Mage must have a source of flame to conjure from. A match will do.	Make a second Effect Test against target's Mystic Defense to set target on fire, doing Step 4 damage for three rounds.
Heal	Novice	Lay On Hands	Mage lays both hands on the target.	None.
Improve Movement	Novice	Speed	No special effects.	None.
Sleep	Novice	Sleep	Mage tosses a pinch of dust or sand toward target.	None.
Thought Link	Novice	Mind Link	No special effects.	None.
Deny Movement	Journeyman	Stop Right There	Mage shouts the name of the spell at the target.	None.

The Sons of Thoth

The Sons of Thoth is a shadowy cabal of politicians, businessmen, scientists, and religious figures that has worked behind the scenes for centuries to guide the progress of mankind for its own ends. Just as the Egyptian god Thoth was considered the true author of every work of all branches of knowledge, human and divine, so the Sons of Thoth dip their fingers into every branch of learning, and hold the hidden strings behind many of those claiming to have discovered new knowledge.

Origins

The Sons of Thoth began in the 17th century as a small group of like-minded occultists and natural philosophers working with and under Athanasius Kircher, a widely published German Jesuit scholar focusing on medicine, geology, and Oriental studies, in Avignon, in France. Kircher was ordered to leave Avignon and go to Vienna by the Emperor, who wanted him there as Court Mathematician, but his ship blew off course and he ended up in Rome instead. A fellow scholar, Son of Thoth, and associate named Peiresc interceded with the Emperor for Kircher, and he was allowed to stay in Rome and continue his studies there. Some of the Sons followed Kircher to Rome, some stayed in France with Peiresc, and some returned to England, forming the first three widely spread cells. Kircher's in depth study of Ancient Egypt taught him that hieroglyphs were occult symbols with power that could not be translated directly, only approached sideways through the correct marks and characters, and led him and his fellows to understand the hieroglyphic texts of the Egyptians. The power they found there was deep and old and they kept the truth of it hidden, publishing the Oedipus Aegyptiacus as a cover for true work they did, even as hints of the truth leaked into the books' pages.

In Rome

Many of the Sons focused on study, but some turned their gaze to power, like Olimpia Maidalchini, who became Pope Innocent X's primary adviser. Her advice allowed the Sons to keep a finger on the pulse of the Papacy, and begin to infiltrate the shadows of the Pontifical Swiss Guard as advisers, spies, support-staff, and weapon designers.

The Sons of Thoth also make up many of those who investigate new science to see whether it counts as blasphemy or not, and rumor states that they keep the knowledge whether the Pope of the day condemns it or not.

After Pope Innocent X died, the Sons of Thoth drew back deeper into the shadows behind the papal throne, and continued to make sure that the commander of the Pontifical Guard remained as much the Sons' man as the Pope's. Indeed, they plan to force a change of commander by assassination, after the current commander tried to investigate and clear away the shadows they keep within.

In France

Already under strain from the Thirty Years War and its witch hunts, the French cell disintegrated as the Black Death swept through in the war's wake. Entire sections of the Sons fell ill and died. Others scattered, fleeing wherever they saw a glimpse of safety, taking with them whatever knowledge they could salvage from the plague houses, and abandoning other stashes as lost. Some of these caches have yet to be recovered.

In England

For a time, the English cell attached itself to the new Royal Society, but found it too philanthropic for their tastes. After the Great Fire of London, they went into deep shadow, using the reconstruction work to build the hiding places they needed in full view, yet hidden in all the other work being done.

Instead of pushing to the front of public scientific research, the Sons infiltrated deep into the Library of the British Museum. Here, due to the law requiring that the library receive a copy of every book, newspaper, and periodical published in Britain, and a Chief Librarian with a taste for collecting works not published in Britain, they had behind-the-scenes access to the details of every new invention, every proven scientific discovery, every published report. These days, a Son of Thoth controls and issues the passes needed to use the Reading Room at the heart of the library.

Goals and Methods

The Sons of Thoth desire to control, mold, and guide the world (beginning with the British Empire) into a better place, closer to their ideal. They desire a world where they hold all knowledge at their fingertips and all is known, discovered, and perfectly controlled by those they trust (which in practice means only themselves, if that). Knowledge, they claim, is dangerous, and can kill as surely as it enlightens, brings sorrow as surely as joy. Such knowledge should never be held in untrustworthy hands, but only in the pure, scientific, hands of an enlightened seeker-of-knowledge such as they themselves are. They realise that as yet there is still more knowledge to discover and control, and so they also shape their desired ideal to include increasing that perfected knowledge and bringing it into their hands.

To this end, they leave no avenue for knowledge and information gathering untouched, wielding ceremonial magic rooted in Egyptian symbols, bringing together Weird Scientists, Dodgers, Fiddlers, businessmen, priests of various religions, and politicians with equal facility. Likewise, they punish leaks and loss of information viciously, often making examples of whoever caused the loss.

The Sons or their pawns win seats in Parliament, but rarely take party leadership roles. Instead, they gravitate towards the Whips who monitor attendance of the MPs, decide the importance of issues and discussions, count the votes, and discipline the party members into voting as the party decides (or on occasion, how that particular Whip decides).

They run businesses and build influential social networks, specialising in the created rumor that can elevate or ruin a person, inject enthusiasm or disinterest into an important issue. They wield these networks to manipulate people with the power to make changes and deliver information while remaining untouched and untouchable in the shadows.

They create extensive libraries of rare books, grimoires, and documents, trying to collect all available copies of them and making them available only to certain ranks within the Sons, in an attempt to harness unrivaled power and knowledge. Their magical studies specialize in spells that manipulate the mind and the emotions, in order to 'persuade' others of the 'right' course of action.

The Sons have also developed a Weird Science method of drying and grinding splithee sap into a fine powder and mixing it with dried, shredded tobacco and other leaves to make a substance known as airship tobacco, or airbaccy. Airbaccy can substitute directly for pipe tobacco, but like snuff, requires no flame or heat to be effective, only a drop or two of something acidic (vinegar works well, as does lime juice) to release fumes that the smoker inhales. The fumes are slightly heavier than air and tend to drift downward when they overflow the pipe bowl, sharply

reducing passive smoke around the airbaccy user. However, unlike snuff, airbaccy retains the splithee's withdrawal symptoms. Dependency from inhaling sets in faster than from consuming the sap itself. In contrast, second-hand smoke is much weaker. Dependency is slow to set in, and although withdrawal is painful, it is not fatal. Second-hand smoke has been used to reduce dependency deaths with partial success. The Sons keep a tight control over the primary source, but turn a blind eye to secondary sales, knowing that sooner or later, any buyer must come to them.

Current Activities

Victoria Mill, a converted cotton mill in Lancashire, now makes a new kind of cloth and clothing, treated by the genderless troll Weird Scientist Lou Faulkner to make people's gaze slide away from the wearer. Faulkner initially created the cloth for personal use, but it rapidly became popular with fellow Boojums. Faulkner sought partnership with factory owner Edward Stanley. Stanley, an early graduate of St Aldhelm's College Oxford, agreed as long as he could sell his share of the cloth freely. Faulkner agreed that that was only fair, and the two went into partnership - until a team of Dodgers raided a museum wearing Faulkner's clothing and got away with some valuable artifacts the museum had refused to sell to a Son of Thoth. The investigation traced the cloth back to Faulkner and Stanley's factory and placed all the blame at their feet. Faulkner protested, and Stanley immediately kicked Faulkner from the partnership and the factory. Faulkner is now looking for someone to steal the formula back from Stanley so that no similar incidents can occur in future.

Listen, you can't just arrest one of the Sons of Thoth on suspicion. You have to be rock solid and more than rock solid to have any kind of chance to bring one to justice. I've seen what happens if you don't. You get this situation:

You are certain S was in a particular place, so you arrest him. He sends for a lawyer, who brings three witnesses to say S was elsewhere, so he couldn't have been in that place at that time. Your own witnesses, who originally said he was there, suddenly clam up, 'lose' their memory, and become unwilling to testify. If you continue, the newspapers come down on the side of S, such a respectable man, so well known, so liked, a rising star with the makings of a good political career. You are reported as dragging his name into the mud, you have an unreasonable grudge, you want to destroy his career before it even gets started, obviously a rival paid you to hound him with these terrible lies. Because clearly they must be lies, other respectable people backed him up and you are nothing more than a guttersnipe, a disreputable detective, a gloryhound.

S gets away free.

You get a destroyed reputation and career. Nobody ever believes you again, and you don't get a second chance. Ever. Don't risk your first chance.

– 'Henry', an undercover Intelligence Agent for the British Home Office.

Heron Rosemary Parsons found a Samsut railgun pistol after the patrol she worked with ran into a Samsut unit. Cautious examination and experimentation earned her a vague idea of its workings and roused her curiosity. She plans to hide the pistol in the crates of samples and trade goods she is escorting back, so that she can smuggle it through the Rabbit Hole and examine it further in a fully equipped private laboratory. Walter Finch, a friend of the soldiers in her patrol and the North in the local cell, got wind of her plans and set out to foil them and get the rarity for his

cell by intercepting the pistol after she packs it to travel on the train. Joseph Armstrong, privately a Promethean and Samsut admirer, also heard about her plans to smuggle it through the Rabbit Hole and is looking for someone to short-stop both other attempts and extract the pistol for him so that he can one day return it to the Samsut.

Trading on the black market for splithee sap halted briefly when the human end of the trade, Lt Timothy Potts, was caught and court-martialed over it. His replacement, the Honorable Beatrice Grayson-Burnett, although having made contact with the Saurids under the guise of a scholar, must still find a new delivery method. Unlike Lt. Potts, she cannot simply order the crates included in the London-bound cargo, and must use reason, bribery and persuasion to achieve her aim. Army officials seek a small group capable of infiltrating the trade and pinpointing everyone involved. Her discreet advertising for 'cargo handlers' provides an excellent access point for anyone interested.

Two years ago, a series of murders took place in France where the victim's head was wrapped in Plaster of Paris bandages and the victim left to slowly suffocate as the plaster set into impermeability. The perpetrator, a Son of Thoth closing down a line of enemy infiltrators, was never caught. Now the same perpetrator is heading for the Gruv, hot on the trail of another group of infiltrators.

A cell in London requires its members to study anatomy and surgery, and plans to practice torture on female prostitutes, chosen for the fact that no one will miss them, in order to find the best methods of quickly breaking a woman without leaving visible traces. Once they have their method, the cell South wishes to infiltrate the Royal Court as a surgeon and put the Queen herself under the Sons' control, finally giving the Sons of Thoth legitimate power to make their desire reality.

A prominent politician, and Son of Thoth, continues to press for a bill that would make the Gruv British territory, accessed across British soil, and subject to British laws (particularly that little law that requires copies of all publications sent to the Library of the British Museum).

Having addicted airship owner Kathleen Caldwell to airbaccy, the Sons continue to manipulate behind the scenes to get her airships designated diplomatic carriers and assigned to royal visits, both from Queen Victoria's immediate family in Britain, and the extended family across the European monarchies.

Front Organizations

St. Aldhelm's College of Philosophy and Architecture, Oxford

Founded in 1861 by Mr Tobias Snyder, a wealthy retired architect and amateur historian, and named after a 7th century bishop and learned scholar, the college serves as one of the Son's recruiting grounds for members. Promising students are offered scholarships and future jobs, in return for innocuous seeming tasks and pranks, for example slipping into a professor's office in secret and planting a piece of chalk that doesn't write. These allow the Sons to sift through the students and learn just who is prepared to bend or break the rules for what kind of reason. Some of these students go on to make harmless lives for themselves, right up to the moment one of their old university friends 'persuades' them to do another 'harmless' prank for old time's sake, such as posting half a dozen envelopes with itching powder in (which, when one particular recipient has an allergic reaction, allows a substitute Fiddler blameless access to an important building for a day). Others drift more directly into the Sons of Thoth, taking up a position in one of the outermost cells, or knowingly making the family business a cover for meetings between Sons.

The Pyramids Club

A gentleman's club, founded in London in 1815 by Henry Herbert, the 2nd Earl of Carnarvon, the Pyramids Club serves as a place where gentlemen of the Society of Antiquaries of London and those interested in similar matters might meet and dine socially, without the eyes of the world on them. Anyone showing an interest in the subject is likely to receive an invitation to dine there. It has recently expanded to include branches in other major cities, and is graced by several paintings of the reputed painter Samuel Johnson Carter, including one of the MP and prominent Pyramids member Mordaunt Fenwick-Bisset in his position as Master of Staghounds. Due to the number of commissions brokered and delivered by the painter, he has received a standing invitation to reside in the Club when he is in London, and he sometimes brings one or more of his many sons with him.

Although ostensibly for those interested in Egyptology, antiquities, and archaeology, the Pyramids Club is also the prime sale-point of the flameless 'airship tobacco'. Once someone is firmly addicted, the Sons who run the Club behind the scenes use the pain of withdrawal to convince the person to follow their exact orders, whether the person wishes to or not.

Barrow and Quentin's, restaurant chain

A chain of restaurants across much of Britain and the Empire, featuring simple but high quality food, and renowned for its eclectic mix of customers, from a wide variety of professions and occupations. Such a mix causes no stir when two or more Sons of Thoth run into each other here or strike up conversation over a cocktail or brandy.

Organization

Structure

The Sons of Thoth layer themselves like a pyramid, or an onion. The outermost layer comprises cells of eight people, each named for one of the compass points. South, never occupied by more than one person, is the head of the cell, the source of illumination from above, the origin of the Nile's life-giving water. East and West link sideways to other cells. North is for those newest, who have yet to prove what they can provide. The next layer consists of front organisations and individuals, and the third of more cells containing the upper hierarchy. There is no single person at the top. Rather, the senior-most cell in any geographic area coordinates with the senior-most cells in other regions to provide direction to the organization as a whole.

Regalia

Sons of Thoth wear an ankh somewhere about them. It may be a bow-tie visibly looped around the neck, and with a single long end hanging down the shirt-front, so that the whole tie forms an ankh. It could be a tattoo that only becomes visible when exposed to pure ultraviolet light (which can easily be created with sunlight and a good prism). The ankh could be one charm among many on a fashionable charm bracelet, or as embroidery on a dress, rotated and multiplied to resemble stylised flowers. The Son might carry a handkerchief with an elegant border of celtic knotwork, where the corners are placed together, the loops and lines on the four corners become an ankh. Gentlemen might have their watch chain 'accidentally' looped around a button. Some Sons who profess to Christianity wear a cross with the top bar subtly rounded instead of straight. The methods are as variable as the Sons themselves and, other than the ankh, each dresses as he or she pleases.

Resources

The Sons of Thoth have a great deal of money and resources between them, but rarely use it openly, requiring the outermost cells to function with very little more than the cell itself can provide. In times of crisis or when important plans arise, the organization can marshal a tremendous amount of wealth and manpower.

Membership

Membership is a mix of politicians of all parties and levels, businessmen, scientists both traditional and Weird, and clergy. The one thing they have in common with one another is a good education, usually via school and university. Occasionally they admit a self-taught Weird Scientist to Cell North in a particularly disposable cell. Such admissions require a unanimous vote from the cell, as well as approval from someone in the next layer up in the organisation.

Bencivenni "Ben" Ryall: Son of a civil servant, and born when his father served in Italy, Ben Ryall was inducted into an Italian cell as a young man. When he returned to England with his parents, he carried books and letters for the English cells. He now works for the Library of the British Museum, charged with long tedious journeys to collect fragile books from foreign countries, a job which takes him all over the world. He carries unofficial instructions and letters with him, and uses his father's name to access the diplomatic mail for urgent matters.

Jonathan Plimmswood: Once no more than a merchant turned Weird Scientist, Jonathan Plimmswood's star soared when his experiments resulted in suddenly dousing a house fire. He was awarded the Albert medal for saving lives. A Son of Thoth for years, allowing one of his smaller businesses to act as cover, Plimmswood was drunk when he chanted over his equipment after many failures, and still cannot recall exactly what he did that night. However, he refuses both to turn down the new-found fame when it can be put to good use, and to reveal his secrets, determined to re-discover the ability in secret, though as yet he has had only more failure. He looks for ways to fake the ability, or to summon true magic through the Rabbit Hole to do his will.

Enemies/Allies

The Order of Britannia Victorious

A magical lodge deeply embedded within the British military, the Order of Britannia Victorious (OBV) is made up of officers of all ranks who serve or have served the British Empire on the battlefield. The OBV is the modern version of the Druids who once advised the tribal kings of old Britain, and is convinced that the manifest destiny of Great Britain is to rule the world. The Empire already dominates a third of the globe. Members of the Order know it is only a matter of time before the rest also pays homage to Queen Victoria. The Sons of Thoth disagree, believing that when the true time comes, there will be no more need of such things as armies or queens, but instead all will acknowledge them as rightful guardians of knowledge.

Knights of the Grail

The Knights of the Grail are a Lodge of warrior mages sworn to the defense of the Royal family, and by extension to Parliament and the British government. The Sons of Thoth tangle

regularly with the Percivals, and truly detest that the Merlins are researching and planning spells and gadgets that the Sons can't locate and reuse.

Her Majesty's Home Office Intelligence

The British Government knows the Sons of Thoth exist, but as yet has no hard evidence to stop them. The Sons of Thoth do their best to keep it this way, including infiltrating the Home Office and turning any agents they catch into either double agents or Examples.

Spell Lists

Mage Spells

Spell	Tier	Known As	Style	Modifications
Illusion (physical)	Initiate	Gilded Mask	The magician traces a line from the outer corners of the eyes to the point of the chin.	The illusion is restricted to changing a person's appearance. Strain -1.
Light	Initiate	Aten's Ray	A miniature sun disk, approx. 3 inches across, appears above the magician's head.	None.
Lock	Initiate	Waxen Seal	The magician touches a bit of wax to the item being locked.	None.
Reduce Sense	Initiate	Wrappings of Silence	The magician winds a piece of cloth around a finger and touches the wrapped finger to the eyes and mouth.	None.
Hide Object	Novice	Deep Burial	The object appears to sink into the magician's body.	The effect only applies to objects small enough to hold. Strain -2.
Illusion (mental)	Novice	Shifting Sands	The magician's eyes narrow into a hard stare.	None.
Improved Attitude	Novice	Wine-sighted	The magician tilts a hand towards the target as if pouring from an invisible bottle.	On a Rule of One result, the target acts as if intoxicated instead.

Spell	Tier	Known As	Style	Modifications
Replicate Item	Novice	A Matched Pair	The magician holds the original object in the right hand, and a duplicate appears in the magician's left hand.	None.
Switch Object	Novice	False Reassurance	The magician murmurs, "Your hand to my hand. My hand to your hand."	None.*
Control Person	Journeyman	At My Service	The magician beckons the target twice.	None.

*A favorite method of setting up a theft is to place A Matched Pair on a desired item, return the original to the owners, and then use False Reassurance to exchange the stored original for the replica.

Priest Spells

Spell	Tier	Known As	Style	Modifications
Cleanse	Initiate	Ritual Cleansing	A mix of oil and water dabbed on the forehead with a brush causes dirt to fall away.	None.
Detect Spirit	Initiate	Ka Sight	A faint red glow outlines each spirit.	None.
Improve Sense	Initiate	Opening of the Mouth	The magician touches a blade to the eyes and mouth.	None.
Set Ward	Initiate	Shielding Pyramid	The magician taps a miniature pyramid to each corner of the warded area.	None.
Send Message	Novice	Anubis' Voice	The spirit appears as a miniature jackal or dog, but one that can talk.	None.
Aetheric Containment	Novice	Ushabti	The magician uses a wooden figurine as a focus for the containment.	The spirit is bound inside the figurine rather than in a static circle. The figurine can be moved by the magician, but not by the spirit. Strain +2.

Spell	Tier	Known As	Style	Modifications
Summon Spirit	Novice	Ka Seeking	The magician scribes the name or description of the summoned spirit inside a cartouche or shen ring.	None.
Spirit Talk	Novice	Ka Speech	A faint red glow outlines the magician's lips and tongue.	None.
Sleep	Novice	Field of Dreams	The magician hums a line from a lullaby and mimes playing a reed flute.	None.
Geas	Journeyman	Feather of Judgement	The magician weighs a feather in the hand, then points the feather at the target.	Creates a specific response to a specific stimulus, but does not restrict the target's actions. Strain -1.

Device List

Scaropion: An automaton with the front half of a scarab pushing a dungball (hinged into two halves) and the back half of a scorpion, created to locate small magical items, hide them inside the dungball, and return to its owner. It has a working sting, but only uses it if interrupted in its task. A small compartment in the base of the tail holds a vial (poison, sedative, potion, etc) which the sting injects into the target.

Silent Pyramid: A cardboard pyramid a foot tall, covered in hieroglyphs. When invoked, the pyramid expands into a 6 foot pyramid of force that blocks all communication and observation in and out of its area. The effect lasts for one hour, and the pyramid must be recharged before it can be used again.

Ma-at's Feather: A lifelike steel feather. When held in the hand, it glows white when the holder speaks truthfully, and turns red when the holder lies. When touched to an object, it glows yellow, and the older the object, the darker the shade it glows.

The Thuggee

The Thuggee are an ancient Indian order of assassins, criminals, and political revolutionaries. Shrouded in many layers of secrecy, the Thuggee are not a singular organization, but rather a collection of autonomous sects loosely connected by a common set of beliefs. While they often work at cross purposes, the three main Thuggee groups are united by their hatred of British colonial power and their dedication to the Hindu goddess Kali. The largest group, the criminal syndicates,

uphold the traditions of Kali worship, but are more concerned with expanding their share of the black market. Many of them are sprawling organizations capable of manipulating political leaders and undermining legal authorities at every turn. The orthodox sects remain devout servants of Kali, dedicated to striking down Her enemies. Their assassins, aided by powerful magic, are feared even among the Thuggee. The revolutionary nationalist groups devote their efforts to expelling the British from India and returning the country to local rule. While their goal may sound noble, they ultimately hope to exploit the divisions within Indian society to become the new dominant power on the subcontinent. Despite the Empire's concerted efforts to destroy the organization, the Thuggee remain a significant threat to British colonial power.

Origins

Although the Thuggee claim to be as old as Indian civilization, the oldest evidence of their existence dates back to about the fifth century CE. Their origin roughly coincides with the earliest depictions of the goddess Kali in the Devi Mahatmya, which recounts Kali's victory over the demon Raktabija. One of the most terrifying demons in Hindu scripture, Raktabija possessed the ability to spawn a duplicate of himself whenever a drop of his blood fell to the ground. While the rest of the deva cowered in fear, Kali struck down the demon and drank his blood to prevent him from multiplying.

According to Thuggee tradition, a single drop of Raktabija's blood fell into the Indus River. Although too diluted to spawn another demon, traces of his blood spread into water supplies throughout the world. Once consumed, the tainted water twisted human souls, changing them into demonic creatures bent on destruction. Sometimes the corruption remained dormant, passing down through several generations before manifesting in the unsuspecting host. When the goddess Kali learned of Raktabija's foul descendants, she summoned the ten greatest assassins in the world and empowered them to root out the evil beings hiding within human society. These assassins became the first masters of the Thuggee.

Wholly dedicated to their goddess, the masters claimed to receive visions that identified demons disguised in human form. The earliest members of the Thuggee only assassinated targets handed down by the masters, but within a century, the cult grew too large to support itself. The masters permitted new recruits to take on additional contracts so long as they offered their targets up as sacrifices to Kali. With the Gupta Empire slowly disintegrating, assassins had no difficulty finding work.

India broke apart under several regional powers by the seventh century, and would not be united again under a single kingdom until the Mughal conquest in the sixteenth century. The Thuggee reached the height of their power during this period. Assassins sold their services to the highest bidders. Many rajas hired Thugs to serve as their personal bodyguards. Although the masters' dedication to Kali never wavered, the lower ranking members of the cult were increasingly seduced by wealth and power. Many assassins used the cult's fearsome reputation to further their own ambitions. Since few of them came from high castes, they could not muscle their way into the ranks of the nobility. They turned instead to crime, engaging in smuggling, protection rackets, and general banditry.

By the time the Mughals invaded northern India in the sixteenth century, the Thuggee had become synonymous with crime. Weak rulers found their cities held hostage by local Thuggee gangs willing to murder local officials foolish enough to cross them. Many assassins ignored the masters,

instead targeting political enemies and competing criminal groups. Although these misguided Thugs found it convenient to maintain their frightening reputation as worshippers of Kali, few of them remained true believers. On rare occasions, the masters emerged from hiding to assassinate a particularly wayward Thug, but such stories were generally dismissed as legend.

The Mughal Empire brought a rapid end to the Thuggee's "golden age." When Akbar the Great's policies of religious tolerance won him the loyalty of most of India's nobility, local rulers were quick to turn against the Thuggee gangs. Driven out of India's major cities and deprived of their former employers, the Thuggee relocated to rural areas far from Mughal authority. The dispersion to the countryside further fractured an already strained organization. While some groups maintained their ancient traditions, others had no connection at all to the masters, having lost contact with them during the Mughal conquest or never having such in the first place. Gangs of common bandits took to calling themselves Thuggee in the hope that the name might strike enough fear into their victims to force their surrender.

Foreign trade expanded rapidly over the course of the next century, and resourceful Thuggee gangs muscled their way into overland smuggling. The Central Asian drug trade proved particularly profitable, and as Mughal power gradually waned, the Thuggee rebuilt their strength and numbers. When the English East India Company established a foothold in India during the seventeenth century, a great many Thugs found their way aboard ships bound for foreign ports. Although they rarely managed to establish a strong presence abroad, various Thuggee groups eventually carved out a place for themselves in every corner of the British Empire.

But the East India Company introduced new methods of law enforcement that the Thuggee did not expect. For centuries, the Thuggee ruled the overland trade routes that criss-crossed the subcontinent. Hundreds of miles often separated cities. It took weeks for merchant caravans to traverse the poorly maintained roadways. Thuggee gangs could infiltrate caravans slowly, joining one man at a time until their numbers grew large enough to overwhelm the merchants. When the East India Company exerted its influence further inland in the 1820s, the rampant banditry along the trade routes shocked British authorities, leading them to establish the Thuggee Department in 1830 to address the problem. Colonel William Henry Sleeman became superintendent of the department in 1835 and set about eradicating banditry in rural India.

Piecing together information from several captives, Sleeman soon discovered that the Thuggee were hardly common criminals. He came to regard them as a devil worshiping cult of murderers that performed human sacrifice in the name of Kali. Although his investigation turned up some factual information, much of it was fragmentary and distorted by falsehoods and misunderstandings. Many of the Thugs he interrogated knew less about the cult's true history than he did, and the few devout Thugs he managed to apprehend proved wholly uncooperative. The picture he constructed predictably reflected Victorian fantasies of the "exotic" Orient. His findings caused a sensation when they reached London. Queen Victoria herself found Sleeman's description of the "Thuggee cult" titillating.

When it came to actually suppressing rural banditry, however, Sleeman proved remarkably effective. While the Thuggee had dealt with hostile authorities before, the British brought a new methodological approach to the problem. Extensive crime reports revealed connections between Thuggee groups and rural communities, allowing British authorities to flush Thugs out of their traditional hiding places. The Thuggee Department employed its own dedicated police force and courts, expediting the trial process to convict hundreds of captives. Several Thugs with weak ties to the masters became informants in exchange for reduced sentences. The British arrested entire villages and rounded up native travelers for questioning without sufficient cause. Under such a coordinated

and comprehensive assault, the disparate Thuggee stood no chance. Thousands of Thugs were arrested, tried, and sentenced to imprisonment, exile, or death during the 1830s.

Although the British claimed to have eradicated the Thuggee, the campaign merely drove the older, more organized sects into hiding. Most of the "Thugs" the British captured were little more than common bandits and hired swords. After the campaign purged the underworld of its more fragmented elements, the surviving syndicates moved in on abandoned smuggling routes, extortion rackets, and drug markets. While most of the true Thuggee managed to escape British "justice", the experiences of the 1830s gave them a newfound respect for British military power. They adapted by shrouding their activities in secrecy. No longer would new recruits or low level bosses be exposed to Thuggee traditions or beliefs. Even the most trusted, senior members of the syndicates vowed to never mention their affiliation to any outsider. While the British authorities continued to investigate what they regarded as Thuggee activity, the real Thugs continued to operate through an elaborate network of unsuspecting subordinates. In the height of ironies, the Thuggee even became involved in the East India Company's illicit schemes to smuggle opium into China.

While crime remained a profitable endeavor, a few Thuggee groups became increasingly involved in political movements following the Sepoy Rebellion. Resentful of British colonial control, especially following the establishment of the Raj in 1857, politically active Thugs worked to manipulate the system through bribery, extortion, and murder. They did not confine their efforts to India. In 1862, a pair of Thugs garroted Hugh Pilkington, a British M.P., on the streets of London, after he refused to accept a bribe. Pilkington's death caused a panic throughout London and led to the passage of a series of harsh penal laws, which created serious problems for Thuggee groups based in London. Although politically active Thuggee continued to work toward expelling British authorities from India, they never again murdered such a high profile civic official.

When the Portal opened fully in 1877, every Thug leader received a message from the masters that the time had come to resume their sacred duty to protect the world from Raktabija's demonic offspring. Most of the leaders ignored the command, dismissing the masters as a group of wizened old fools, but a very few chose to reestablish communication with the masters. Some did so only tentatively, whereas others forsook their criminal ways and fully embraced the most ancient Thuggee traditions.

Those traditions suddenly took on new meaning. Thuggee assassins found that their rituals allowed them to tap into a source of magical power that had long eluded them. The masters claimed that Kali was speaking to them once more, revealing to them the many wicked children of Raktabija hiding throughout the world. They handed assassination targets down to their followers, targeting men and women of all nations around the world. Although no one has drawn connections between the killings, the Thuggee criminal syndicates worry such a discovery might lead to a new wave of anti-Thuggee investigations. More worrisome, however, is the fact that the assassins targeted several Thuggee leaders who refused to bow to the masters. Indian nationalists with Thuggee ties also worry that the killings will cause the British to impose even harsher laws throughout the Raj to root out the assassins.

Goals and Methods

Although united by their faith in Kali, the Thuggee often work at cross purposes and pursue unrelated goals. Orthodox sects are utterly loyal to the masters, taking on assassination assignments to destroy Raktabija's offspring wherever they find them. They view themselves as Kali's chosen

defenders of the Earth, the only thing standing between humanity and enslavement at the hand of demon-touched overlords. The criminal syndicates occasionally serve the masters, but most of them remain wholly independent. They pursue wealth and power above all else, seeking to dominate illegal markets and eliminate competition wherever they find it. Revolutionary Thugs take an active role in nationalist movements to displace British power in colonial holdings all over the world. Although they often engage in some criminal activity to fund their endeavors, they view crime as a dishonorable means to an honorable end.

Although Thuggee groups share common traditions, they do not cooperate well and are often at odds with one another. Criminal syndicates view other Thuggee as competitors to be thwarted and destroyed. The orthodox sects look upon others as wayward heretics who have dishonored their noble history. Conflict between the various groups was always common, but it escalated significantly after the masters called for the Thuggee to return to their ancient practices. Orthodox assassins regularly target syndicate leaders, which leads to vicious reprisals that leave scores of Thugs dead. If the trend continues, the Thuggee may not be able to conceal their presence from the world any longer.

Criminal Syndicates

A few syndicates maintain contact with the masters, but most consider themselves completely independent. When a Thuggee syndicate moves into a new territory, it first muscles in on local gangs by either buying them off or killing them. After establishing a foothold, it breaks the area down into districts, each one controlled by a semi-autonomous cell. The cells are expected to coordinate with one another to push competitors out of their territory and facilitate large scale smuggling and distribution efforts with other cells.

Once a Thuggee syndicate is well established in an area, it begins leaning on local civic authorities. Extortion, moneylending, and blackmail provide both new streams of income and political influence, allowing the syndicate an even greater range of action. Over the centuries, criminal Thuggee have become quite skilled at mixing their criminal enterprises with legitimate investments. In many parts of India, the Thuggee are so heavily involved in the local economy and political structure that rooting them out would prove all but impossible. This ability to hide in plain sight has confounded colonial authorities seeking to crack down on smuggling, prostitution, and the drug trade. The syndicates have learned to profit under British rule, but they long for the time when they had free rein over a heavily divided country.

Although the higher ranking members of the syndicates maintain a tradition of worshipping Kali, their initiation rituals and prayers are purely superficial. The assassin tradition survives in most syndicates, but the assassins lack the magical abilities of their orthodox counterparts. As rumors of these abilities spread, however, many Thugs wonder if they could harness such power without bending a knee to the masters.

Orthodox Sects

The orthodox Thuggee uphold the society's most ancient traditions. The masters commune with Kali by means of a ritualistic trance, then identify the assassin most qualified to take on the assignment. The blood magic ritual that each assassin must go through during their initiation creates a magical connection to the masters that relays the visions. Once assassins receive their target, it is up to them to decide when, where, and how they will strike. Although they generally try to avoid harming anyone other than the target, a Thug assassin will not hesitate to kill anyone defending them. Once the target is dead, the assassin performs a bloody ritual to extract the demonspawn's soul and deliver it up to Kali for destruction. The ritual is complex and bloody, involving the disemboweling and dismemberment of the corpse. Since the body must be intact at the beginning of the ritual, Thuggee assassins are forbidden from using explosives or any weapons that would prevent them from performing their sacred rite. The ritual takes about ten minutes to perform and cannot be interrupted. Many Thugs utilize magic to conceal themselves while they carry out their sacrificial duty. While it is unclear whether or not the body's soul is indeed delivered to a deity during the ritual, the assassins do extract a portion of the victim's mana during the killing, to be handed over to the masters as proof of their success. The masters use this mana to make contact with Kali and transmit the visions they receive to their assassins.

Thuggee assassins have demonstrated an ability to strike anywhere and at any time. They are masters of infiltration, disguise, and deception. Although most common in India, Thuggee killings are carried out all over the world. Because the ritual leaves the body almost unrecognizable, it is very difficult for local authorities to identify a pattern to the killings unless they have a magician on the scene. The process of extracting mana from the victim leaves a distinctive astral mark on the remains and creates a disturbance in astral space, both of which last for about an hour following the killing. If they reach the scene quickly enough, a magically sensitive investigator can determine whether the act was the work of a true orthodox assassin or a copycat killer. Many times, however, the assassin will dispose of the body following the ritual by scattering pieces of it across a wide area, making it unlikely that the murder will even be reported.

Since most of the orthodox sects were formerly crime syndicates, they remain engaged in various illegal activities to provide the money and equipment needed to support the assassins. Lower ranking members of the sects are sometimes called upon to unknowingly assist assassins, usually by creating distractions that allow assassins to get closer to their targets. The criminal portion of the sect often remains wholly unaware of the assassin side.

Political Revolutionaries

Although the politically active Thuggee mostly began as an offshoot of criminal syndicates, several of them branched off into wholesale activism after the British government established the Raj in 1857. Staunch nationalists, the political revolutionaries seek to undermine British authorities at every opportunity. Their spies infiltrate all levels of the Raj government, allowing the more militant members of the movement to stay one step ahead of the law. Political Thuggee can be found in

every part of the British Empire. While they remain focused on Indian independence, a few groups have attempted to foster rebellion in other colonial holdings to further destabilize British power.

Revolutionary Thuggee mainly use their assassins as thieves, spies, and couriers. While they are not above murdering a political official, they try to avoid drawing too much attention to their involvement in Indian independence movements. The Sepoy Rebellion showed that India was not sufficiently unified to expel their British oppressors, and the nationalist Thugs prefer to bide their time until such unity proves possible. Until then, they will continue to provide information to seditious printers and underground rebels. When the time is right, they will be at the forefront of the Indian revolution.

The Thuggee and the Gruv

Given the amount of security surrounding the Portal, the Thuggee have not yet established a strong presence in the Gruv. While criminal syndicates have managed to slip a few spies through the Rabbit Hole, they remain little more than advance scouts sizing up potential markets. At present, the challenges of getting goods and people to and from the Gruv are simply too difficult for Thuggee smugglers to overcome. A few ambitious members have considered setting up their own syndicates to operate wholly in the Gruv. Orthodox sects have a more ideological interest in the Portal. The masters are greatly interested in the Gruv's inhabitants, and the more devoted among the Thuggee wonder if the Samsut or Saurids represent an ancient, demonic threat to the world.

Organization

Regardless of their true goals, most Thuggee groups utilize a similar organizational structure. The similarities play havoc on British attempts to understand the true nature of the Thuggee, as investigations tend to produce hoards of contradictory evidence. A Thuggee organization can range between a few dozen and a few thousand in size, though these numbers do not always include the vast numbers of criminals unknowingly affiliated with the Thuggee.

Crime syndicates offer the best example of Thuggee organizational structure. The cell is typically the foundational unit, numbering less than fifty people. Most cells consist of local criminals recruited because they are familiar with the area. Bosses, called nayaks, oversee each cell, tracking the income from their illicit activities and leveraging the syndicate's power over the community. Members of a cell usually consider themselves an independent gang and remain ignorant of the fact that their nayak reports to a superior.

Common criminals who ascend to the role of nayak are quickly disabused of such illusions. While nayaks might be able to lord their status over the members of their cell, each of them serves beneath another rank of bosses called thakurs. A thakur usually oversees five to ten nayaks, which allows them to coordinate the activities of several cells in a region. The thakurs are considered "true" Thuggee, having undergone a ritual initiation to join the sect and dedicate their lives to the goddess Kali. For some Thuggee groups, the initiation is little more than an empty ceremony. Orthodox sects, however, regard it as a sacred, transformative moment. In addition to commanding the nayaks, thakurs usually keep a large cell of Thugs at their disposal. All such servants are fully initiated members of the Thuggee who have proven their loyalty beyond question.

The thakurs report to the head of the Thuggee syndicate, the rana. In some cases, the rana is a descendent of the syndicate's founder, but many ranas rise to power through the ranks of the thakurs by their own initiative and ruthlessness. As the supreme ruler of a Thuggee syndicate, the

rana determines its overall direction and goals. Much like thakurs, a loyal retinue of Thugs attend the ranas, serving them with unswerving loyalty. Some larger Thuggee groups, like the one that dominates the Bombay underworld, have more than one rana. In such cases, the most powerful among them holds the title of maharana, and rules over the others. Orthodox ranas defer some measure of their authority to the masters, a council of mystic seers said to dwell somewhere in a great temple high in the Himalayan Mountains. Although no one has ever visited this temple, the ranas often receive special instructions from the masters that they are expected to carry out to the letter.

Thuggee assassins stand both outside the organizational structure and within it. Some ranas permit thakurs to train and use assassins. Others reserve that right for themselves. In both cases, assassins must undergo a special initiation in addition to the regular Thuggee initiation to become one of the Blades of Kali. After initiation, they are forbidden from holding any other position within the syndicate. In orthodox sects, assassins are answerable only to the masters. A coterie of senior assassins serve the rana as advisors and see to the training of potential candidates. While the rana may make requests of them, the assassins are under no obligation to carry them out. They receive their targets directly from the masters. Not all assassins work with Thuggee overseers. Some are "sleepers" who live out seemingly ordinary lives, integrating themselves into society and waiting months, or even years, to receive orders to strike. They also have a well-deserved reputation for spying on fellow Thuggee. Thakurs are often paranoid that one of the Thugs under their command might be an assassin sent by the rana to watch over them.

Resources

Thuggee syndicates dominate the lucrative black markets of India and much of central Asia, but the revenues are divided between dozens, perhaps hundreds, of independent sects. Every Thuggee group is a self-sustaining organization, subsisting on collections from cells at the local level and the payoffs from smuggling illicit goods across country and over protected borders. Most syndicates maintain a variety of legal investments that provide profitable returns, but most of their wealth comes from illegal trade, extortion rackets, and outright theft.

Given their active role in the central Asian arms trade, Thuggee groups have little difficulty procuring firearms and ammunition. While gangs at the lowest cell level are usually not well equipped, Thugs in service to thakurs generally have access to enough firepower to give a small military unit difficulties. The Thuggee can travel and smuggle goods to and from India quite easily, since their local gangs can either bribe or blackmail port officials and rail station supervisors. Although their influence is more limited outside of India, Thugs can be found in every British port if one knows where to look. The Thuggee also possess abundant human resources. Given the poverty in India, manpower is seldom a problem.

Since 1877, the masters have directed many orthodox Thuggee sects to recover lost relics from ancient India. When rumors circulated that some of these items might possess magical properties, several non-orthodox syndicates began searches of their own. No one knows how many such relics have been recovered or whether they hold anything more than symbolic value for the masters. Older Thuggee groups likely already possess a few relics, but it remains to be seen whether they possess any power.

Membership

Despite expanding into other parts of the world over the last century, the overwhelming majority of Thuggee are of Indian descent. The organization is most diverse at the cell level as there are no religious requirements for membership. Criminals and various social unfortunates fill these lower ranks, though most of them never learn that they actually serve the Thuggee. In order to advance beyond the rank of nayak, prospective Thugs must undergo a ritualistic initiation in which they throw off their old allegiances and pledge their souls to Kali. In some cases, the ritual is purely a ceremonial means of reaffirming loyalty to the Thuggee. Orthodox Thuggee, however, emphasize the spiritual importance of the occasion. After initiation, Thugs may worship no deity other than Kali. Apostasy, if proven, is punishable by death.

Since the Thuggee are devoted to a female deity, there has always been a large number of women within their ranks. Women commonly hold leadership positions within the orthodox sects, and some rumors even suggest that a few of the masters are female. Cultural patriarchy is a bit stronger in the crime syndicates because their members are drawn from criminal gangs that tend to be dominated by young, violent men. The revolutionary groups have seen a significant increase in the involvement of women as they become more involved in the burgeoning Indian nationalist movement. Regardless of their attitude towards women, every sect makes use of female assassins.

Once Thugs are initiated, they usually receive a mark of some kind to identify them to other Thugs. Tattoos are quite common, as are piercings and scarification. As they progress through the ranks, additional marks are sometimes used to indicate their status among the Thuggee. Thugs do not discuss these marks with anyone outside of their immediate organization. The initiation ritual

emphasizes the importance of secrecy and loyalty. Each Thug is expected to die before divulging any secrets about their sect.

Potential assassins can be recruited from anywhere and at any time. Unlike nayaks and thakurs, they can be brought in from outside the sect without having to pass through the conventional Thuggee ranks. In orthodox sects, assassins are sometimes permitted to recruit and train their own apprentices. Assassins must undergo two initiations: one to bring them into the Thuggee and another to forsake all worldly ambitions to better serve Kali. Since assassins can be recruited from outside the Thuggee ranks, they tend to be more diverse in terms of nationality.

No one knows how the masters rose to their position of power. Speculation on their identity ranges from the mundane theory that they are the descendants of ancient Thuggee lords to the outlandish belief that they are immortal sorcerers who consume souls to sustain their withered bodies. There is no question that someone speaks in their name, however. So long as they hold the loyalty of the orthodox sects and their assassins, they will continue to dictate Thuggee activities around the world.

Enemies/Allies

When the various Thuggee sects are not fighting one another, their greatest enemy is unquestionably Great Britain. Regardless of ideology, every Thug hopes to eventually drive the British from India. Although British authorities remain dimly aware of Thuggee activity, their knowledge of the organization is based almost exclusively upon misinterpretations and outright faulty information dating back to the anti-Thuggee campaigns of the 1830s. For the time being, they regard the Thuggee as little more than a fanciful bit of colonial folklore confined to the backward corners of the Raj. If the British government understood the true extent of Thuggee activity

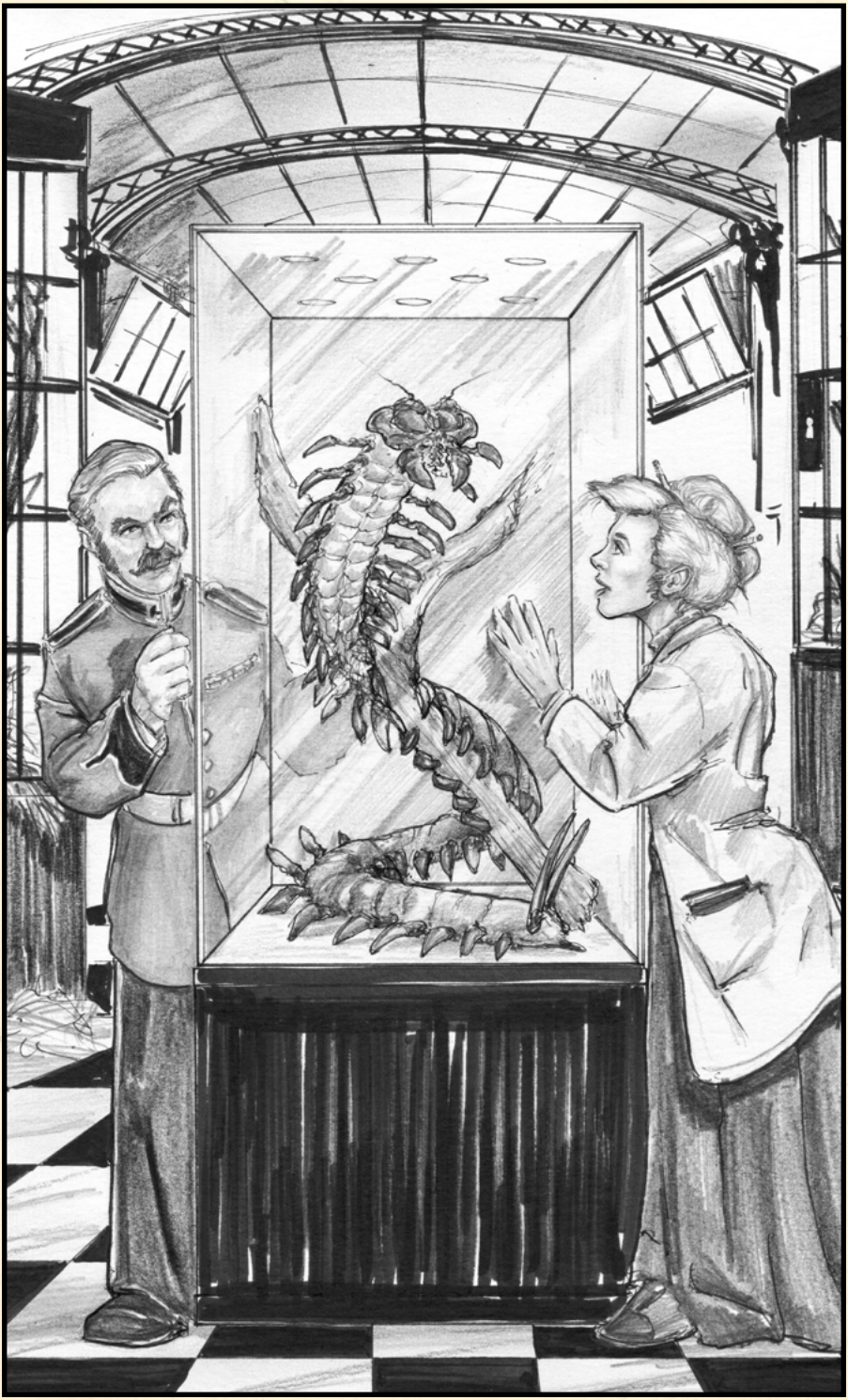
throughout the Empire, it would certainly redouble its efforts to uncover and eradicate the threat.

The Thuggee are an insular organization with few allies. They will occasionally make common cause with other criminal organizations to set up smuggling routes and undermine political authorities, but such alliances are only struck as a matter of convenience. The Thuggee sometimes deal with Britain's European rivals, but they have no desire to swap one colonial power for another.

Spell List

Spell	Tier	Known As	Style	Modifications
Darkness	Initiate	Shroud of Kali	The assassin pulls a cloak, sheet, or blanket over the air in front of him as if he were shrouding some object beneath it.	If the assassin does not possess the appropriate item, reduce the range and duration of the spell by half.
Illusion (physical)	Initiate	Mirage	The assassin draws the illusion in the air before her as she recites a prayer to Kali.	None.
Stun	Initiate	Paralyze	The assassin stabs at the air as if he were stabbing the target's vitals.	If the assassin uses a dagger while casting the spell, reduce the Spellcasting TN by -1.
Unlock	Initiate	Thief's Touch	The assassin places a single finger over the locking mechanism as he recites the exploits of an infamous Thuggee thief.	None.
Invisibility	Novice	Beyond the Veil	The assassin must wear a hooded cloak and draw the hood over her head as she casts the spell.	If the assassin has just performed an assassination and is carrying out the ritualistic sacrifice to Kali, increase the Effect test by +2. If the assassin does not possess a hooded cloak, increase the Spellcasting TN by +2.

Spell	Tier	Known As	Style	Modifications
Reduce Defense Rating	Novice	Precise Target	The assassin pinpoints precisely where he intends to strike the target.	The assassin ignores the penalty for a called shot to the targeted area, but applies a -3 penalty to attacks in any other location (+1 Strain).
Sleep	Novice	Tranquilize	The assassin whispers softly, lulling the target to sleep.	None.
Reduce Movement	Novice	Spectral Caltrops	The assassin blows on her closed hand and makes a throwing gesture at the target's feet.	If the assassin throws actual caltrops, marbles, or ball bearings, increase the Effect test by +1 (do not apply any effects for the physical objects themselves).
Improve Damage	Novice	Wrath of Kali	The assassin must coat his blade with human blood from a previous sacrifice to Kali.	If the assassin does not coat his blade with blood, increase the Spellcasting test by +2.
Pass Through Shadows	Journeyman	Ghostwalk	The assassin traces an outline of the passage with human blood from a previous sacrifice to Kali.	The shadow passage is two-way, allowing the assassin to pass through it and return to the starting location (+1 Strain). If the assassin does not use blood to focus the spell, increase the Spellcasting TN by +1. The resulting passage is not two-way.



1879 GAMEMASTER'S GUIDE

Bestiary

There are entire continents of pestilence carried by each and every camel.
– Maj. Henry Sherridan, 3rd Cavalry, Egyptian detachment

Introductory Notes to a Profile of the Grosvenor Land, Its Habitats, Fauna and Flora

By Paula Nancy Millstone, Lady Jennings, FRS, with Capable Assistance from Lieutenant Alfred Faversham, Royal Welsh Fusiliers (23rd Regiment)

Firstly, allow me to express my profound gratitude to the Royal Society for the opportunity granted by this posting. Being included in such company as my fellow candidates was a considerable honor. Being selected for the position of field biologist in the Grosvenor Land conveys a tremendous responsibility, and I can only hope that my efforts and abilities are up to the challenge. I greatly appreciate the confidence expressed by the Society in my humble self.

This document shall describe the territory of the Grosvenor Land, with primary attention paid to the habitats defined therein, and cataloging of the flora and fauna to be found in the same. I intend to also include some notes as to the challenges posed by field work in this environment, in the hope that they will be of use to the scientists who will follow me. In many cases, the challenges are inherent in the nature of the species native to the Grosvenor Land. So very unlike England's green and pleasant land, where the flowers are beautiful and the birds sing sweetly, where the most dangerous thing one might encounter on a walk over the moors is a surly fox or an irascible hedgehog, the Gruv's species start at pugnacious and pungent, and establish a scale with markers at

aggressive, odoriferous, hostile, repugnant, and savage. I am assured that I have thus far encountered only the milder forms of life here. Perhaps one reason why I was chosen for this assignment is because, as a woman, I am naturally cautious when confronted with something that has more teeth than Nature's God surely intended, where a man would of course see a challenge that must be confronted assertively.

One further observation and then I shall bring this introduction to a close, and set to with the real work of this document. Clothing suitable for England most definitely does not wear well in the Gruv. I had to discard my favorite walking-skirt just a few days after arrival. Not only was it not suited for the climate, but, after an encounter with a ripping creeper, was neither modest nor salvageable. The high boots and jodhpurs provided by Sergeant Nokwazi are certainly not what a proper lady should wear, being entirely too form fitting, but they are comfortable and well suited to the environment.

On the Geography and Resulting Habitats of the Gruv

Fort Alice is in an unfortunate location, in a long, broad valley between two low mountain ridges, one to the north and the other to the south. East, the land rises even more sharply, creating an alpine forest region. The prevailing winds circulate from the south and east, and thus do not bring clouds in through the opening to the west. This creates a dry habitat, where the primary source of water is runoff from icemelt from the surrounding mountains. As a result, a region that should be temperate forest, and in fact is surrounded by such on the far side of the mountains and to the west, has belts of temperate forest following the rivers and streams, with large stretches of savannah and near-desert stretching between them.

If one travels south past the ridge, one finds oneself in proper temperate forest, with shrublands and a near-tropical environment at the southernmost spur of the peninsula. Going west, the island chain between Fort Alice's peninsula and the second continent (for such we assume it to be, based on the tales told by the Saurids) bears plants and supports life roughly equivalent to a tropical deciduous forest. Thus far, however, all of my observations have been restricted to dried or dead specimens brought by the Saurids, as the Empire has not yet brought boats of its own to this world, and Lt. Faversham has flatly forbidden me to travel in the Saurids' crafts, concerned that the combination of their instability and my poor swimming skills could prove lethal. I have also spent several days making observations through binoculars, and so gathered some information about the bird life of the island. Hopefully the promised boats will arrive soon, and we can make a proper expedition to the island.

Going east toward the Samsut lands, one leaves behind the small boreal forest atop the few peaks the peninsula has to offer, and travels through temperate forest across the land bridges connecting the Grosvenor peninsula to the mainland. The northernmost of the three fetches up against more mountains, and more alpine forest. The center bridge passes between two small inland seas, which I am told are freshwater, then lets out into temperate grassland before rising rapidly through scrub hills into alpine forest and then taiga in the high peaks. The southernmost of the bridges widens considerably into temperate grassland. One must then pass through an extensive area of scrub hills before reaching yet again the alpine forest and the taiga beyond. No observations have been made past the mountain range that screens off the land bridges from the Samsut homelands, largely due to the hostility of the Samsut.

I have taken the liberty of arranging my observations by habitat, rather than in the Darwinian mode of organization, putting flora and fauna that co-exist together instead of grouping by common characteristics across habitats. I have attempted to follow the Linnaean classification schema as closely as possible, but beg the Committee's forgiveness for the inventiveness that exigencies of the new world have required of me. In some cases, the claims that my taxonomy make will require comparison with the specimens I have been able to send back, partly to confirm my classification and partly to confirm my sanity. This world contains such species as are not seen in England outside of the ravings of those in Bedlam.

The habitats created by the geographic considerations laid out above are therefore as follows.

1. Fort Alice, and the Savannah and Hills Surrounding
2. Northern Mountain Ridge
3. Southern Mountain Ridge
4. Temperate Forest of the Peninsula
5. Boreal Forest of the Peninsula
6. Southern Shrublands and Coast of the Peninsula
7. Land Bridges: Northern, Central, and Southern

The following chapters will present the flora and fauna of each of these habitats. In cases where a species is found in multiple habitats, I shall describe it where it was first encountered, and make a note as to other regions where it has been observed.

Giant Insectoids

The preliminary reports from the Gruv described what appeared to be giant insects. Clearly, this was not feasible, as insects are exoskeletal, and chitin does not have the structural strength of bone. To achieve the size of a man, a flea would require an exoskeleton several inches thick, which would preclude movement due to both weight and encumbrance. Yet here we have the report from the second team dispatched to New Wigan, which found the settlement (and the unfortunate initial patrol unit) overrun by what appeared to be fleas the size of a Percheron. The military having resorted to fire and explosives in response to the quite deadly threat, we have little evidence remaining of the creatures themselves beyond eyewitness reports, sketches drawn from memory and description, and a few charred fragments. Thus, the battle reports and investigation summary drew the understandable conclusion that the Gruv was home to giant insects.

Later encounters would however leave more to investigate. Thorny molecrabs burrowed under the rail beds and had to be dispatched. Tuskers harassed the cattle and goat herds. The Samsut deployed mordslangers and shardraqxi as biological weaponry, releasing these creatures into British-held territory where they ravaged settlements and diverted military resources from the front. Each time one of these creatures was met, we learned more about them. At this point, I can definitively say that they are not insects, and propose a new taxonomy to accommodate these creatures that are thankfully unique to the Gruv.

The defining characteristic of the insectoid creatures is an internal latticework, like that of an English vertical Gothic cathedral. Arches and trusses of chitin support them from within, and brace against the exoskeleton, which acts as the outer walls and the flying buttresses, distributing the load. This complex structure has two important effects. First, it allows the chitin of the exoskeleton to

be thin enough for the creature to move and not be weighed down by its own supporting structure. Second, it toughens the creature, especially against impact. The load distributing capacity of the internal structure spreads out the energy from a strike, such as a gunshot or pike blow, resulting in less damage to the point of impact. A good deal of the energy ends up being directed into the ground, an assertion vindicated by observation of the battle ground after conflicts with thorny molecrabs. The scuff marks left by the creatures clearly indicate their feet sliding across and digging into the ground with each blow dealt, the structure of the creature transmitting the impact down and into the earth in the same manner that a cathedral's flying buttresses transmit the weight of the building.

An important further note as to chitin – that of the creatures of the Gruv is similar to, but not the same as, the chitin of Terrestrial arthropods. Examination of the tissue structure under a microscope reveals it to be more striated, with a nearly crystalline matrix. Its density exceeds that of terrestrial chitin by approximately two and a half times. I have had to borrow tools from the rail maintenance yard in order to section samples for microscopic examination and for dissection of the specimens. The military response to these creatures has escalated considerably since the New Wigan massacre, with larger calibre rifles and explosives being brought into the fray. Fire appears to be as effective against Gruv chitin as it is against the terrestrial sort, but is not easily directed as a weapon. No ready solution to this problem appears to be at hand.

The taxonomic structure I have devised is as follows. A full taxonomic tree of the creatures catalogued in this volume may be found in Appendix II.

- **Kingdom:** *Animalia* – the animals
  - **Phylum:** *Arthropoda*
    - **Subphylum:** *Chelicerata*
      - **Class:** *Concamerata* – from the Latin, "vaulted", referring to the internal support structures
        - **Order:** *Nefarispinum* - "atrocious spines"
          - **Family:** *Valenvenatorus* - "strong hunter"
            - Mordslanger, Shardraqx, Tusker
          - **Family:** *Perfodies* - "burrowing"
            - Thorny Molecrab
        - **Order:** *Magninsilies* - "great leap"
          - **Family:** *Sanguisugens* - "blood suckers"
            - Giant Flea

Why Is It Attacking?

Wild animals, like humans, never attack without a reason. That reason may be derangement, error, or malice on the part of the attacker, but it remains present nonetheless. If one considers the conditions under which a wild animal is most likely to attack, one can avoid these situations and live a more peaceful existence.

Territory

Predators especially are territorial, having a patch that they regard as their own. They won't take kindly to anyone else attempting to poach on it. Upon spotting a potential competitor for the

game supply, the predator may engage in threat displays, territorial marking behavior, or, if it thinks it has a chance, outright attack. Some Terrestrial predators will engage an enemy with the goal of driving it off. Others fight to kill. Careful observation has to be made to determine which sort of behavior is most likely in a predatory species, and then one must remember that this is simply an indicator of probability, not a predictor of absolute behavior. A species that prefers to run off competitors with a few minor scratches may decide that this time a more savage response is in order. Watching for territorial markings helps avoid these situations. Remember to smell more than look, as most predators will use urine or scent glands to mark their boundaries rather than visual cues.

Hunger

While we're on the subject of predators, we should discuss the fact that humans, for all our assumptions of superiority, are not necessarily at the peak of the feeding order. There have been plenty of incidents of people dragged off or killed and eaten on the spot in India, Africa, and South America. The only reason we don't have that happen in England or western Europe is that we long ago exterminated anything large enough to pose such a threat to us. Do try to remember that when you walk into the forest, you enter the food chain, not necessarily at the top. There are plenty of creatures in the Gruv that would be quite happy to put you on their menu, and quite capable of doing so.

Derangement

Animals suffer lunacy. Humans don't have any sort of lock on that market. Animals, however, tend to go mad from the effects of disease, or venom, rather than from emotional trauma. Rabies is well known enough that I shan't discuss it here, other than to say that everyone knows to avoid an animal that's frothing at the mouth. While we haven't yet recorded any cases of rabies in the Gruv, there will be something that occupies its niche, that can be relied upon for

On Earth, a number of plants, including a high percentage of those domesticated as food crops, produce salicylic acid when attacked by caterpillars, aphids, or other herbivorous insects. This acid, released into the air, signals to nearby predatory insects and insectivorous birds that a ready meal exists, drawing them to the plant and thus to its defense. Salicylic acid is also the active ingredient in willow bark and meadowsweet, which makes decoctions thereof useful as pain relievers and antipyretics. Synthesized a few years ago by the Prussian firm Bayer and marketed under the trade name Aspirin, this wonder drug has quickly won global acceptance, and become a standard part of the pharmacopeia. (The name is a portmanteau of acetyl and Spirsäure, an old German name for salicylic acid derived from the Latin Spiraea ulmaria, the genus and species of meadowsweet.) Bayer Aspirin and its imitators may be found in every military medical kit and many civilian ones. Gardeners across the Empire and in other nations have taken to adding an Aspirin tablet to their sprayers. By misting down their garden with a dilute solution of acetylsalicylic acid, they sound an alarm, and encourage Nature to take care of any pests that might plague their crops via predation. Experiments in the Gruv, some of which, for safety reasons, should not be repeated, have proven that salicylic acid performs a parallel signaling function in the new world. Those currently taking Aspirin, or any decoction of willow bark or meadowsweet, are advised that the acid, released from their skin as their sweat evaporates, may attract unwanted attention of a particularly substantial sort.

certain. Mating seasons produce their own sort of madness, with females looking for mates, males competing to be mates to the females, and both sexes willing to take out their frustrations on anything ready to hand. Knowing the mating cycles of the local wildlife just might be conducive to survival in the bush.

Protection of Young

Our observations have noted that some species of saurians tend their nests and see to their young. The mammals of the Gruv appear to be no different in their behavior than Terrestrial beasts, in terms of seeing to the well being of the next generation. On spotting any sort of young, one should very quietly and quickly leave the area, as one may be certain that an overprotective mother is somewhere nearby, and may very well rend the intruder tooth and nail.

And so forthwith, the beasts of the field, the birds of the air, and the insectoids of the Concamerata.

Creature Descriptions

Each creature description is presented in up to four sections. First, the opening text includes a physical description of each creature, as well as various details about the creature's habitat, eating and mating habits, and natural defenses. Each creature entry lists its relevant game statistics. The **Rules** section includes game rules that correspond to the descriptions of each creature and possible ways to defeat or escape it. This section also includes rules for resolving the use of any unique powers or abilities a creature may possess, including any exceptions to existing rules. Lastly, some creatures have an **Adventure Hook** suggesting at least one way Gamemasters might use an encounter with the creature as a starting point for an adventure. These adventure hooks are intended to spark ideas for fleshing out a complete adventure and/or integrating the creature into an ongoing *1879* campaign. Keep in mind that the suggestions offered in this section are just that: suggestions. The Gamemaster should feel free to use the creatures in this book in any way appropriate to the campaign.

The Standard Format

The statistics in this chapter describe "average" members of each type of creature, unless otherwise noted. There is no such thing as an "average" creature, however—they are all as unique and individual as people.

Statistics

Attributes: Each creature has a Step Number for the following Attributes: Dexterity (DEX), Strength (STR), Toughness (TOU), Perception (PER), Willpower (WIL), and Charisma (CHA). Use the Action Dice for this Step Number when making Attribute Tests.

Initiative: The Step Number used to make Initiative Tests.

Actions: The number of Standard Actions the creature may make each combat round.

Attack: The Step Number used to make Attack Tests. If the creature can make more than one type of attack, the Step Number for each is listed separately.

Damage: The Step Number used to make Damage Tests for successful attacks. Separate Damage Steps are given for each type of attack the creature can make.

Death: This is the creature's Death Rating. If the creature has Durability, this is included in the total.

Unconsciousness: This is the creature's Unconsciousness Rating. If the creature has Durability, this is included in the total. "None" means the creature never falls unconscious.

Wound Threshold: This is the creature's Wound Threshold. "None" means that the creature cannot be Wounded.

Adventure Award: This is the Tier of the Adventure Award Table (see pg.166) that should be used when the creature is defeated. Most opponents are meant to be one-on-one opposition. Some opponents are meant as one opponent per 2 player characters (denoted as: 1 per 2 PC). On average, a group of five characters can defeat 2 to 3 of these creatures. Other opponents are meant to challenge an entire group of characters (denoted as: Group). When the characters defeat such a creature, they each earn an amount of Adventure Points equal to the Adventure Award of that Tier. For example, when the characters defeat a group of five Initiate Tier creatures, they each earn an Initiate Tier Adventure Award (an average of 50 AP). When the characters defeat two to three Novice Tier creatures with a 1 per 2 PC denotation, they each earn a Novice Tier Adventure Award (an average of 350 AP). When the characters defeat a single Journeyman Tier Group opponent, they each earn a Journeyman Tier Adventure Award (an average of 2,850 AP).

Physical Defense: This is the creature's Physical Defense.

Mystic Defense: This is the creature's Mystic Defense.

Social Defense: This is the creature's Social Defense. Characters must be able to communicate to use social abilities against the creature. Battle Shout and other non-verbal skills work against most creatures.

Physical Armor: This is the creature's natural Physical Armor Rating. Most often, this is tough skin, thick fur, or some other body covering, however, some magical abilities can determine or affect this number.

Mystic Armor: This is the creature's Mystic Armor Rating.

Recovery Tests: This is the number of Recovery Tests the creature may make each day. Most creatures use their Toughness Step for Recovery Tests. If a different Recovery Step is used, it appears in parentheses.

Knockdown: The Step Number used to make Knockdown Tests. "None" means the creature cannot be knocked down. "NA" or "Not Applicable" means the creature cannot resist Knockdown; the creature is knocked down any time it suffers a Wound.

Movement: This is the number of yards a creature can move in a combat round using a Simple Action. Unless noted otherwise, this form of movement is considered to be ground based.

Karma Points; Karma Step: Only magical creatures can use Karma to enhance their abilities. However, not all magical creatures necessarily have Karma. The number of points and the Step Number are listed with the creature's entry.

Powers: This entry lists the powers and abilities possessed by the creature. For detailed information on how these powers work, see the individual **Powers** sections, on pg.346, and in the **Astral Denizens** chapter (pg.433). For those powers that require an Action Test, a Step Number is also listed. Some spell-like powers require a Spellcasting Test, which is listed as a separate power; for most powers the Spellcasting Test meets the action requirement for that power.

Spells: This entry lists the spells available to the creature. The spells listed work as described in the 1879 Player's Guide. Special effects normally found in the Known As version will be listed here.

Equipment: This notation refers to any weapons, armor, magical items, and the like, which the creature possesses. At the Gamemaster's discretion, a creature may have more or better equipment than what is listed.

Loot: This notation lists the valuable items or body parts the creature possesses.

Creature Encounters

With the possible exception of large towns and cities, player characters may encounter creatures almost anywhere in either world. Even in the fortifications of the Gruv or on the streets of London, some creatures may be encountered, such as sparkers or rats. Some areas, however, have more creatures prowling around them than others. For example, the plains of the central Gruv provide grazing lands and hunting grounds for many of the larger herbivores and carnivores, including the garnickey and the mordslanger. Many creatures also nest in caves and the entrances of Anunnaki ruins.

In general, creature encounters should have some connection to the characters' current adventure rather than occurring at random. However, the encounters need not be connected to the adventure's main plot. For example, an adventure that takes the characters into the western forest might plausibly lead them to any number of encounters with creatures inhabiting the west of the Gruv. In this case, the setting of the adventure provides the connection.

Which Creatures Should I Use?

Creatures work best in an adventure if you choose them based on the size of your player group and the average Tier of their characters. For example, sending a group of six Novice Tier characters against a mordslanger would be inappropriate because the characters stand no chance against such a beast. It will kill them and end the adventure very quickly. A group of seven Journeyman Tier characters, on the other hand, might need a more hefty challenge. Sending them against three or four storsventoks wouldn't give them the chance to even work up a sweat.

The Adventure Award for each creature is also intended as a quick guideline to their difficulty for a character of the same Tier as the specified Adventure Award. As you get to know your party, you may find they are slightly behind or ahead of these indications and you can adjust them slightly as they advance.

How Many Creatures Should I Use?

The number of creatures to include in an encounter also depends on the average abilities of the characters in your player group. Most of the creature descriptions in *1879* products suggest the number of any given creature that characters can normally expect to encounter, but the Gamemaster should always consider these suggestions with an eye toward game balance. For example, shardraqxi often attack in swarms of 25 or 30, but only the most powerful characters could possibly survive such an attack. Unless your players' characters are incredibly powerful, don't send the maximum number of shardraqxi against them. Instead, send whatever number they can feasibly handle. The Adventure Award notation (see above) in a creature's description offers suggestions on how many of the creature you should use against a certain Tier of characters.

Creature Combat

Characters will encounter, and sometimes have to fight, many different creatures throughout the course of their adventures. See the **Combat** chapter of the *1879 Player's Guide* for more information on combat.

Initiative

Creatures make Initiative Tests as normal to determine when they act during the combat round. Unless noted in the creature's description, the Gamemaster uses the Initiative Step given with the creature's statistics.

Number of Actions

Some creatures can make more than one Standard Action per round, which can be used as described in Actions (*1879 Player's Guide*, pg. 176). The number of Standard Actions a creature can make each combat round is shown under the "Actions:" notation in the creature's statistics block. However, creatures are limited to moving no further than their Movement Rate during a round in which they take one or more other actions. Creatures may move twice their Movement Rate, but doing so precludes other activities, except for a single Simple Action (*1879 Player's Guide*, pg. 233).

There are also restrictions to the maximum number of attacks that can be made of a particular type. These limitations are described in **Creature Attacks**, below.

Note that while some creature powers do not use a creature's Standard Action, these powers might require a test for another power to be made. For example, the Bone Shaping power does not require a Standard Action, but a Spellcasting Test. The Spellcasting Test requires a Standard Action, which is why the Bone Shaping power cannot be used when the creature does not have a Standard Action available – because it cannot make a Spellcasting Test. An exception to this rule exists: when a creature has a power that automatically causes an effect – outside of the creature's control – that requires a test, usually a Spellcasting Test, and in such cases the use of Spellcasting does not use a Standard Action.

Karma Use

In *1879*, only the most powerful creatures possess Karma. Unless a creature's description specifically states otherwise, all creatures with Karma available to them may spend 1 Karma Point on any Action Test they make during the round, including Attack Tests, Damage Tests, Knockdown Tests, and so on. The Karma Step noted in the creature's statistics block determines the Action Dice rolled with the creature's Action Test. Creatures with Karma can spend only a single point on an Action Test, but they can spend Karma on each Action Test they make during the round. For example, a purpose with two claws and a bite attack can spend a Karma Point on each Attack Test it makes, if it so desires.

Creature Attacks

Creatures will generally attack their prey using the most effective means available to them. As noted earlier (see **Number of Actions**, above), many creatures can attack in more than one way. The statistics block for each creature lists the number of actions a creature can make per round; in many cases, a creature can make more than one type of attack in the same round. For example, a

creature with two actions per round may attack twice with its claws, or once with a claw attack and once with a bite attack. If the creature can make more than one type of attack, the Step Number for each type of attack is listed separately. Likewise, separate Damage Steps are provided for each type of attack a creature can make. The following text describes some of the different forms of attacks that creatures use. Unless noted otherwise, each type of attack uses one of the creature's available actions in a given combat round.

Bite Attacks

Less often employed by creatures than Claw attacks, the Bite attack is often used in combination with another type of maneuver, such as Bite and Shake, Bite and Hold, and Grab and Bite. Each of these methods of attack is described below. Regardless of how many attacks they can make, all creatures can only make one Bite attack, including combinations, per round.

Bite and Shake

With the Bite and Shake attack, the creature first bites the victim, then vigorously shakes its prey, causing additional damage in subsequent combat rounds. Most of the time, the creature bites its opponent's neck and then shakes it until the neck snaps. A Bite and Shake attack requires the creature to make a successful Attack Test using the Called Shot combat option (*1879 Player's Guide*, pg. 242). If the test succeeds, the target is considered Grappled (*1879 Player's Guide*, pg. 250). Each round thereafter, the creature automatically makes a bite Damage Test, reflecting the additional damage caused to its prey from the shaking; it does not need to make another Attack Test. A creature that is shaking its opponent cannot make another Bite attack until the victim is released by the creature or breaks free.

Because the creature shakes its victim so violently, it is easier to break free of the creature's grip. When attempting to break free from the Grapple, the victim gains a +2 bonus to their Strength or Unarmed Combat Test. Unfortunately, the act of breaking free requires tearing away from the creature's teeth, which causes further damage to the victim. If the test succeeds, the creature makes a free bite Damage Test (not requiring an Action or an Attack Test) against the victim as they pull free. Physical Armor protects against this damage.

Bite and Hold

Similar to the Bite and Shake attack, a creature using a Bite and Hold attack bites the victim, usually latching on to a limb, and keeps its iron grip steady, causing additional damage to its prey in subsequent rounds. As with the Bite and Shake attack, a Bite and Hold attack requires the creature to make an Attack Test using the Called Shot combat option. If the test succeeds, the target is considered Grappled, and the creature makes an automatic bite Damage Test each round thereafter until the victim is released or breaks free. The creature uses its Strength Step, rather than its Damage Step, for the automatic Damage Test. A victim attempting to break free does so at the normal Target Number for the Strength or Unarmed Combat Test. As with the Bite and Shake attack, the prey takes damage if it manages to pull free from the creature's jaws. At the Gamemaster's discretion, a creature that achieves extra successes with its Bite and Hold Attack Test also causes its victim to incur a Harried penalty until freed.

Grab and Bite

Larger non-humanoid creatures can make a Grab and Bite attack, using their body size and mass to restrict their victim. A Grab and Bite attack is resolved as described for Grappling (*1879 Player's Guide*, pg. 250), except the creature makes a Strength Test to determine the Target Number for breaking free. Once a creature has successfully grappled its victim, it makes a Bite or one or more Claw attacks against its struggling prey. The victim takes damage only from the Bite or Claw attacks, not from the initial grab attack. The creature cannot make a Bite attack in the round that it makes a successful Grab and Bite attack, but once it has grappled its opponent, it is free to do so each round thereafter. At the Gamemaster's discretion, a creature that achieves extra successes with its Grab and Bite Attack Test also causes its victim to incur a Harried penalty until freed. Large humanoid creatures, such as gorillas, use the standard rules for Grappling.

Charging Attacks

Some creatures, especially those with horns or antlers, attack by charging into and trampling or goring their victim. These Charging attacks are resolved according to the normal rules for making Charging attacks while mounted (*1879 Player's Guide*, pg. 254). If a horned or antlered creature makes a Charging attack, it runs at its target and makes an Attack Test, digging its horns deep into the target's flesh. If the test succeeds, the creature makes a Damage Test, which is resolved as normal, and a Strength Test, the result of which is the Knockdown Target Number of the attack. Regardless of the Damage Test result, the creature's victim makes a Knockdown Test against the Charging attack's Knockdown Target Number. If the test succeeds, the victim remains standing. If the test fails, the victim is immediately Knocked Down. If the creature has additional attacks available to it after the Charging attack, it makes these as normal.

Larger creatures, such as geealongs or rhinoceri, can trample a target who has been Knocked Down. Unless noted in the creature's description, trampling attacks are resolved in the same manner as the creature's normal attacks.

Claw Attacks

As most creatures possess claws, the Claw attack is the form most commonly used. When making a Claw attack, most creatures use one or both of their fore limbs, slashing and raking their prey with their sharp talons or nails. The number of Claw attacks the creature can make prefixes the Damage notation for the attack. For example, a notation showing "2 × Claws" indicates the creature may make up to 2 separate Claw attacks. A notation showing just "Claws" means the creature may use all of its claws to fight, but they count as a single Claw attack.

Diseases

Creatures sometimes carry diseases that can affect their victims. For example, a character attacked by a rabid dog has a good chance of contracting rabies. Animals such as lizards and mice often carry different diseases. Other creatures may be exposed to disease through the twisted machinations of an evil magician. Certain creatures, such as the common rat, are living disease carriers. Whether or not a creature is carrying a disease, and the nature of the disease in question, is entirely at the choice of the Gamemaster. Any disease that can exist in the world of *1879* poses a potential threat to characters. In game terms, the effects of diseases are resolved using similar game mechanics as for poison (see the **Fatigue** chapter on pg.231 for more information).

Magical Attacks

A few creatures possess some kind of magical ability, the effect of which is described in the creature entry. These Magical attacks vary from creature to creature, being diverse in nature and effect. Some creatures possess one or more powers, with an associated Step Number used to determine how effective they are. See the descriptions for Creature Powers in this chapter, and Spirit Powers in the **Astral Denizens** chapter (pg.433).

Pack or Swarm Attacks

Though most creatures attack in relatively small groups, some attack in packs of six or more. A Pack or Swarm attack can easily overwhelm even the strongest opponent. The standard rules for close combat assume that all attackers are approximately human-sized. Because many creatures are much smaller than a human, more than six of them may attack a human-sized opponent at once.

Pack and Swarm attacks are made as normal, except that, depending on the creature's size, more than six of them may attack a single character at the same time (*1879 Player's Guide*, pg. 247). Creatures the size of an average dog (one to two feet high at the shoulder, and three to four feet in length), can attack two at a time from the same position. This means that up to twelve dog-sized creatures can attack a single human-sized target. Creatures up to one foot long, such as rats, small snakes, and bats, can attack three at a time from the same position, allowing up to eighteen rat-sized creatures to attack a single human-sized target. Creatures more than four feet long are considered human-sized for purposes of combat.

As well as receiving multiple attacks, a character surrounded by a pack or swarm of creatures is Harried if a sufficient equivalent number of human-sized creatures are involved. Eight dog-sized or twelve rat-sized creatures are equivalent to four human-sized characters, and therefore enough to cause their victim to become Harried. A character attacked by the equivalent of more than four human-sized creatures at a time is not only Harried, but Overwhelmed and incurs an increased penalty to their Defense Ratings and Action Tests. For each additional human-sized equivalent number of creatures in the pack or swarm attacking the victim, the victim incurs another -1 penalty to their Defense Ratings and Action Tests.

Poisonous Attacks

Some creatures overcome their prey through use of a poisonous bite or stinger. When a creature makes a Poisonous attack, it may or may not choose to inject poison into the victim. Unless specified in its description, the creature does not need to inflict a Wound on the target for its poison to take effect. A single Damage Point is sufficient to introduce the venom. To resolve the effects of the creature's poison, use the rules for **Poison**, pg.239.

Pouncing Attacks

Many creatures attack their prey by pouncing on it, hoping to daze it long enough for them to kill it. When making a Pouncing attack, the creature leaps toward, and then knocks down, its prey. Some creatures can make long jumps of specified distances. If the description for a creature does not specify how long a jump that creature can make, use the following procedure when the creature attempts a Pouncing attack.

The jumping creature makes a Strength Test, the result of which is the distance in feet the creature can leap. If a creature attempts to jump over an obstacle (such as a chasm or pit), the creature makes the test against a Target Number equal to the distance it is attempting to jump, in

feet. Jumping movement is considered to be a movement action, allowing the creature to attack after it has jumped toward or onto its target.

Once the distance that a creature can jump has been determined, the creature makes an Attack Test as normal for its Pouncing attack. If the test succeeds, the creature makes a Strength Test, the result of which becomes the Knockdown Target Number of the Pouncing attack. The creature's prey makes a Knockdown Test against the attack's Knockdown Target Number. If the test succeeds, the victim remains standing. If the test fails, the victim is Knocked Down (*1879 Player's Guide*, pg. 248).

A Pouncing attack uses one of the creature's actions. Any creature capable of more than one action per round can continue to attack its victim after pouncing on it, regardless of the outcome of the Pouncing attack. At the Gamemaster's discretion, a creature that achieves a Rule of One result on its Pouncing Attack Test cannot make any further attacks that round.

Severing Limbs

Optional Rule: Because of their immense size and strength, some creatures can actually tear or bite off an opponent's limb. Though a rare occurrence, Severing Limbs attacks do happen. Severing Limbs attacks can generally only be made by very large creatures, including lions, theropods, and some Concamerata. Some Gamemasters may allow this rule to be used by people, but should do so only if there is a considerable size difference or natural weapon (such as an Aquatic Saurid attacking a swimming human, for example). If the Gamemaster chooses to allow this devastating type of attack, the following guidelines should be used.

Regardless of the number of attacks a creature may have, it may only make one attempt at a Severing Limbs attack per round. For the creature to be able to tear off an opponent's limb, the creature's Strength Step must be greater than twice that of the victim. The creature makes a Bite or Claw attack using the Called Shot combat option against one of its victim's limbs. If the test succeeds, the creature makes a Damage Test as normal. In addition to the Damage Points inflicted, the creature compares the Damage Test result against the victim's Wound Threshold. With two extra successes, the target's limb is torn or bitten off.

In addition to the immense amount of normal damage done by the attack, the victim will also bleed severely. At the end of each round after the limb is torn off, the victim suffers Step 4 damage from blood loss. No armor protects against this damage. The bleeding continues until the victim dies or somehow staunches the bleeding, with a tourniquet, cauterization, a healing potion, or through use of the Heal spell. Severed limbs can be replaced, but only through use of complex spells or Weird Science procedures, or by attaching a prosthetic limb.

Swooping Attacks

A flying creature will often drop down to attack its target and then fly up and out of harm's way (see the *1879 Player's Guide*, pg. 256).

Creatures and Combat Options

When attacking their prey, creatures will often use many of the standard combat options available to characters. Several options and the creatures most likely to use them are described below. The Gamemaster should keep in mind that the use of combat options is intended to simulate

a creature's natural instincts rather than indicate conscious decision-making or intelligence on the part of the creature.

Aggressive Attack: Many creatures will use this combat option, especially those who are wounded, dying, or defending their young or territory.

Attacking to Knockdown: This option allows a creature to expose its prey to more effective attacks. Several of the creature attacks described previously, including Pouncing, Charging, and Grab and Bite attacks, include the use of this combat option.

Called Shot: Creatures use this combat option whenever they attempt to attack a specific place on a victim's body, such as limbs, head, or neck.

Defensive Stance: Most creatures use this combat option only if they are badly wounded and attempting to withdraw from battle.

Splitting Movement: Flying creatures commonly use this option when making Swooping attacks.

Special Abilities of Creatures

Creatures have a wide range of magical and mundane powers at their command. The following text describes the creature powers available to the creatures in this book. The list is by no means comprehensive, and many creatures have unique ways of using their powers.

The Step Number of a power is usually determined by adding the power's Rank to the Attribute Step listed under the **Step:** notation. If the power requires the creature to make a test, the Step Number is used to determine the Action Dice rolled. For example, a creature with a Willpower Step of 6 and the Camouflage power at Rank 3 would have a Camouflage Step of 9 (6 + 3). The Step/Action Dice Table (*1879 Player's Guide* p. 29) shows that Step 9 rolls D8+D6 Action Dice.

Some powers use only a Rank. No Attribute Step is added to the Rank in this case. Many of these powers don't require a test. Their effect is determined differently, as detailed in each power's description. For example, a creature's Burning Aura Rank determines the Damage Step used against all targets within 3 yards of the creature.

Most powers use a Standard, Simple, or Free Action, but a few use Sustained Actions or no Actions (work automatically or all the time). Actions for creatures are handled in the same way as for characters, but creatures can have more than one Standard Action (see **Number of Actions**, , *1879 Players Guide*, pg.232).

The type of power (the **Type:** notation) indicates whether it is magical or mundane in nature. Some powers correspond to Skills (*1879 Player's Guide*, pg. 169). These are noted by a superscripted 'S' (Skills as powers) at the end of the power's name.

Acid Spray

Step Number: Rank + DEX
Action: Standard
Type: Mundane

Just below the creature's mouth is an organ that can fire a spray of concentrated irritant. This substance is not corrosive, but causes extremely painful rashes and swelling if it hits exposed flesh. The creature makes an Acid Spray Test against the target's Physical Defense. The power's range is the creature's Rank × 6 yards (Rank × 3 hexes). If the test succeeds, the target is hit with acidic spray. Any character hit by the irritant must make a Willpower Test against the Acid Spray Test

result. If this test fails, the target falls to the ground, writhing in agony for a number of rounds equal to the Acid Spray Rank. The target may make a Willpower Test against the Acid Spray Test result each round to recover. The acid's potency decreases over time; subtract –1 from the Difficulty Number of the Willpower Test each round after the first.

Blood Veins

Step Number: Rank + STR
Action: Standard
Type: Mundane

The Blood Veins power allows the creature to push small veins, hollow fangs, or other natural tubes into victims it is touching, drawing away and deriving its sustenance from the victim's blood and fluids. Each minute it is attached to the victim, the creature makes a Blood Veins Test to determine how much damage it inflicts. No armor protects against this damage.

Breath Weapon

Step Number: Rank + WIL
Action: Simple
Type: Magical

Element as per creature description, if any. This power allows a creature to breathe a damaging substance at its victims, possibly even a burning one. The exact substance and range is listed with each creature. To attack with its breath weapon, the creature makes a Spellcasting Test against the target's Mystic Defense. If the test succeeds, the creature makes a Breath Weapon Test to determine how much damage is inflicted. Mystic Armor provides protection against this damage. If the substance is burning or acidic in nature, it continues to burn the character for the next 3 rounds, doing an additional Step 6 damage every round unless the character puts it out by diving into a pool of water, somehow neutralizing it (if it is an acid), or suffocating the flames by other means. For burning substances, the heat from a fire this size is equal to a small campfire (see pg.225) and can affect nearby targets, the victim's possessions, and the surrounding area.

Burning Aura

Step: Rank
Action: NA
Type: Magical

Some creatures can generate a tremendous amount of heat, appearing as if burning themselves. If the creature passes within 4 yards (2 hexes) of a target, the target automatically suffers damage equal to the creature's Burning Aura Rank. Physical armor protects against this damage. Advanced forms of this power can make non-magical wooden weapons burst into flames at a touch or even melt metal weapons.

Camouflage

Step: Rank + WIL
Action: Standard
Type: Magical; Mundane (can be either)

Many creatures have the ability to hide in their natural environment, and can use this ability to camouflage themselves or even hide something being sought. The creature makes a Camouflage

Test to blend in with its environment, the result of which becomes the Target Number for characters attempting to notice it. Creatures can attack from a camouflaged position. If the intended target fails a Perception Test to spot the creature, the camouflaged creature can make a Surprise attack against the target (see the **Combat** chapter of the *1879 Player's Guide*).

Charge

Step: Rank
Action: Standard
Type: Mundane

The creature is able to make sudden and rapid Charging attacks. The creature must move a distance at least equal to its Movement Rate that round, before attacking an opponent. If the attack is successful, the creature adds its Charge Rank as a bonus to the Damage Test.

Crackling Armor

Step Number: Rank + WIL
Action: Standard
Type: Magical

This power surrounds the creature with bolts of lightning, crackling and popping a mere inch from its skin. Crackling Armor takes one round to activate, and remains active for a number of minutes equal to the creature's Crackling Armor Rank. The creature adds its Crackling Armor Rank as a bonus to its Physical Armor. Any time a character or other creature physically strikes the creature, with their hand or foot, a metal weapon, or any other conductive object, the creature makes a Spellcasting Test against the attacker's Attack Test result. If the test succeeds, lightning arcs from the creature into the attacker. The creature makes a Crackling Armor Test to determine how much damage is inflicted. Non-metal Physical Armor protects against this damage.

Disease

Step Number: Rank
Action: NA
Type: Magical; Mundane

Creatures with this power are infectious and are able to infect a target with a disease. No Test is required for a creature to affect a target with the disease. If the victim is physically struck and damaged by tooth, claw or stinger, the disease automatically affects them. After taking damage, the target might become infected by the creature's disease, which is listed with each creature (for more information, see **Disease**, pg.232).

Durability

Step Number: Rank
Action: NA
Type: Mundane

The Durability power increases a creature's ability to take damage. Each Rank in the Durability power permanently adds its Toughness Step to its Unconsciousness Rating, and 1.2 times its Toughness Step to the creature's Death Rating.

The creature's Death and Unconsciousness Ratings, adjusted for Durability, are shown in parentheses beside the creature's unadjusted ratings.

Enhanced Senses

Step Number: Rank
Action: Free
Type: Magical; Mundane

A creature that has the Enhanced Senses power has an improved sense of hearing, smell, sight, taste, or touch. When the creature makes a Perception Test using the enhanced sense, it adds the Enhanced Senses Rank as a bonus to the Perception Test result. The five enhanced senses that creatures can possess include hearing, sight, smell, taste, and touch. The specific senses enhanced by this power are shown with the power.

Howling Challenge

Step Number: Rank + CHA
Action: Standard
Type: Magical; Mundane

The leader of a group of creatures may use its Howling Challenge power on a target within line of sight. The lead creature spends one round howling. In the following round, it makes a Howling Challenge Test against the target's Social Defense. A successful result forces the target into a howling contest with the creature. The victim then makes a Charisma Test against the creature's Howling Challenge Test result. If this Test succeeds, the challenge ends and the creature flees in shame, followed next round by its fellow creatures. If the victim's Charisma Test fails, the leader may maintain the Howling Challenge, making another Howling Challenge Test to produce a new Target Number each round for as long as the challenge lasts. The leader can maintain a Howling Challenge as long as it continues to win, and as long as it takes no other action.

Karma

Step Number: Special (see text)
Action: NA
Type: Magical

Unless a creature's description specifically states otherwise, all creatures with Karma available to them may spend 1 Karma Point on any Action Test they make during the round, including Attack Tests, Damage Tests, Knockdown Tests, and so on. The Karma Step noted in the creature's statistics block determines the Action Dice rolled with the creature's Action Test. Creatures with Karma can spend only a single point on an Action Test, but they can spend Karma on each Action Test they make during the round. For example, a cheshire with two claws and a bite attack can spend a Karma Point on each Attack Test it makes, if it so desires. The number of points available and the Step Number are listed with the creature's entry.

Lightning

Step Number: Rank + WIL
Action: Simple
Type: Magical

Some creatures have the power to strike their target with bolts of electricity. To use this lightning-generating ability, the creature makes a Spellcasting Test against the target's Mystic Defense. The power's range is the creature's Rank × 8 yards (Rank × 4 hexes). If the test succeeds,

the creature makes a Lightning Test to determine how much damage is inflicted. Non-metal Physical Armor protects against this damage.

Locate Target

Step Number: Rank + PER
Action: Standard
Type: Magical; Mundane

Creatures with the Locate Target power can find their target's position even if they are not able to see them (e.g., on the earth's surface from underground, or in complete darkness). This may involve sensing vibrations, heat signatures, electrical signatures, or other means. To determine an opponent's location, the creature makes a Locate Target Test against the target's Mystic Defense. If the test succeeds, the creature is aware of the target's position. The Locate Target range is listed with the creature's description.

Poison

Step Number: Rank
Action: NA
Type: Magical; Mundane

Creatures with this power have poisonous fangs, teeth, claws, or stingers. No Test is required for a creature to affect a target with the poison. If the victim is physically struck and takes even a single Damage Point, they are exposed to the poison and suffer the effects. The specific effect of the poison is given in the creature's description (see **Poison**, pg.239, for more information).

Sense Danger

Step Number: Rank + PER
Action: Standard
Type: Magical

The creature makes a Sense Danger Test against the Spell Defense of any target within line of sight. In the case of more than one target, the creature makes a test against the highest Spell Defense among the group. If the test succeeds, the creature knows whether or not the targets intend to attack or otherwise intend it harm.

Sense Magic

Step Number: Rank + PER
Action: Standard
Type: Magical

The creature can use its magic-sensing ability over a range of Sense Magic Rank miles. To detect the use of magic, the creature makes a Sense Magic Test against a Target Number based on the type of magic being used, as shown in the **Magic Use Table**. If the Test succeeds, the creature can track the source of the magic within its range. Because magic use is so pervasive in the Gruv, a creature can detect several different

Magic Use Table

Magic Type	Target Number
Raw Magic	4
Creature Magic	9
Skill Magic	11
Magical Items	12

sources of magic use within the range of its power. The strain of sensing multiple uses of magic often confuses and irritates the creature, possibly making it more dangerous.

Skills

Step Number: Special (see text)
Action: Special (see text)
Type: Mundane

Some creatures have powers based on Skills (see the *1879 Player's Guide*, pg. 169, for descriptions). Skills as powers are noted by a superscripted 'S' at the end of the power's name.

Spellcasting

Step Number: Rank + PER
Action: Standard
Type: Magical

The Spellcasting power enables creatures to cast spells using raw magic. When casting spells with this power, creatures are vulnerable to the same Warping and Damage effects as magicians. To determine the effect of a spell, use the creature's Willpower Step.

Spells

Step Number: Special (see text)
Action: NA
Type: Magical

The spells that the creature can cast are listed with their descriptions. See the **Spells** chapter in the *1879 Player's Guide* for descriptions of the spells themselves.

Sticky Body

Step Number: Rank + WIL
Action: Free
Type: Magical; Mundane

Creatures with this power excrete a sticky fluid. Whenever the creature comes into contact with another character or item, the creature makes a Sticky Body Test against the target's Mystic Defense. If the test is successful, the fluid glues the character and the creature together. Creatures using this ability are free to perform other actions while attached to a victim. A character is considered Harried (*1879 Player's Guide*, pg. 247) as soon as even a single creature sticks to them using this power. Once four creatures stick to a target, it begins to suffocate. The victim takes 1 Damage Point each combat round until fewer than four creatures remain on it. No armor protects against this damage. Characters suffer from being Overwhelmed at this stage, further hampering them. As a guideline, up to six creatures can stick to a character of equal size. To break free from the gluey gob, the target must make a successful Strength Test against the result of the creature's Sticky Body Test. The only other way to escape the glue is to wait for the sun to break down the substance, but a creature with this power will rarely allow that to happen.

Making physical attacks against a sticky creature is very difficult. At the start of combat, the Gamemaster makes a Sticky Body Test to determine the strength of the creature's adhesive layer.

Whenever an opponent successfully attacks the creature, his weapon, hand and so on sticks to the creature; the attacker must make a successful Strength Test against the result of the Sticky Body Test to pull the weapon or limb free. If the Strength Test fails, the attacker may make further Strength Tests, but the Target Number for each additional test increases by +1.

Sticky Spit

Step Number: Rank + STR
Action: Standard
Type: Magical; Mundane

Creatures using this power usually prefer to glue their foes to the ground rather than fight them in close combat. The creature can spit a gob of adhesive at any opponent within the range listed in its description. To spit the gob, the creature makes a Sticky Spit Test against the target's Physical Defense. The power's range is the creature's Rank × 2 yards (1 hex). If the test succeeds, the target is struck by the mucus. The spit hinders the character's movement. The character is considered Harried (*1879 Player's Guide*, pg. 247). The spit can be removed with a mild acid, such as vinegar, and a good scrubbing brush. Alternatively, a round spent trying to pull the goo free allows the target to make a Strength Test against the creature's Sticky Spit Test result. If this test succeeds, enough of the goo has been removed to allow freedom of movement again. For this reason, it is common for creatures with this power to use it more than once against the same opponent to ensure its prey is well and truly stuck (and to force multiple Strength Tests to break free). The Gamemaster may wish to use the Overwhelmed rule to account for the effect of multiple Sticky Spit attacks on a target.

Surprise Attack

Step Number: Rank
Action: Free
Type: Magical; Mundane

The creature is able to strike faster in its initial attack, usually from a hidden position. Add the creature's Surprise Attack Rank to its Initiative Step in the first round of combat. The creature's victim may also suffer a Surprised penalty (*1879 Player's Guide*, pg.249).

Tire Others

Step Number: Rank + CHA
Action: Standard
Type: Magical

Those affected by this power become **Fatigued** (see pg.231), and lose interest in anything they are doing for a number of minutes equal to the Tire Others Test result. To shrug off the mental effects of this ability, a target must make a successful Willpower Test against the result of the creature's Tire Others Test. Fatigue penalties can only be lost through the normal means of rest and food.

Venom

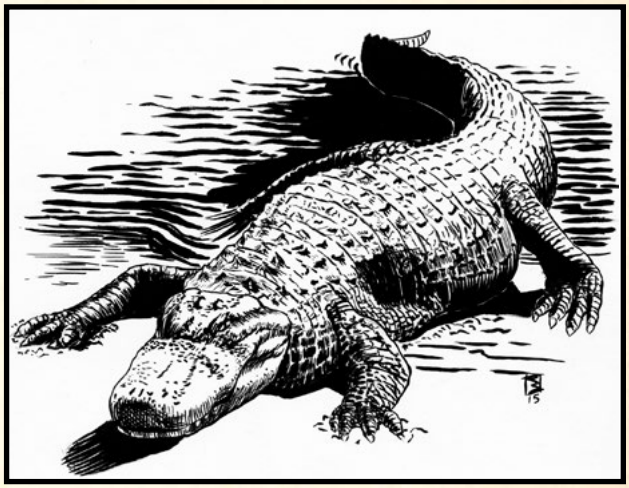
Step Number: Rank + WIL
Action: Free
Type: Magical, Mundane

Creatures using this power can spit venom at targets. The venom is caustic to the touch and creates an irritating burn if it contacts a victim's skin. Whenever a creature makes a venom attack, make a Spellcasting Test for the creature against the target's Spell Defense. If the test succeeds, make a Venom Test for the creature to determine the damage the attack causes. Venom has a range, which is listed with each creature.

Creatures of Earth

Alligator

Animalia Chordata
Reptilia Crocodilia Alligatoridae
Alligator (mississippiensis or sinensis)



This aggressive aquatic predator is approximately ten to twelve feet long, and possesses sharp teeth and powerful jaws. It is found in the numerous river and marshland areas of the Americas, the Middle East, and Asia, although alligators are most prevalent in the rivers of the Amazon Basin. These cunning reptiles lie submerged in the water with only their eyes and nostrils showing, waiting for prey to come within reach for them to attack. When in the water they are difficult to discern from floating wood or other detritus.

DEX: 5 **STR:** 6 **TOU:** 6
PER: 4 **WIL:** 4 **CHA:** 3
Initiative: 5 (7; Surprise Attack) **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 6
Attack (3): 8 **Social Defense:** 4
Damage: **Physical Armor:** 5
Bite (5): 11 **Mystic Armor:** 0
Death: 38 **Recovery Tests:** 3
Unconsciousness: 30 **Knockdown:** 7
Wound Threshold: 10 **Movement:** 6/8 *
Adventure Award: Initiate Tier
* The second value is the creature's swimming Movement Rate
Powers: Surprise Attack (2), Swimming S (2): 8
Loot: Skin worth 5d10 silver pieces.
Rules

Sight-based Perception Tests made to detect a partially submerged alligator require a Good or better result. Even if detected, an alligator's initial attack is extremely sudden. The alligator gains a +2 bonus to its first Initiative Test. The alligator's favored attack strategy is to quickly capture

prey using a **Bite and Hold** attack (pg.342) against a (usually) Surprised victim, dragging it underwater to drown.

Aquatic: Alligators can hold their breath for a number of minutes equal to their Toughness Step before drowning.

Bear

Animalia Chordata Mammalia Carnivora Ursidae Ursus (many species)

Bears are forest- and mountain-dwelling omnivores that are usually not dangerous unless an unwary traveler enters their lair, or threatens their cubs. Bears usually permit travelers to pass through their territory, unless the trespassers pose an obvious threat to the animal's food supply.

DEX: 5	**STR:** 7	**TOU:** 6
PER: 3	**WIL:** 4	**CHA:** 5
Initiative: 5	**Physical Defense:** 7	
Actions: 1	**Mystic Defense:** 4	
Attack (2): 7	**Social Defense:** 7	
Damage:	**Physical Armor:** 5	
Bite (5): 12	**Mystic Armor:** 0	
Death: 38	**Recovery Tests:** 3	
Unconsciousness: 30	**Knockdown:** 8	
Wound Threshold: 10	**Movement:** 8	

Adventure Award: Initiate Tier

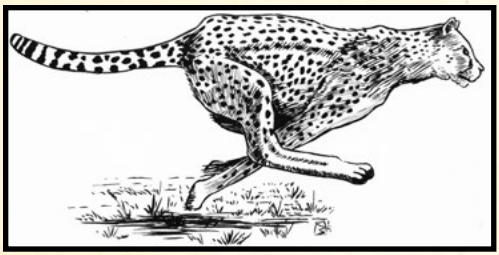
Powers: Battle Shout^{S} [Roar] (1): 6, Climbing^{S} (2): 7, Enhanced Senses [Smell] (2): 5, Swimming^{S} (1): 8

Cheetah

Animalia Chordata Mammalia Carnivora Felidae Aciconyx jubatus

The cheetah is a long-legged and swift running cat, with black spots, yellowish-brown fur, and non-retractable claws. These creatures are most likely to be encountered in plains regions throughout Africa and parts of the Middle East.

DEX: 8	**STR:** 5	**TOU:** 4
PER: 5	**WIL:** 3	**CHA:** 3
Initiative: 9	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 7	
Attack (3): 11	**Social Defense:** 4	
Damage:	**Physical Armor:** 0	
Bite (5): 10; 2 × Claws (3): 8	**Mystic Armor:** 0	
Death: 30	**Recovery Tests:** 1	
Wound Threshold: 7	**Knockdown:** 6	



Unconsciousness: 21 **Movement:** 9
Adventure Award: Initiate Tier
Powers: Climbing^{S} (2): 10, Enhanced Senses (Listen, Sight) (2): 7, Great Leap^{S} (2): 10, Low-Light Vision, Silent Walk^{S} (2): 10, Sprint^{S} (5)
Rules
Unlike other cats this size, a cheetah's high speed is what makes it a threat. Using their Sprint power, cheetahs can quickly cover any intervening ground and take their prey by surprise, running off with the body before a herd (or group of adventurers) realizes what hit them. The cheetah's speed makes up for its low endurance. Cheetahs will usually flee before they get involved in a fight.

Pounce: The cheetah may move up to twice its Movement Rate and still make an attack in the first round of combat.

Dog

Animalia Chordata Mammalia Carnivora Canidae Canis lupus familiaris

Dogs are found in almost all populated areas of Earth, since they are often kept as pets by people of all races. Dogs can be trained for all kind of things, but are mostly used as guardians.

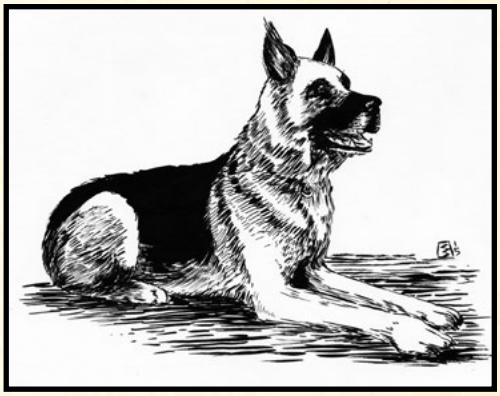
Guard Dog

Guard dogs are trained to guard a house or an area. They bark at anyone who enters their territory and will attack if the intruder persists.

DEX: 4 **STR:** 5 **TOU:** 3
PER: 5 **WIL:** 3 **CHA:** 4
Initiative: 4 **Physical Defense:** 6
Actions: 1 **Mystic Defense:** 6
Attack (2): 6 **Social Defense:** 5
Damage: **Physical Armor:** 0
Bite (5): 10 **Mystic Armor:** 0
Death: 26 **Recovery Tests:** 1
Unconsciousness: 17
Knockdown: 6
Wound Threshold: 6
Movement: 7
Adventure Award: Initiate Tier
Powers: Battle Shout^{S} (Bark) (2): 6, Enhanced Senses (Listen, Sight, Smell) (3): 8

Hunting Dog

Dogs trained for hunting are used to hunt and track down other animals and creatures. They usually try to help their masters in the hunt, but can bring down the prey if ordered to do so.



DEX: 5 STR: 5
TOU: 3 PER: 5
WIL: 3 CHA: 3
Initiative: 5 Physical Defense: 7
Actions: 1 Mystic Defense: 6
Attack (2): 7 Social Defense: 4
Damage: Physical Armor: 0
Bite (5): 10 Mystic Armor: 0
Death: 26 Recovery Tests: 1
Unconsciousness: 17
Knockdown: 6
Wound Threshold: 6
Movement: 7
Adventure Award: Initiate Tier
Powers: Enhanced Senses (Listen, Smell) (2): 7, Great Leap^{S} (2): 7, Hunting^{S} (2): 7, Tracking^{S} (2): 7

War Dog

These dogs are a rare breed, as they need careful training. Bred for aggression, these animals are trained for war and attack to kill on command.

DEX: 5 STR: 6 TOU: 4
PER: 4 WIL: 4 CHA: 4
Initiative: 5 Physical Defense: 7
Actions: 1 Mystic Defense: 5
Attack (3): 8 Social Defense: 5
Damage: Physical Armor: 0
Bite (5): 11 Mystic Armor: 0
Death: 30 Recovery Tests: 2
Unconsciousness: 21 Knockdown: 7
Wound Threshold: 7 Movement: 7
Adventure Award: Initiate Tier
Powers: Enhanced Senses (Listen, Smell) (2): 6, Great Leap^{S} (2): 7

Eagle

Animalia Chordata Aves Accipitriformes Accipitridae (multiple genera and species)

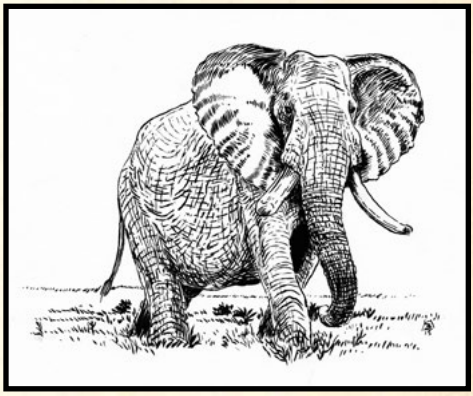
Eagles are large birds of prey, characterized by a powerful, hooked bill, broad wings; and strong, soaring flight. Eagles can be found almost everywhere in the world, hunting for food in the air and on the ground.

DEX: 5 STR: 5 TOU: 4
PER: 6 WIL: 4 CHA: 5
Initiative: 5 Physical Defense: 7

Actions: 1
Attack (3): 8
Damage:
Bite (4): 9
Death: 30
Unconsciousness: 21
Wound Threshold: 7
Mystic Defense: 8
Social Defense: 7
Physical Armor: 0
Mystic Armor: 0
Recovery Tests: 2
Knockdown: 5
Movement: 2/9 *
Adventure Award: Initiate Tier
* The second value is the creature's flying Movement Rate
Powers: Enhanced Senses (Sight) (5): 11

Elephant

Animalia Cordata Vertebrata Mammalia Afrotheria Proboscidea Elephantidae



These large, long-nosed herbivorous mammals are sometimes trained to serve as war mounts in India and Africa. Elephants are often used as beasts of burden for transporting goods as well. In their native lands, elephants are typically found in the plains and forested regions.

DEX: 4 **STR:** 12
TOU: 9 **PER:** 4
WIL: 4 **CHA:** 4
Initiative: 3 **Physical Defense:** 4
Actions: 1 **Mystic Defense:** 6
Attack (3): 7 **Social Defense:** 6
Damage: **Physical Armor:** 6
Charge (8): 20
Trample (2): 14; Tusks (4): 16
Death: 50
Unconsciousness: 43
Wound Threshold: 14
Mystic Armor: 0
Recovery Tests: 4
Knockdown: 13
Movement: 8
Adventure Award: Novice Tier
Powers: Charge (4), Enhanced Senses [Listen, Smell] (2): 6
Rules

If provoked, elephants tend to gore their unfortunate victims with their tusks before using their hooves to trample them down.

Falcon

Animalia Chordata Aves Falconiformes Falconidae Falco (numerous species)

Falcons are small birds of prey, characterized by long, pointed, and powerful wings, and capable of swift flight. Falcons can be found almost everywhere in the world, hunting for prey. These birds are often trained for hunting.

DEX: 8 **STR:** 3
TOU: 4 **PER:** 7
WIL: 5 **CHA:** 6
Initiative: 8 **Physical Defense:** 12
Actions: 2 **Mystic Defense:** 9
Attack (3): 11 **Social Defense:** 8
Damage: **Physical Armor:** 0
Beak (5): 8; 2 × Claws (3): 6
Mystic Armor: 1
Death: 40 **Recovery Tests:** 2
Unconsciousness: 29 **Knockdown:** 6
Wound Threshold: 7 **Movement:** 2/9 *
Adventure Award: Novice Tier
* The second value is the creature's flying Movement Rate
Powers: Durability (2), (1), Enhanced Senses [Sight] (2): 9, Hunting^{S} (3): 9, Tracking^{S} (3): 10

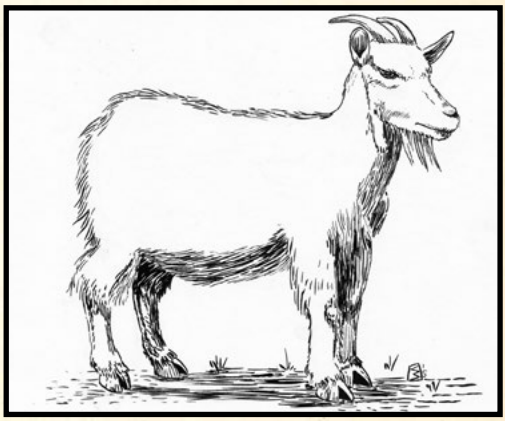
Rules

Swooping Attack: A falcon's swooping attack gains a +4 bonus to the Damage Test if the falcon hits the target character, but a swooping falcon sacrifices its other attack that round. A falcon may make a swooping attack after it has used its full Movement Rate of 9, and may make two non-swooping attacks in the following round.

Goat

Animalia Chordata Mammalia Artiodactyla Bovidae Caprinae Capra Aegragus

Goats are bearded, horned herbivores that are often domesticated. Shepherding herdsmen raise them in the mountains and hills for milk and meat. These statistics can also be used for other horned or antlered herbivores, such as deer and antelope.



DEX: 4 **STR:** 6
TOU: 6 **PER:** 4
WIL: 4 **CHA:** 4
Initiative: 4 **Physical Defense:** 5
Actions: 1 **Mystic Defense:** 5
Attack (1): 5 **Social Defense:** 8
Damage: **Physical Armor:** 3
Gore (2): 8 **Mystic Armor:** 0
Death: 35 **Recovery Tests:** 2
Unconsciousness: 27 **Knockdown:** 7
Wound Threshold: 9 **Movement:** 8
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Sight, Smell] (3): 7, Sprint (2)

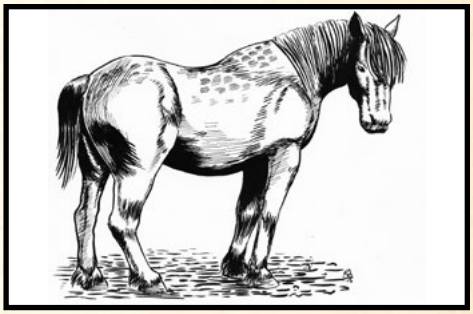
Horse

Animalia Chordata Mammalia Perissodactyla Equidae Equus Ferus Caballus

Horses have been of critical importance on Earth for thousands of years, and are found everywhere, usually domesticated but sometimes in wild herds. Those in the Gruv have been imported from Earth, and are regarded as valuable and expensive assets, hard to replace until breeding herds are well established.

Draft Horse

Draft horses are used to transport goods, draw plows, and generally do much of the heavy work of moving things from one place to another. While steam engines are more powerful and efficient, they're also more expensive in terms of purchase price and fuel, require Skills to maintain that the average person, accustomed to horses, does not have, and are harder to come by than draft animals. Draft horses specially trained for riding can be used as mounts by trolls, but the cost of such an animal is doubled.



DEX: 5 **STR:** 8 **TOU:** 8
PER: 3 **WIL:** 5 **CHA:** 3
Initiative: 4 **Physical Defense:** 6
Actions: 1 **Mystic Defense:** 4
Attack (1): 6 **Social Defense:** 4
Damage: **Physical Armor:** 0
Trample (2): 10 **Mystic Armor:** 1
Death: 43 **Recovery Tests:** 3
Unconsciousness: 35 **Knockdown:** 9
Wound Threshold: 12 **Movement:** 8
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 5

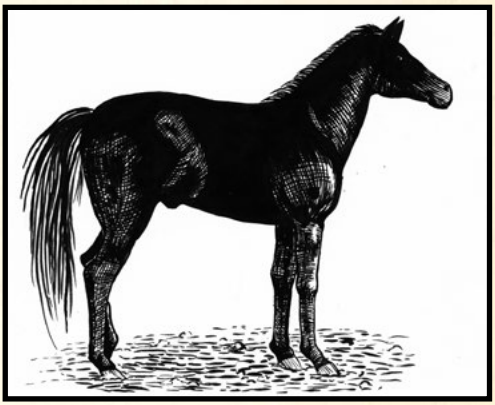
Pony

A smaller breed of horse used mainly by miners for drayage in tight quarters and by travelers in mountainous and/or cold regions, ponies are generally more sturdy and more tolerant of extreme weather than horses. Ponies cannot wear barding. A pony can carry a rider of dwarf, elf, or human size and up to 125 pounds of equipment without suffering encumbrance penalties. Snarks may ride ponies with no additional equipment without incurring penalties. Trolls are simply too large for the mount.

DEX: 6 **STR:** 6 **TOU:** 9
PER: 5 **WIL:** 5 **CHA:** 6
Initiative: 6 **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 6
Attack (1): 6 **Social Defense:** 7
Damage: **Physical Armor:** 0

Trample (2): 8
Mystic Armor: 1
Death: 40
Recovery Tests: 3
Unconsciousness: 32
Knockdown: 7
Wound Threshold: 11
Movement: 8
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 7, Great Leap^{S} (2): 7, Sprint (3)
Rules
Ponies make Toughness Tests and similar resistance Tests to weather conditions, deprivation, fatigue, &c. at +1 Step.

Riding Horse

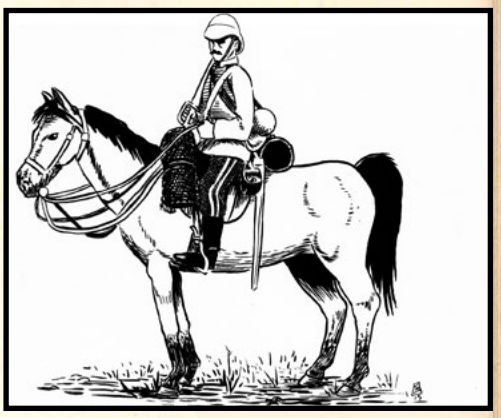


The most common horses used, riding horses make strong mounts, but cannot wear barding. A riding horse can carry a rider of up to Snark size and up to 250 pounds of equipment without suffering encumbrance penalties. Trolls are too large for riding horses.

DEX: 6 STR: 7
TOU: 8
PER: 4 WIL: 4
CHA: 5
Initiative: 7
Physical Defense: 8
Actions: 1 Mystic Defense: 6
Attack (1): 7 Social Defense: 7
Damage: Physical Armor: 0
Trample (2): 9 Mystic Armor: 0
Death: 44 Recovery Tests: 4
Unconsciousness: 36 Knockdown: 8
Wound Threshold: 13 Movement: 10
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 6, Great Leap^{S} (2): 8, Sprint (3)

War Horse

Larger and stronger than riding horses, war horses are bred to carry heavy loads while remaining able to canter and gallop. War horses can wear barding, and can carry a rider of up to Snark size and up to 350 pounds of equipment without suffering encumbrance penalties. Trolls may ride the larger breeds of war horses without carrying equipment other than personal armor and weaponry witout penalty. Any equipment beyond personal gear of the troll rider incurs encumbrance.



War horses are often used by armies and cavalry units, and thus most often encountered at military bases or on the battlefield.

DEX: 7 **STR:** 9
TOU: 9 **PER:** 5
WIL: 7 **CHA:** 6
Initiative: 7 **Physical Defense:** 9
Actions: 1 **Mystic Defense:** 6
Attack (2): 9 **Social Defense:** 8
Damage: **Physical Armor:** 0
Trample (4): 13
Mystic Armor: 2
Death: 48 **Recovery Tests:** 4
Unconsciousness: 41 **Knockdown:** 10
Wound Threshold: 14
Movement: 8
Adventure Award: Novice Tier
Powers: Enhanced Senses [Listen, Smell] (2): 7, Great Leap^{S} (2): 9, Sprint (4)

Leopard

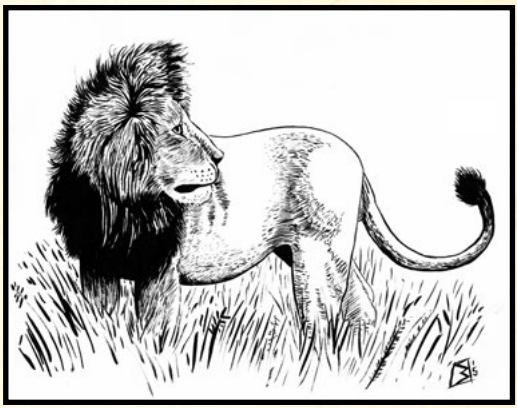
Animalia Chordata Mammalia Carnivora Felidae Panthera pardus

Leopards have yellowish-brown fur, covered with black spots and striations. They are most likely to be encountered in the plains, forests, and jungles of Africa and tropical Asia, although the snow leopard having white fur with black spots and striations can be encountered in the mountains. The same statistics can be used for North American mountain lions, which live in the mountains and foothills of the Union, the Confederacy, and Canada.

DEX: 6 **STR:** 5
TOU: 4 **PER:** 4
WIL: 5 **CHA:** 3
Initiative: 6 **Physical Defense:** 8
Actions: 1 **Mystic Defense:** 4
Attack (3): 9 **Social Defense:** 4
Damage: **Physical Armor:** 2
Bite (5): 10, 2 x Claws (3): 8 **Mystic Armor:** 1
Death: 30 **Recovery Tests:** 2
Unconsciousness: 21 **Knockdown:** 6
Wound Threshold: 7 **Movement:** 8
Adventure Award: Novice Tier
Powers: Climbing^{S} (3): 9, Enhanced Senses (Listen, Sight) (2): 5, Great Leap^{S} (2): 8, Low-Light Vision, Silent Walk^{S} (2): 8, Sprint (2)

Lion

Animalia Chordata Mammalia Carnivora Felidae Panthera leo

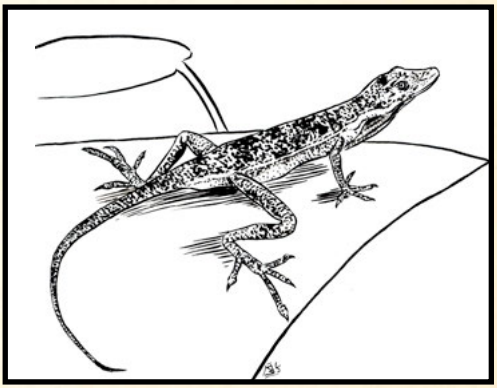


The lion is a ferocious carnivore, with a yellow-brown coat, a loud roar, and a devastating bite. The males have a long, thick mane, whereas females do not. These animals live in the plains of Africa.

DEX: 4 **STR:** 7
TOU: 5 **PER:** 4
WIL: 3 **CHA:** 3
Initiative: 4 **Physical Defense:** 6
Actions: 1 **Mystic Defense:** 4
Attack (3): 7 **Social Defense:** 4
Damage: **Physical Armor:** 3
Bite (5): 12 **Mystic Armor:** 0
Death: 34 **Recovery Tests:** 2
Unconsciousness: 26 **Knockdown:** 8
Wound Threshold: 9 **Movement:** 8
Adventure Award: Novice Tier
Powers: Battle Shout^{S} [Roar] (3): 6, Climbing^{S} (1): 5, Enhanced Senses (Listen, Sight) (2): 5, Great Leap^{S} (2): 6, Low-Light Vision, Silent Walk^{S} (2): 6, Sprint (2)

Lizard

Animalia Chordata Tetrapoda Reptilia Squamata (many genus/species branches)



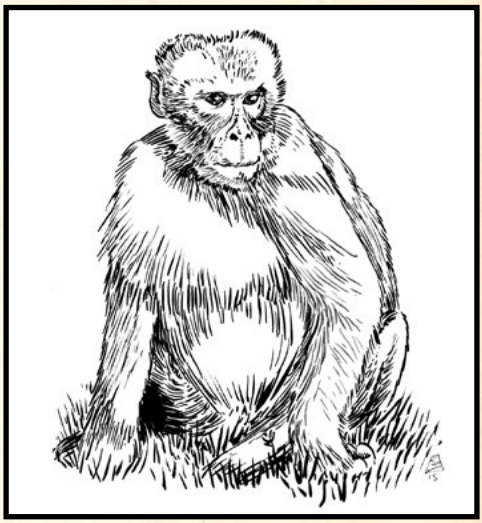
Lizards of different colors and sizes are often kept as pets by children. These creatures are found in almost every corner of Earth and the Gruv.

DEX: 4 **STR:** 3
TOU: 4 **PER:** 4
WIL: 3 **CHA:** 4
Initiative: 4 **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 6
Attack (1): 5 **Social Defense:** 6
Damage: **Physical Armor:** 0
Claws (1): 6 **Mystic Armor:** 0
Death: 20 **Recovery Tests:** 1
Unconsciousness: 16 **Knockdown:** 4
Wound Threshold: 6 **Movement:** 7
Adventure Award: Initiate Tier
Powers: Climbing^{S} (2): 6

Monkey

Animalia Chordata Mammalia Primates (many genus/species branches)

Monkeys are small arboreal primates who live in the forests and jungles of Africa and Asia.

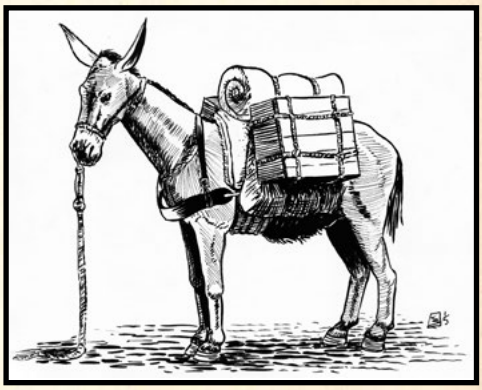


Many different species exist: lemurs, tarsiers, and marmosets. These animals live in small tribes and are usually peaceful in nature, but can be fiercely territorial.

DEX: 7 **STR:** 5 **TOU:** 4
PER: 5 **WIL:** 3 **CHA:** 3
Initiative: 7 **Physical Defense:** 11
Actions: 1 **Mystic Defense:** 7
Attack (1): 8 **Social Defense:** 4
Damage: **Physical Armor:** 0
Bite (5): 10 **Mystic Armor:** 0
Death: 30 **Recovery Tests:** 2
Unconsciousness: 21
Knockdown: 5
Wound Threshold: 7
Movement: 6/7 *
Adventure Award: Initiate Tier
* The second value is the creature's climbing Movement Rate
Powers: Climbing^{S} (2): 9, Enhanced Senses [Smell] (2): 7, Great Leap^{S} (2): 9

Pack Mule

Animalia Chordata Mammalia Perissodactlya Equidae Equus asinus x caballus



Mules are the sterile crossbreeds of donkeys and horses. Pack mules are used to transport goods all across Earth. Though not as strong as draft horses, they are more sure-footed and travel better on uneven ground. These animals are often found pulling the carts and wagons of military supply trains and caravans traveling through rough terrain.

DEX: 4 **STR:** 7 **TOU:** 7
PER: 3 **WIL:** 6 **CHA:** 3
Initiative: 4 **Physical Defense:** 6
Actions: 1 **Mystic Defense:** 4
Attack (1): 5 **Social Defense:** 7
Damage: **Physical Armor:** 0
Trample (2): 9 **Mystic Armor:** 2
Death: 42 **Recovery Tests:** 3
Unconsciousness: 34 **Knockdown:** 8
Wound Threshold: 12 **Movement:** 8
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 5

Rat

Animalia Chordata Mammalia Rodentia Muridae Rattus (many species)

City and dockside rats grow up to twelve inches long, hungry, vicious, diseased, black- or brown-furred, with sharp yellow teeth. Rats appear in groups of ten to twenty animals. At the Gamemaster's discretion, they may or may not attack, depending on how hungry or vicious they are.

DEX: 4 STR: 2
TOU: 3 **PER:** 4
WIL: 5 CHA: 2
Initiative: 5
Physical Defense: 6
Actions: 1
Mystic Defense: 6
Attack (1): 5 Social Defense: 6
Damage: Physical Armor: 0
Bite (1): 3 Mystic Armor: 0
Death: 25 Recovery Tests: 2
Unconsciousness: 20 Knockdown: None
Wound Threshold: None Movement: 6
Adventure Award: Initiate Tier; increase award, depending on Disease virulence
Powers: Disease [SD 5–8; Blood Poisoning]
Rules

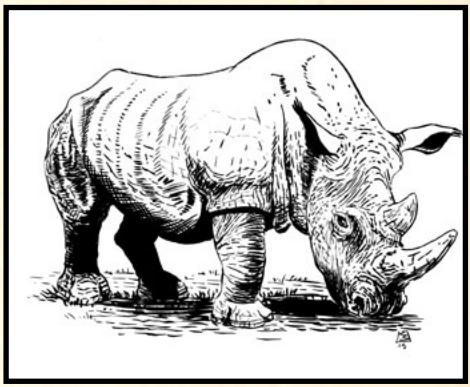
Rats use the rules for **Pack or Swarm Attacks** (pg.344). The statistics above are for a pack of twenty rats. When the pack's Unconsciousness Rating is exceeded, the surviving rats scamper away.

Disease: A character bitten by a rat might suffer the effects of the blood-poisoning disease the rat is carrying. The disease's Spell Defense varies from rat to rat, ranging from 5 to 8, and the onset time ranges from 12 to 24 hours. For 36 hours before the poisoning actually sets in, the infected character becomes feverish. During this period the character is Harried (***1879 Player's Guide***, pg.247). In addition, the infected character must make a Toughness Test every 24 hours. The character loses one point from their Toughness value for every Test failed. Once the disease sets in, the character's body becomes a disgusting mass of boils, sores, and pustulant buboes. A doctor can cure these effects for a fee of £1/6 per day of treatment. A character undergoing treatment regains lost points of Toughness at the rate of +1 for every 48 hours of bed rest or week of normal activity. If the character's Toughness value is reduced to zero, the character dies.

Rhinoceros

Animalia Chordata Mammalia Perissodactyla Rhinocerotidae (several genus/species branches)

A rhinoceros is a large, thick-skinned mammal bearing one or two horns on its snout. As herbivorous herd animals, they live on the plains of Africa. Rhinos are known for their bad tempers and will typically charge intruders if they get too close, attempting to gore their foes on their horns. Typically, a rhinoceros directs its first Charge attack at the nearest character or animal that poses

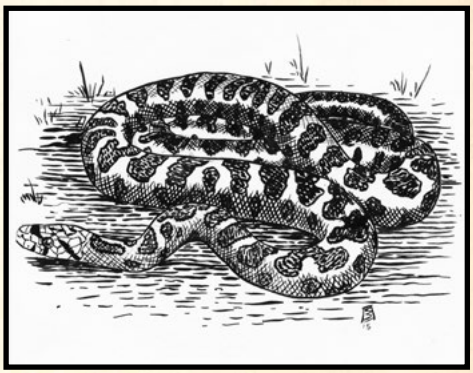


a threat. Contrary to popular myth, a rhino will not charge a campfire and stomp it out. Like all wild animals, they are afraid of fire.

DEX: 5 **STR:** 10
TOU: 10 **PER:** 3
WIL: 6 **CHA:** 5
Initiative: 5 **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 4
Attack (3): 8 **Social Defense:** 7
Damage: **Physical Armor:** 6
Charge (8): 18; Gore (4): 14 **Mystic Armor:** 2
Death: 52 **Recovery Tests:** 4
Unconsciousness: 45 **Knockdown:** 11
Wound Threshold: 15 **Movement:** 8
Adventure Award: Novice Tier
Powers: Charge (4), Enhanced Senses [Listen, Smell] (2): 5

Snake

Animalia Chordata Reptilia Squamata (many families, genera and species)



The snake is a small, scaly, legless, venomous reptile. These creatures are found all over the world, but most of them live in the forests and jungles. There are a wide variety of species, some of which are beneficial, such as the common blacksnake that eats mice and lives in barns, and some which present a serious danger to people, such as asps, black adders, and cobras.

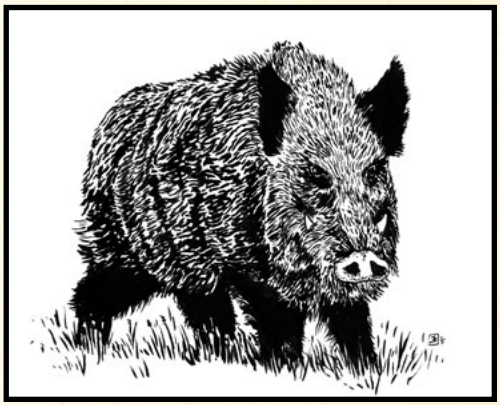
DEX: 6 **STR:** 5 **TOU:** 4
PER: 3 **WIL:** 4 **CHA:** 4
Initiative: 6 **Physical Defense:** 9
Actions: 1 **Mystic Defense:** 4
Attack (2): 8 **Social Defense:** 6
Damage: **Physical Armor:** 0
Bite (3): 8 (poison) **Mystic Armor:** 0
Death: 28 **Recovery Tests:** 2
Unconsciousness: 19 **Knockdown:** None
Wound Threshold: 7 **Movement:** 5
Adventure Award: Initiate Tier
Powers: Climbing^{S} (2): 8, Enhanced Senses (Smell) (2): 5, Heat Sight, Poison (SD 5; Damage 5), Silent Walk^{S} (2): 8

Wild Boar

Animalia Chordata Mammalia Artiodactyla Suidae Sus scrofa

Wild boars are hunted throughout Europe. Their meat has been a staple in many areas, although

with the increase in human population their numbers are dwindling. A single male leads and protects each boar herd, attacking all threats to the herd with a pair of wicked tusks that can cause ragged and bleeding wounds. Typically, a boar directs its first attack charge at the nearest character or animal that poses a threat.

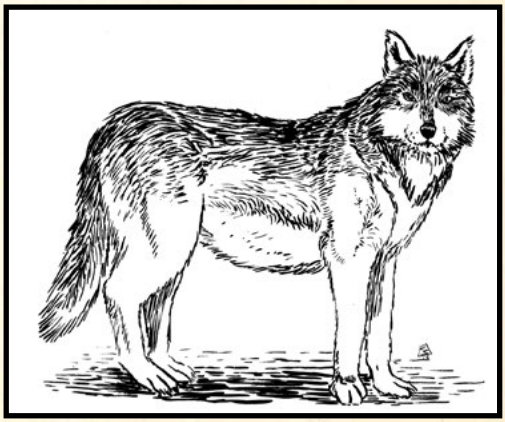


DEX: 5 **STR:** 6 **TOU:** 7
PER: 4 **WIL:** 4 **CHA:** 4
Initiative: 6 **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 6
Attack (3): 8 **Social Defense:** 6
Damage:
Charge (11): 17; Tusks (5): 11
Death: 40
Unconsciousness: 32
Wound Threshold: 11
Physical Armor: 3
Mystic Armor: 0
Recovery Tests: 3
Knockdown: 7
Movement: 8
Adventure Award: Novice Tier
Powers: Charge (6), Enhanced Senses [Listen, Smell] (2): 6, Sprint (2)
Loot: Tusks worth 3D6 shillings

Wolf

Animalia Chordata Mammalia Carnivora Canidae Canis lupus

Related to domestic dogs, wolves are intelligent, clever carnivores that attack as a pack and maneuver to outflank and harass their intended prey before attacking in force. Wolves can be encountered anywhere in Europe or North America, but have a preference for mountainous terrain. These statistics represent regular wolf pack members, those who loyally follow their leader, the alpha male, female, or pair.



DEX: 6 **STR:** 5 **TOU:** 4
PER: 5 **WIL:** 4 **CHA:** 3
Initiative: 7 **Physical Defense:** 8
Actions: 1 **Mystic Defense:** 7
Attack: (2): 8 **Social Defense:** 4
Damage:
Bite (5): 10
Death: 39
Unconsciousness: 28
Wound Threshold: 6
Physical Armor: 2
Mystic Armor: 0
Recovery Tests: 1
Knockdown: 6
Movement: 8
Adventure Award: Novice Tier

Powers: Battle Shout[S] [Howl] (3): 6, Durability (2), Enhanced Senses [Listen, Smell] (2): 7, Great Leap[S] (2): 8, Maneuver[S] (2): 8, Sprint (2), Tracking[S] (2): 7

Creatures of the Gruv

Buff

Animalia Chordata Reptilia Saurischia Deinonychosauria Dromaeosauridae Ornithodesmus Velocicursus desmedii

A close relative of the hunchbeak, the buff is a bipedal sauroid in the transitionary family between true saurids and avians. Far too large for flight, its upper limbs have regressed to vestigial stubs, and are kept tucked closely to the body. Its dun-colored plumage grants its name. Standing an average of 14 hands from ground to pelvic joint, the buff carries its head high, like an ostrich, putting its eyes at an excellent height for spotting obstacles. The buff has proven itself as strong as a horse and much more tractable (and less malodorous) than the hunchbeak, and thus enjoys service among the civilian population, saving it from the stresses put upon its cousins by the military. In use as both a riding animal and in pairs for drawing carriages, buffs have become a common sight on the roads and in the wildlands of the Gruv. Possessed of a sturdy digestive tract, the buff feeds on insects, vegetation, or whatever comes ready to hand. Farmers discovering weevils or maggots in their stored grain simply feed the spoiled crop to their buffs, or trade it to neighbors who have buffs but no grain production of their own.

The downside, of course, is that a buff will try to eat anything within reach. Ladies who sport fancy hats quickly learn to either muzzle their buffs or keep their millinery well away. Lt. Faversham tells me a cautionary tale of a young soldier assigned to tend the carriage team of an officer, who felt sorry for the beasts and loosened their muzzles while waiting for the officer to visit his club. Forgetting that he'd done so, the soldier stood to attention when the officer exited the club, only to have one of the buffs reach about and snatch the officer's shoulder insignia straight off his jacket. The soldier spent the next two days searching through the buff's droppings for the missing insignia, then another day cleaning it until all traces of its passage had been removed.

DEX: 6	**STR:** 7	**TOU:** 8
PER: 4	**WIL:** 5	**CHA:** 5
Initiative: 7	**Physical Defense:** 8	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 7	**Social Defense:** 7	

Damage:
Trample (2): 9
Death: 48
Unconsciousness: 40
Wound Threshold: 12
Physical Armor: 4
Mystic Armor: 1
Recovery Tests: 4
Knockdown: 8
Movement: 13
Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 6, Great Leap^{S} (2): 8, Sprint (3)

Cheshire

Animalia Chordata Reptilia Saurischia Flexilocaudae Terrenosauria Velocirapax millidenta

Not a cat at all, nor even in the order Mammalia, on first observation the reason for the name becomes abundantly clear. Cheshires, *V. millidenta*, are long, lean, ugly lizards, with an innate camouflage ability and an overabundance of long, sharp teeth. These quadrupedal carnivores are ambush predators, relying on their ability to evade detection while lying in wait, and a sudden pounce or charge to capture their prey. The average female measures approximately five feet from snout to tail tip, while the larger male averages six feet for the same dimensions. Larger specimens have been reported, but no physical evidence other than a blurry footprint has been observed.

Classification of *V. millidenta* has posed considerable difficulty, given that their whippy, near-prehensile tails are most definitely not stiff, nor are they primarily bipedal, which excludes them from Theropoda and Tetanurae. I have thus created a new clade, which I believe will be justified as additional species are populated into it from the New World. The Committee discussed the possibility of augmentation of the Linnaean schema prior to my selection for this assignment. As I recall, while the vote was inconclusive, the probable necessity of extension was openly acknowledged.

Similar to *B. taeniabronchum*, well known in the Cape region of Africa, *V. millidenta* can vary its skin coloration and pattern. When hunting, this ability allows *V. millidenta* to break up its outline and blend into its surroundings. Spotting a hunting cheshire by vision thus becomes nearly impossible. Cavalry patrols have had much better luck avoiding cheshire ambush than infantry, as their mounts can smell the predator when passing downwind of it. The Saurids seem to be able to detect cheshires from a distance, but I have not yet been able to determine how this is accomplished. My attempts to speak with the Saurids have not gone well, apparently due to my gender.

> While they do talk t' me, trading ideas ain't easy across t' language barrier. T'zekharr, one of t' junior Saurid scouts, tells me it's something to do wi' listening, but I ain't yet pinned him down on whether it's listening t' Cheshires themselves, or t' creatures around them, akin to pinpointing a stalking cat by t' bird alarm calls back home.
>
> ***Sgt Edward Brown, Regimental Schoolmaster, 1/4 Royal Lancaster Regiment***

Mating rituals and rearing of young have not yet been observed. However, what observations we do have indicate that *V. millidenta* is a solitary, territorial hunter. I suspect that, as with terrestrial predators of similar mien, the females stake out territory and guard it from other females, while the males range across the territories of multiple females. Once the mating season is determined, observation will show whether or not this hypothesis holds water. If so, the mating season will require enhanced watchfulness on the part of the human population, to avoid encounters with males in rut. If *V. millidenta* is anything like terrestrial predators, a male in rut will attack anything its size or larger, seeing it as a potential competitor in the mating cycle.

DEX: 7	**STR:** 6	**TOU:** 7
PER: 5	**WIL:** 6	**CHA:** 3
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 7	
Attack (3): 11	**Social Defense:** 4	
Damage:	**Physical Armor:** 4	
Bite (6): 12; 2 x Claws (5): 11	**Mystic Armor:** 1	
Death: 41	**Recovery Tests:** 3	
Unconsciousness: 34	**Knockdown:** 7	
Wound Threshold: 11	**Movement:** 9	
Adventure Award: Novice Tier		

Powers: Camouflage (3): 9, Enhanced Senses (Listen, Sight, Smell) (2): 5, Great Leap^{S} (3): 10, Heat Sight, Silent Walk^{S} (2): 9, Sprint (3)

> It was sort of like the Cheshire Cat in reverse. You disappeared behind its smile.
>
> *- Ian Borchardt, Fortnum and Mason representative, in a letter explaining the loss of his mule*

Crawling Wig

Animalia Arthropoda Insecta Lepidoptera Megalopygidae Megalopyge cancellatus

For once, the origin of the common name of a creature is blindingly obvious. The larval form of the Reticulated Furry Moth, itself a remarkable specimen, the Crawling Wig looks like nothing so much as an escaped toupee. A caterpillar measuring three inches in length at its final pre-pupation instar, *M. cancellatus* is covered with long, silky-appearing hairs. This tends to inspire people with a desire to pet the creature, at which point they discover that the hairs are more like a cross between the quills of a porcupine and the tentacles of a jellyfish. Covered in tiny burrs and equipped with nematocysts, or stinging cells, the hairs deliver a painful sting. Often, the tips of the hairs break off in the wound, requiring them to be removed to prevent infection and put an end to the victim's suffering.

And suffer the victim does, intensely. The pain and symptoms of the sting may be confined to the wound area, but more often spread, up to the shoulder if the hand is stung, and potentially throughout the body if the sting occurs on the torso. The wound area experiences a fierce burning sensation, coupled with rapid swelling, that makes removal of any hair remnants difficult. Blistering and a spreading rash may ensue. The victim may experience headache, nausea, griping of the bowel, chest pain, and difficulty in breathing. Without treatment, these symptoms may persist for more than a day, and can, in individuals with weak constitutions, result in death. Treatments that have proven effective include extract of comfrey, a paste made of baking soda, calamine, and ice packs, all applied topically, and echinacea or chamomile taken as a tea or in pill form.

Like most caterpillars, *M. cancellatus* can be found on a variety of trees and leafy plants, spending its waking time feeding voraciously as it prepares for transformation to its adult form. Interestingly, *M. cancellatus* does not pupate in the usual manner. Instead of spinning a cocoon, it separates its outer skin, and shelters within the dried covering, still protected by the stinging hairs of its youth.

The adult form, known locally as the Catling Moth, is likewise covered in fur, but lacks the burrs and nematocysts of the juvenile form. Its body tends toward light brown and pale blonde, while its legs shade through dark brown down to black at its feet. The wings bear a pattern very closely resembling the grain of wood, not surprising in a forest moth. As an adult, *M. cancellatus* feeds on evening and night blooming flowers, making its living as a pollinator.

Collection of specimens has thus far been restricted to adult instars and eggs. I trust the Society will understand the difficulty of obtaining juvenile specimens.

DEX: 2	**STR:** 2	**TOU:** 2
PER: 2	**WIL:** 2	**CHA:** 2
Initiative: 2	**Physical Defense:** 2	
Actions: 1	**Mystic Defense:** 2	
Attack (1): 9	**Social Defense:** 2	
Damage:	**Physical Armor:** 0	
Sting (3): 5	**Mystic Armor:** 0	
Death: 6	**Recovery Tests:** 1	
Unconsciousness: 4	**Knockdown:** 2	
Wound Threshold: 3	**Movement:** 3	

Adventure Award: Initiate Tier

Powers: Climbing^{S} (3): 5; Poison (debilitating, Spell Def 12, Effect Step 14, victim is Harried until cured)

Dormouse

Animalia Chordata Reptilia Squamata Telidae Cnemidophorus novaculacaudii

In England, a dormouse is a tiny rodent known for hibernating a substantial portion of its life, giving rise to adorable sleepy characters in children's books. In the Gruv, a dormouse is a drug fiend that will cut off pieces from anyone interfering with its supply or its narcotically induced dreams.

Measuring eight to ten inches from the snout to the tip of the tail, and an inch or so wide and high, the whiptail lizard that some Carroll-addled amateur thought to call a dormouse makes its nest in the leaves of the splithee bush. Feeding primarily from insects that come to the splithee for the bush's nectar and sap, *C. novaculacaudii* ingests a fair amount of splithee with its prey. Given

its size, not much of a dose is required to put the brownish-grey lizard into torpor. Thus, *C. novaculacaudii* is most likely to be encountered while dozing in the cupped leaves of the bush.

An Australian associate of Lt. Faversham likened *C. novaculacaudii* to the koala, a sort of small bear native to the island nation. Koalas feed on the leaves of the eucalyptus tree, which have a similarly narcotic effect. Oh, yes, he said, they look cute and cuddly from a distance, grazing among the branches in a sleepy and befuddled way, but if one annoys a koala, they turn into a ball of fury and claws and do their best to remove your face. The scales on top of *C. novaculacaudii's* long, whip-like tail (distinctive of its genus, Cnemidophorus, the whiptail lizards) are razor-sharp, capable of severing a finger with a single stroke. Upon being awakened from torpor, *C. novaculacaudii* goes into a frenzy, lashing about with its tail until either it's killed or has enough time to wake up and realize that the threat has passed.

This, of course, explains why Saurids wishing to harvest splithee toss a large rock at the bush and wait for the commotion to die down before approaching.

DEX: 5	**STR:** 3	**TOU:** 4
PER: 4	**WIL:** 3	**CHA:** 4
Initiative: 5 (8)	**Physical Defense:** 7	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 9	**Social Defense:** 5	
Damage:	**Physical Armor:** 2	
Tail Whip (5): 10	**Mystic Armor:** 0	
Death: 20	**Recovery Tests:** 2	
Unconsciousness: 16	**Knockdown:** 3	
Wound Threshold: 6	**Movement:** 7	

Adventure Award: Initiate Tier

Powers: Frenzy^{S} (1): 6; Surprise Attack 3

Rules

The dormouse's Damage Bonus for extra successes on its Attack Test is +3 Steps per extra success instead of the usual +2.

Exploder Pod

Plantae Angiospermae Caryophyliales Cactaceae Cactoideae Echinocactus fulmenatus

The seed distribution method suggests a relationship to euphorbia, scotch broom, gorse, or sandbox trees, but the morphology of *E. fulmenatus* places it firmly within the taxonomy of the cacti. Squat, barrel-shaped, with what on initial observation might be thought to be spines lining the ridges, but are actually long, needle-shaped seeds, *E. fulmenatus* thrives in arid, sun-drenched environments. Whether it uses the same mechanism for storage of water within its stem as terrestrial cacti, I have not been able to determine.

Garnering a specimen has proven terrifically annoying, as the soldiers placed at my disposal have flatly refused to go anywhere within half a mile of the known growing areas. Making sketches through a spyglass does not substitute for first-hand observation, although, given the forceful nature of *E. fulmenatus*, I have yet to devise a way to obtain an immature specimen that does not risk provoking the mature plants toward dispersal. While I have to respect the gentlemanly way Lieutenant Faversham has firmly insisted that seeing to my safety (and that of his men) is more important than obtaining plants for study, I must remind him once again that if I am prevented from performing my own duties, I shall have to write a letter of protest to the Secretary.

The risk involved in gathering specimens is directly related to the method of seed distribution. Mature *E. fulmenatus* specimens generate considerable pressure in their stems. Like gorse pods, when warmed by the sun, or disturbed by the passage of, well, pretty much anything, the stems release this pressure abruptly, scattering the seeds. The sandbox tree has been measured to hurl its seeds up to fifteen yards away. While we have no accurate measurements of *E. fulmenatus* seed distribution, we have anecdotal evidence that they can travel up to fifty yards, based on the locations of the bodies left after an *E. fulmenatus* field detonation took a patrol of soldiers by surprise. One plant bursting to spread its seeds will tend to set off other nearby specimens, resulting in a cascade effect that can spread across the entire field. Of course, any wildlife caught in such a detonation would simply enrich the soil for the next generation of plants. The detonation also cultivates the soil, breaking the hardpan crust, due to the plants having part of their stem below ground. Sergeant Langley, a survivor of two field detonations, described a considerable amount of dirt becoming airborne, the ground in one instance caving in, and in another the cliff face letting go in a small landslide.

I have been able to obtain seeds from a detonated field, and have found them quite extraordinary. They measure three to five inches in length, only a quarter of an inch in diameter at their centre, and ending with points sharper than a tailor's needle. The seed coat is remarkably tough, even for the phylum. Lieutenant Faversham likens them to a sabot round, or to the flechettes used in antipersonnel explosives. Given the impetus provided by the stem detonation, these seeds have proven quite capable of penetrating woolen uniform coats and shredding exposed flesh in a most disturbing fashion.

I have been able to germinate a few of my seeds. Overwatering them is far too easy. Captive specimens are not as useful for study as those in the wild, but we must at times make do. Lieutenant Faversham keeps a close eye on my efforts, and has stated his intention to remove the juvenile specimens from my greenhouse before they become a threat. I suppose he'll take them off to be turned into weapons.

DEX: NA
PER: NA
Initiative: 15
Actions: 1
Attack (1): 17
Damage:
Seed Burst: 25
Death: 16
Unconsciousness: NA
Wound Threshold: NA
Adventure Award: Novice Tier
Powers: None
Loot: Whatever has been left by previous victims
Rules

STR: NA
WIL: NA
Physical Defense: 2
Mystic Defense: 3
Social Defense: 2
Physical Armor: 2
Mystic Armor: 0
Recovery Tests: 1
Knockdown: NA
Movement: 0

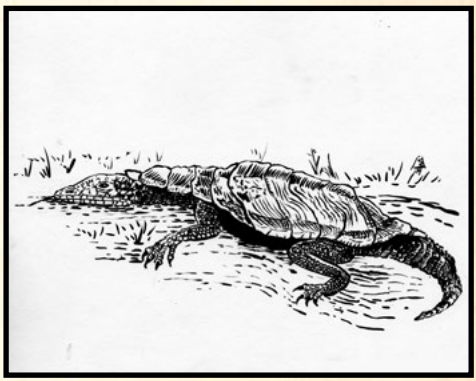
TOU: 8
CHA: NA

The seed burst has a radius of 7 yards. For every pod that explodes, roll 1d6. On a 1, another pod in the same patch is set off by the burst. The average patch is ten yards across, and contains 1d4 ripe pods at any given time. For larger patches, roll for ripe pods for every ten yard by ten yard section.

Flatback

Animalia Chordata Reptilia Squamata Cordylidae Cordylinae Platysaurus grosvenii

As our Mr. Darwin has told us, life adapts to the circumstances. The Grosvenor Land provides ample opportunity for observation of adaptation to the most extreme of circumstances. Consider now the flatback, a poorly-named lizard found in the hills north of Fort Alice, in the region also populated with exploder pods and grenadier birds. Its wide, flat body and heavy osteodermic scaling places it firmly in the Platysaurus family. Unlike other Platysaurus species, however, *P. grosvenii* has a peaked spine instead of a rounded back, giving it much the appearance of a Confederate ironclad, and much the same function.



These insectivores find their best hunting in proximity to exploder pod fields. Thus, their scales have grown thick and tough, and the slant of their backs causes pod seeds to skip off more often than penetrate. Their behavior has also adapted to both the pods and the birds. At any loud noise, or the shadow of a passing bird or large creature, *P. grosvenii* drops flat to the ground, and pulls in its legs and head, something like a tortoise withdrawing into its shell. If the cause of the defensive behavior sets off the pods, the lizards stand a reasonable chance of surviving the detonations, and, a day or two later, can feast on the insects attracted by the decaying pod victim.

It is worth noting that the males have a bright blue stripe along the edge of the belly and down the underside of the tail. They flaunt their coloration to attract potential mates. One would expect predatory birds to take advantage of this opportunity to spot and kill a hearty meal, but

this happens only rarely. The birds in the region will not usually descend to a pod field unless it has recently detonated, and so, if the male *P. grosvenii* avoid flashing their tails at an inopportune moment, they may retain some relative safety. A lesson might be learned from this by the dandies of London.

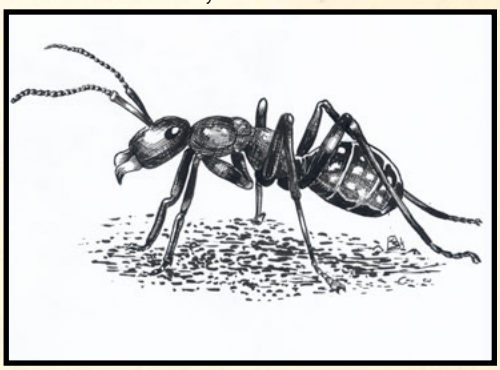
Lieutenant Faversham tells me that our soldiers have learned to watch for flatbacks, and to leave them alone, as their presence serves as an early warning of the presence of pods. The good lieutenant also informs me that the Saurids only hunt flatbacks when their travel rations run desperately low, and that they use an arrow or throwing dart with a line attached thereto. This allows them to make their kill from a distance, then retrieve the speared flatback without having to approach potential exploder pod fields. I am further informed that they have a peculiarly horrid flavor, but will spare the gentle reader the colorful and profane descriptions thereof.

DEX: 4	**STR:** 4	**TOU:** 8
PER: 4	**WIL:** 3	**CHA:** 4
Initiative: 4	**Physical Defense:** 5	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 6	**Social Defense:** 5	
Damage:	**Physical Armor:** 9	
Bite (3): 7	**Mystic Armor:** 0	
Death: 48	**Recovery Tests:** 4	
Unconsciousness: 40	**Knockdown:** 9	
Wound Threshold: 12	**Movement:** 5	
Adventure Award: Initiate Tier		

Galvanant

Animalia Athropoda Insecta Hymenoptera Apocrita Vespoidea Formicidae Galvanae Coacervopotentius fulmens

While at the gross taxonomic level, the Gruv galvanant does not differ significantly from the Terrestrial ant, at the subfamily level they diverge in an important, and, dare I say, shocking, fashion. The metasoma contains a significant concentration of electrocytes, cells that can contain and pass through electrical current, like a biological capacitor. (See the South American reports on the *Electrophoridae*, the badly misnamed electric eel, for more detail on electrocytes.) Lines of electrocytes radiate out from the metasoma forward to the head, and down each leg, creating potential circuits. Given the pale yellow of the electrocytic tissues, and the dark, glossy reddish-brown of the chitin, this makes for a distinctive appearance, which is perhaps fortunate. While galvanants have no organs capable of generating an electrical charge, they accumulate a static charge through movement, in the same way that the silk handkerchief and glass rod parlor trick works. Individually, galvanants can hold and release enough of a charge to produce an unpleasant tingle from a worker or enough of a sting from a soldier to make a human drop it. It's when a nest of galvanants is encountered that the sparks truly fly.



Collectively, a nest of galvanants can generate enough of a static charge to stop the heart of smaller animals. Josisaurs, for example, avoid galvanant nests, settling for picking off the occasional straggler, and letting out a startled squawk when they mistake a soldier for a worker. The workers sometimes use their collective charge to stun prey, much like other ants will swarm large prey and sting it into submission. The soldiers, of course, use their charge both defensively, to protect the nest, and offensively, to attack other ant hills and anything else that annoys them. And they are so very easily annoyed.

Lt. Faversham and I visited a farm where a galvanant nest had been found in a cultivated field. Concrete was poured into the nest, and left to harden for several days. Digging up the resulting structure revealed the extent of the nest. Within just a short time, the ants had gone down twelve feet, and expanded outward fifteen feet from the nest entrance to the farthest point. This process, of course, killed the ants, but did allow the collection of a considerable number of dead specimens. From these, I can say that the average length of a worker is a bit less than an inch, the average length of a soldier a bit more than an inch, and the one queen specimen I have obtained measures two and a half inches in length. These are substantial sizes for a non-Concamerata insect. The larders and egg chambers of the nest showed a proportionate increase in volume. Chipping away the concrete that had filled one of the larders, I found not only the recent remains of a number of large insects and frogs, but the skeleton of a kitten. I hadn't the heart to ask the farmer if he'd had one go missing.

Other than concrete, flammable substances and strong alkali have proven effective, as with Terrestrial anthills. Until we are able to domesticate the rocky anteater (q.v.), however, we have no equivalent to the Josisaur that can stand against the galvanants.

DEX: 4	**STR:** 3	**TOU:** 3
PER: 3	**WIL:** 5	**CHA:** 2
Initiative: 4	**Physical Defense:** 5	
Actions: 1	**Mystic Defense:** 4	
Attack (1): 6	**Social Defense:** 2	
Damage:	**Physical Armor:** 4	
Bite (3): 6	**Mystic Armor:** 2	
Death: 13	**Recovery Tests:** 1	
Unconsciousness: 10	**Knockdown:** 6	
Wound Threshold: 5	**Movement:** 4	

Adventure Award: Novice Tier

Powers: Crackling Armor (3): 8; Lightning (3): 8

Rules

Individual galvanants can only use one of their powers once per combat, but if the hive is nearby, a ready supply of freshly charged ants is available. Soldiers often coordinate their Lightning discharge to take down larger enemies. For each additional soldier discharging at the same time, increase the Lightning Step by 3. When a soldier is killed, it automatically discharges if it has not already. Crackling Armor lasts for Rank rounds, not Rank minutes. Once galvanants swarm an enemy, they fight until they die or the enemy is killed or driven off. Each time an individual soldier or fighting swarm discharges, this summons 2d6 soldiers that arrives in 1d4 combat rounds.

Garnickey

Animalia Chordata Reptilia Ornithischia Eurypoda Ankylosauria Armaspinae Invitus brutomaximus

Somewhere in the depths of the garnickey's immensely thick skull, buried far under the weight of its most basic urges, a tiny spark of consciousness gutters feebly, on the edge of going out entirely. Some creatures stood well back when intelligence was handed out. The garnickey failed to queue up at all. Its survival in the Gruv can only be attributed to its prodigious strength and resilience. The garnickey simply ignores anything that does not spend substantial effort trying to gain its attention, and plods on its slow, inexorable path to the next patch of vegetation.

For once, I have no complaint against the common name bestowed on a creature of the Gruv. Deriving from a lower-class expression of disgusted amazement ("gar") and a derogatory term for the simple-minded ("nickey"), the name succinctly encapsulates the reaction of every person who has thus far encountered one of these animals: dear heavens, that's a stupid beast. That something larger than a rhinoceros, well on its way to elephantine proportions, could have such a small brain defies all rules of proportion. Its obstinacy could school a Tory. Used in the Gruv as a draft animal, handling a garnickey requires a highly charged electrical prod, as nothing less will get it to change direction or what passes for its mind.

Classification posed a slight challenge. The garnickey is an herbivorous sauroid, beaked, four-footed, with heavy dermal armor plates from snout to tail, placing it clearly in the ankylosauria. The garnickey has neither spines like the nodosaurids nor a bony tail club like the ankylosaurids. Thus, I have created the family of Armaspinae, in which to place Invitus brutomaximus, the unwilling, massively stupid sauroid with the armored spine. Field observation has yielded several other possible members of this family. Please, let them have more than two neurons to rub together.

DEX: 5
PER: 2
Initiative: 5
Actions: 1
Attack (1): 15
Damage:
Trample (6): 18
Death: 83
Unconsciousness: 70
Wound Threshold: 20
Adventure Award: Novice Tier
Powers: Charge 7
Loot: If Any

STR: 12
WIL: 8
Physical Defense: 7
Mystic Defense: 2
Social Defense: 2
Physical Armor: 14
Mystic Armor: 6
Recovery Tests: 6
Knockdown: 20
Movement: 8

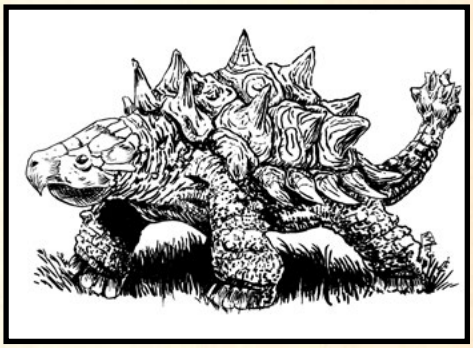
TOU: 13
CHA: 2

Rules

If the garnickey misses its Charge, it forgets that it's in combat until its enemy reappears in its vision or it takes damage.

Geealong

Animalia Chordata Reptilia Ornithischia Ankylosauridae Talarurus maladventura



The further I delve into the biology of the western Grosvenor Land, the more I feel like a character in one of Mr. Verne's lost world fantasies. Creatures walk the land here that have only been seen in my home world as fossils, and what a remarkable sentence that is of its own. Perhaps it's simply a preference of this world for the saurian, where our world has preferred the mammalian. After all, Earth is dominated by humans, which Mr. Darwin would have us believe are primates (and some men of my acquaintance have certainly held up the theory), and we have domesticated a number of mammalian species. Here, the Saurids dominate, although that balance is being shifted by both the Samsut and we of the Empire, and the Saurids have domesticated a number of what can only be termed dinosaurs.

Witness here the *geealong, T. maladventura*, an ankylosaurian used by the Saurids much the same way we (speaking of humans in general) use the humble ox. It draws their plows, pulls their carts, and hauls their burdens in both peace and war. When times are hard, it can be eaten, although, like the ox, the preference is to retain it for the usefulness of its labor. Somewhat the same size, *T. maladventura* matures at an average length of twenty feet, including the tail, more about which later. It stands five feet high at the shoulder, and measures five feet across at the hips. If one were to migrate the legs of a turtle so that they supported the creature from directly below, and made head, legs, and tail nonretractile, one would approach the physiognomy of *T. maladventura*. Like the turtle, and the aforementioned ox, *T. maladventura* is a slow, lumbering herbivore, with both the beak of the turtle and the molars of the ox. It feeds on whatever comes ready to hand, and seems to have little in the way of dietary preference other than plant matter that is not in an advanced stage of decomposition. Its back and sides are protected by osteodermic plating, covered with a tough layer of keratin in shades of brown and burnt orange. The foot-long spikes along the edge of the dermic plating, readily fending off anything that might decide to nip at its flanks, provide something of a challenge in harnessing the creature, and require the handlers to never step between *T. maladventura* and anything solid, be it a wall, a boulder, or another geealong. The creature tends to deal with annoyances by lunging at them, trusting to its prickly structure to discourage the offender. If that fails, its muscular tail, half the length of its body, ends in a massive bony club, peppered with small spikes. One swing of the tail can both knock over a predator of equal size and leave it with a large number of punctures and possibly a few broken bones. The Saurids have shown considerable cleverness in accommodating such a weapon at the aft end of their beast of burden, in the design of harness, plow, and wagon.

T. maladventura has already been pressed into service by the Empire, most notably in the construction of the Alice and Gruv Railroad. The common name was adopted from what

the Chinese navvies called the beast, apparently recognizing it from archaeological digs in their homeland. If the manual laborers we have imported from China are conversant enough with fossil remains of dinosaurs to know their people's name for the species, what does this say both about the education level of the Chinese navvies and about the state of archaeology in China? I leave this for the Society's consideration.

DEX: 5 **STR:** 10 **TOU:** 11
PER: 4 **WIL:** 7 **CHA:** 3
Initiative: 5 **Physical Defense:** 7
Actions: 1 **Mystic Defense:** 5
Attack (1): 13 **Social Defense:** 4
Damage: **Physical Armor:** 12
Bite (4): 14; Trample (4): 14;
Tail Strike (8): 18 **Mystic Armor:** 4
Death: 69 **Recovery Tests:** 5
Unconsciousness: 58 **Knockdown:** 18
Wound Threshold: 17 **Movement:** 7
Adventure Award: Novice Tier
Powers: Charge (3); Enhanced Senses [Listen, Smell] (2): 6

Gengit

Animalia Chordata Mammalia Xenarthra Pilosa Megalonychidae Megalonyx squamatii

For an herbivore, survival in the Gruv requires massive size, to shake off predators, or claws, to drive them away, or armor, to defend against them. *M. squamatii*, the gengit, brings together all three and adds a skunk-like spray ability, making it the least likely herbivore to be eaten in any region thus far explored.

In physiognomy, *M. squamatii* closely resembles *M. jeffersonii*, the prehistoric giant ground sloth, which has the unique distinction of having received its name from the man who four years later became the third President of the United States of America, Thomas Jefferson. (The fact that Richard Harlan is credited with the formalization of the name in 1825 does not detract from Mr. Jefferson's work.) Standing seven feet high at the shoulder, *M. squamatii* rises to ten feet tall in its bipedal feeding stance, making it an imposing creature through size alone. Like the rest of its genus, *M. squamatii* has massive claws on its forefeet, of sufficient size that it must walk on its wrists when down on all fours. Encounters with incautious soldiers have proven that these claws can tear through

quarter inch sheet steel. Given that *M. squamatii* must fend off tuskrs, scorpiodieds, and other such gigantic killing machines, the necessity of such prodigious weaponry in an herbivore becomes self explanatory.

In case size or claws are insufficient, *M. squamatii* sports a coat of bronze-colored scales, much like the terrestrial pangolin. Where the pangolin's scales measure only an inch or so across, however, *M. squamatii's* scales are as broad as my hand, a good eight inches across, and half an inch thick at the centre. Their edges are sharp, not enough to be called knife-like, but certainly enough to damage the mouth of anything foolish enough to try and bite. These scales do not cover the underside of the creature, but, again like the pangolin or the American armadillo, *M. squamatii* can roll itself up in order to protect its more vulnerable parts if necessary.

In the manner of the Gruv, where there is no such thing as too much when it comes to attack or defense, *M. squamatii* has anal glands, again similar to the pangolin, or comparable to the American skunk. These produce a liquid of indescribable stench, which *M. squamatii* can project in either a stream or a spray up to twenty feet away. The stink does not thus far appear amenable to anything short of aqua regia, which of course cannot be applied to anything organic without causing more harm that it cures. Allowing the smell to wear off of its own requires at least two weeks before the affected individual can be tolerated in close quarters.

One would think that such a creature would be easy to spot and thus easy to avoid. Unfortunately, *M. squamatii* apparently enjoys both the warmth and the vibration of train rails. Travelers in the Gruv are subsequently most likely to encounter a specimen while it is napping, sprawled across the tracks. Getting one to move off the tracks requires a good deal of very careful effort. In some cases, the military has simply fired heavy weaponry from a distance, but that requires the deployment of small cannon, as the standard issue military rifle has little chance of penetrating *M. squamatii's* scales. Attempting to use the "cow catcher" on the front of the locomotive has been forbidden by regulation of the Alice and Gruv, after one such attempt derailed the train and left the locomotive suitable only as a source of spare parts and scrap metal. Saurid shamans have been known to coax the animals off the track, but one cannot rely on having a native shaman on board every train. No satisfactory solution has yet been found.

As a final note, the common name for *M. squamatii* is pronounced "geeng git", with a hard G at the beginning of each syllable. I have no clue where the name came from. It seems to have just appeared in common parlance of its own volition.

DEX: 7	**STR:** 11	**TOU:** 12
PER: 4	**WIL:** 7	**CHA:** 5
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 5	
Attack (2): 12	**Social Defense:** 7	
Damage:	**Physical Armor:** 11	
Claw (5): 16	**Mystic Armor:** 5	
Death: 76	**Recovery Tests:** 6	
Unconsciousness: 64	**Knockdown:** 17	
Wound Threshold: 18	**Movement:** 5	
Adventure Award: Novice Tier		
Powers: Sense Danger (2): 6		

Loot: Scales are worth 3d each in cash or trade goods to native craftsmen; typical pelt has over 200.

Rules

The gengit's stench attack uses its Attack Step to fire a stream, with a range limit of twenty feet and a single target. If it sprays, the attack covers an area twenty feet long in a 20 degree arc from the creature. Victims in the area of effect are automatically hit. Anyone hit with gengit stench is incapacitated by nausea for 5 minutes for spray, 10 minutes for stream, reduced by 30 seconds times the number of successes scored in a Toughness (9) Test. Victims are Harried for one hour, until the stink dies down enough. Victims of a stream attack must make a Willpower (12) Test. If they fail, they run away from the gengit, discarding everything that might have been touched by the stench, desperate to find some way to cleanse themselves. If they succeed, they are at -2 to all Actions for 5 minutes. The stink remains offensive enough for up to a week that other people cannot abide to be in an enclosed space with the victim, such as a railway carriage or barracks room, and is still detectable up to three weeks later.

Giant Flea

Animalia Arthropoda Chelicerata Concamerata Magninsilies Sanguisugens Introvector wiganii

Attached kindly find two military incident reports that first established the existence of *I. wiganii*, and explain why it was named after a lost settlement. The short version, for reference's sake, is that the village of New Wigan was overrun by *I. wiganii* during a reproductive surge, killing everyone in the settlement. The first military patrol to reach the village after it ceased communication was likewise overrun. By the time news reached Fort Alice, and reinforcements, armed with heavier weapons and Chinese dragons, arrived, the giant fleas had laid their eggs and for the most part died off, their reproductive cycle complete. I have traveled to New Wigan and spent some time there studying these creatures, and believe that, with care and meticulous observation, we can survive in their habitat, but precautions must be taken.

The most obvious precaution, of course, is weaponry. *I. wiganii* loosely resembles the Earthly flea, with a stubby body, large abdomen, and massive hind legs capable of propelling it over a standard palisade wall. As with all of the Concameratae, its chitin is dense, crystalline, and internally braced, requiring large-calibre rifle fire to penetrate. Fire works just as well with *I. wiganii* as with any other Concameratae. Its mouth parts consist of two pedipalps, suitable for grasping, and a single tube with a sharpened end that is thrust into the prey to obtain

Lady Jennings has a lot of learning to her, and money and rank, but I wish she'd even a ha'porth of feeling for the poor folk stuck there in New Wigan. I knew one of t' men in that patrol. He were a good lad, wi' good prospects. Didn't deserve that ending.

I asked T'zekharr how his people dealt wi' t' giant fleas. He said "We move" as if it were obvious. I'm reminded of t' African villagers I once saw evacuating themselves from t' path of swarming army ants. They came through better'n our encampment did when t' ants arrived.

Sgt Brown

blood. Add to this a fully grown adult being the size of a Tibetan mastiff, and the peril it represents rises to alarming proportions.

As with the Terrestrial flea, the eggs hatch into a worm-like larva. An opportunistic and voracious feeder, the larva will consume several times its body weight in carrion, refuse, or whatever comes readily available, growing from the diameter of a man's finger and the length of his hand to that of his forearm in a matter of two to three weeks. Pupation requires nearly a month, releasing an adult the size of a terrier into the world. A few moltings later, and the adult achieves its full size by the time it's six months of age. Then the reproductive surges begin, and the problem multiplies tenfold.

Normally, *I. wiganii* is an ambush predator, preferring to wait for the opportunity to capture its prey in a single pounce. They hunt alone, generally ignoring each other's presence, and prefer warm-blooded prey smaller than themselves. This changes when the reproductive surge begins. Approximately ten months after hatching, *I. wiganii* begin to congregate, going from solitary individuals scattered over a wide area to seething mobs in just a few days. The swarm then goes on the march, looking for nesting grounds. Like American locusts, they will eat anything in their path. Nothing is safe – the largest of creatures will be swarmed and brought down. During this migration, they mate repeatedly, males butchering each other for the chance to inseminate the nearest female. Once a nesting location, with an ample supply of food and shelter for the egg sacs, is located, the swarm feeds one last time. The males, for the most part, die off while patrolling the edge of the nesting ground over the next few days, while the females lay two or three clutches, each of forty to sixty eggs, and then die, usually while closing the last egg sac. This leaves the females' bodies right next to the egg sac, which the larvae will find useful later on. About one giant flea in a hundred is sterile, and instead of mating, serves as a nest guardian, remaining on watch after the mated insects die off. The nest guardians survive until the eggs start hatching, dying of starvation as they will not leave the nest to hunt, their corpses serving as the second meal for the new young after those of the females. A Prussian sense of time is thus necessary, to keep track of the reproductive cycle of *I. wiganii* in any area where they reside, so that settlements can be prepared to defend against the swarms.

Fortunately, the Gruv holds numerous creatures that find the larvae and young adults tasty and nutritious. Without predators to hold their numbers in check, *I. wiganii* would overrun the continent in two to three generations, then starve for lack of prey, leaving behind a land devoid of anything large enough to make even the slightest meal.

DEX: 9	**STR:** 8	**TOU:** 10
PER: 5	**WIL:** 6	**CHA:** 3

Initiative: 9
Actions: 1
Attack (1): 18
Damage:
Bite (7): 15
Death: 62
Unconsciousness: 52
Wound Threshold: 15
Physical Defense: 13
Mystic Defense: 7
Social Defense: 4
Physical Armor: 9
Mystic Armor: 4
Recovery Tests: 5
Knockdown: 17
Movement: 9
Adventure Award: Journeyman Tier
Powers: Acrobatic Defense^{S} (3): 12; Blood Veins (7): 15; Great Leap^{S} (10): 19; Tiger Spring^{S} (5)

Rules

If the giant flea does Bite damage, its Blood Veins automatically attach. The giant flea's Blood Veins do damage each combat round, not each minute.

Golden Sloth

Animalia Chordata Mammalia Xenarthra Pilosa Megalonychidae Megalonyx chrysogounus

Vaguely related to Linnaeus' Two-Toed Sloth (*C. didactylus*), the golden sloth falls squarely within the family of the Megalonyxians, the most famous of which is, of course, *M. jeffersonii*. It sports three toes on both the fore and hind limbs, and provides a living example to which we may compare all of the speculation surrounding the Megalonychiad specimens previously only known from the fossil record.

The adults measure on average nine feet from nose to tail, and weigh in at a quarter of a ton. They have large, stout hind legs, and substantial non-retractable claws that turn their feet sideways, forcing them to walk on their ankles rather than the soles of their feet. This takes an animal with a slow metabolism and a thorough lack of enthusiasm or excitement and steps it down a notch, to a lumbering beast that might get all the way across the paddock by the end of the afternoon. Its forelimbs are lighter and more agile, although still with claws that would be terrifying if *M. chrsyogounus* could work up the interest to use them. Its tongue is long, black, and prehensile, like that of a giraffe, allowing it to strip the leaves and small twigs from a branch in a single pass, and to reach and subsequently consume things that were left perhaps a bit too close to the paddock fence. Its tail is thick and muscular, and can form the third

leg of a support tripod when the animal rears up onto its hind legs. The inevitable comparison between *M. chrsyogounus* and the Saurids in terms of stance has already been made, with the Saurids themselves comparing their lazier tribesmen to the sloth in derision.

The Saurids compare their fellows to *M. chrsyogounus* for another, equally derisive reason. *M. chrsyogounus* has an amazingly effective, if slow, digestive system, and can thus eat whatever comes ready to hand. The indiscriminate gluttony of *M. chrsyogounus* is thus a source of mockery for Saurids who are of similarly large appetite and perhaps less picky about their food than their comrades. The digestive tract of *M. chrsyogounus* passes through four stomachs with intervening gizzards. Experimentation shows that *M. chrsyogounus's* gut takes five to seven days on the average to process what the animal consumes, with tremendous efficiency and very little waste excreted. This makes them ideal for domestication and use as disposals, much more so than the pig, which tends to occupy that role in British farming. *M. chrsyogounus's* paddock rarely needs cleaning, and their dietary range makes that of a pig or goat look like the most delicate constitution sniffing at the afternoon tea at Fortnum and Mason's.

Possessed of a long, silky, golden coat, *M. chrsyogounus* serves a further purpose as a fiber animal. Shearing them is quite a bit easier than dealing with sheep. They don't run, at all. They don't even put up a fight, seeming resigned to the process. The resulting fabrics are sometimes left the original golden color, but can be readily dyed a dazzling variety of hues with the plants in the area. I would recommend that Professor Franklin Habit receive funding from the Society for an expedition to the Gruv, as he would be more qualified than anyone else who comes to mind to document the textile work of the Saurids.

DEX: 6	**STR:** 10	**TOU:** 10
PER: 4	**WIL:** 6	**CHA:** 5
Initiative: 6	**Physical Defense:** 8	
Actions: 1	**Mystic Defense:** 5	
Attack (2): 10	**Social Defense:** 7	
Damage:	**Physical Armor:** 6	
Claw (3): 13	**Mystic Armor:** 3	
Death: 62	**Recovery Tests:** 5	
Unconsciousness: 52	**Knockdown:** 15	
Wound Threshold: 15	**Movement:** 5	
Adventure Award: Novice Tier		

Gremlin

No Accepted Taxonomy

While technically gremlins could be classified as Animalia, Chordata, Tetrapoda, getting past the "four limbed" clade and down into any established family would require a shoehorn and a large tin of grease. These creatures aren't mammalian, nor really even warm blooded, and given their diet, their metabolism must be extraordinary. Wiser heads than mine own must provide the classification for these beasts.

For beasts they are, have no doubt about that. Bipedal, vaguely humanoid, gremlins stand approximately a foot tall, with long, spindly limbs entirely out of proportion to their squat, heavy bodies. Their sickly grayish-green hide has proven tougher than leather, turning aside blades and resistant to small arms fire. Their slender, pointy, clever fingers and toes end in wicked claws. The head is elongated and flattened, with back-swept horns, large eyes, and stubby, pointed

ears, giving it somewhat the appearance of a medieval church gargoyle. Bunched muscles at the temporomandibular joints and a prognathic jaw warn of terrific biting power. They feed on inorganic materials, with a preference for metallic ore, and a strong preference for the refined inorganics of man-made items. Given a choice between a deposit of iron ore and a train rail, they will tear into the rail like piranha, their diamond-hard teeth and claws shearing through the metal like a hot knife through butter.

Gremlins are far more destructive than rats in their feeding and nesting behavior, not satisfied with ripping loose edible bits but causing wanton destruction. The trail of damage they leave makes them easy to find. Once cornered, however, concentrated rifle fire is required to dispose of them. Care must be taken, as gremlins have been known to pick up bullets that failed to penetrate and either eat them or spit them back at extreme velocities. Wooden projectiles have proven both more and less effective than lead. Carrying around an arbalest simply isn't practical, but anything less powerful or with a smaller bolt simply fails to make an impact. Once through a gremlin's hide, however, wood apparently causes them terrific pain, leaving them writhing on the ground if it doesn't kill them outright. Perhaps a trade could be made with the Americans or the Mexihcans for manzanita wood, which, I am told, is harder than iron and requires steel tools to work. Acids that affect metals have also shown some efficacy, but the danger of hauling about a tank of sulfuric acid and spraying it as a weapon should be obvious to anyone.

Found mainly near the portals, both on Earth and in the Gruv, gremlins have occasionally been seen further afield. Their reproduction method is unknown. The current speculation is that they reproduce by fission, like all bacteria.

DEX: 9	**STR:** 13	**TOU:** 15
PER: 7	**WIL:** 7	**CHA:** 5
Initiative: 9	**Physical Defense:** 13	
Actions: 2	**Mystic Defense:** 10	
Attack (2): 14	**Social Defense:** 7	
Damage:	**Physical Armor:** 15	
Bite (5): 18; Claw (4): 17	**Mystic Armor:** 11	
Death: 97	**Recovery Tests:** 7	
Unconsciousness: 82	**Knockdown:** 24	
Wound Threshold: 23	**Movement:** 11	

Adventure Award: Journeyman Tier

Powers: Enhanced Senses (Listen, Sight) (3): 10, Great Leap^{S} (3): 12; Heat Sight; Low-light Vision

Rules

Gremlins take double damage from weapons made of organic material, such as clubs and crossbow bolts with no metal tip. Against anything metallic, gremlins do the same damage to Barrier Rating as they would to a living opponent. For every point of Barrier Rating of metal a

gremlin consumes (such as in a successful Bite attack against a metallic object), the gremlin regains 1 point of damage.

> Maybe we can poison or clem t' wretched things by coating wood in metal and feeding it to them? Or carry vials of acid like t' ancient Greeks carried pots of fire. Something t' think on.
>
> I'd be glad never t' see a gremlin or it's chewings ever again, 'specialy after one ate my bayonet and razor.
>
> Sgt Brown

Grenadier Bird

Animalia Chordata Aves Passeriformes Corvidae Corvus excidosus

This is what happens when you leave a lot of unimaginative soldiers to name new species.

Grenadier birds received their name because they feed on the seeds of exploder pods. To do this safely, they drop small stones from a great height onto ripe pods, setting off the detonation, and possibly a chain reaction if there are other ripe pods nearby. When the tumult has ceased, the birds (because the noise will attract the rest of the flock) land and feast on the scattered seeds. The upper and lower beak cross over each other, like the blades of scissors, giving the birds the ability to shear through the tough seed coat. The curved tips of the beak are then used to pry out the kernel.

C. excidosus exhibits little sexual dimorphism, with both male and female sporting pale dun plumage, the primary point of differentiation being longer tail feathers with dark tips in the male. This coloration makes the birds difficult to see against the rock and hardpan of their habitat, where they are most vulnerable, but easy to spot against the blue of the sky. The soldiers have learned to look for pale brown birds circling overhead as a warning sign of the presence of exploder pods.

By wing structure and general morphology, *C. excidosus* should belong to either *Falconiformes* or *Procellariiformes*, but they are clearly neither raptors nor marine foragers. After considerable thought, and comparison of diet and foraging habits, I have placed them in *Passeriformes*, with the rooks and crows and ravens, who exhibit similar tactics of obtaining sustenance.

Falconers in the service of Her Majesty have domesticated a few of these birds, although feeding them is being somewhat difficult due to their preferred diet. I have refused to give up my seed specimens, won at so great a cost. Barley and corn are toxic to them. American maize seems to work, but the grain is expensive even after the repeal of the Corn Laws, due to shipping costs, and difficult to obtain. To add to the problem, the birds' beaks require frequent trimming if they are not fed their preferred diet. Cutting through the seed coats of the exploder pod seeds wears away the beak, and so it grows more quickly than the usual. Breeding has yet to work out. The falconers are not certain what the courtship rituals and nesting behaviors of *C. excidosus* are like. My own

observations show them living in rookeries, another point in favor of them being classed with the Corvidae, but retrieving nesting materials so that we know what they build their nests from would require strenuous rock climbing amid a swarm of perturbed large birds, a difficult and dangerous task. Lieutenant Faversham has assured me that if he appeals to the pride of the Prussians, they will go swarming up the cliff face like monkeys up a coco-nut tree, and bring us back all the samples we like, but he must obtain permission from further up in the command chain to approach the Prussians due to diplomatic issues. In the meantime, the falconers and their birds are working as minesweepers, with reasonable efficacy.

DEX: 8	**STR:** 4	**TOU:** 5
PER: 7	**WIL:** 5	**CHA:** 5
Initiative: 8	**Physical Defense:** 11	
Actions: 2	**Mystic Defense:** 10	
Attack (3): 11	**Social Defense:** 7	
Damage:	**Physical Armor:** 0	
Beak (6): 10; 2 × Claws (3): 6	**Mystic Armor:** 1	
Death: 27	**Recovery Tests:** 2	
Unconsciousness: 22	**Knockdown:** 8	
Wound Threshold: 8	**Movement:** 3/10 *	

Adventure Award: Novice Tier

* The second number is the bird's Flying rate.

Powers: Enhanced Senses [Sight] (2): 9, Hunting^{S} (3): 11; True Shot^{S} (2): 10

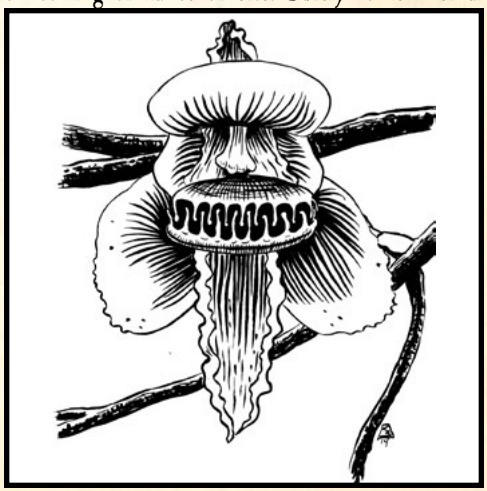
Rules

The grenadier bird uses its True Shot for dropping stones from great altitude onto a specific ripe exploder pod. This allows the bird to adjust for wind, motion, and so forth.

Grinning Monkey Orchid

Plantae Angiosperms Monocots Asparagales Orchidaceae Veloxigerminus simiictii

I find myself empathising with Mr. Carroll's Alice more and more of late, confused by the insanity around me and wishing oh so very hard that I could simply awaken and be back in a quiet English country garden, where the flowers do not sing or dance or bite. Surely some infernal power intent on cruelty and madness has been allowed to run loose in this world, for a kind and merciful God would never have created the Grinning Monkey Orchid.



A sympodial epiphytic orchid, *V. simiictii* grows laterally rather than vertically, following its support, in a branching fashion. Rather than sinking its roots into the soil, it dangles them down its support, which is as likely to be some poor animal's skeleton or a mossy rock wall as a tree, and absorbs its needed moisture both from the air and from whatever happens to splash against them.

Like most orchids, *V. simiictii's* blooms consist of two whorls: an outer of three sepals,

large and curled inward slightly; and an inner of three petals, flaring outward and brightly colored. The center of the bloom, however, instead of containing the usual structures of anther and stigma and so forth, presents a third whorl, consisting of two enlarged and specialized inner leaves. A pale, bleached-bone white, these are similar in structure and function to the terminal lobe of *D. muscipula*, but instead of hair-like fibers, the edge, curved inward, sports a razor-sharp strip of a bark-like substance. The overall effect is that of a grimacing monkey skull, mouth wide open. Any insect unfortunate enough to seek nectar within the bloom instead finds itself trapped as the jaw-like leaves snap shut, triggered by the intrusion. The shaking of the bloom caused by the insect's struggles to escape causes pollen to rain down from anther to stigma at the very back of the bloom, just before the calyx, resulting in fertilization. Again like most orchids, *V. simiictii's* blooms are hermaphroditic, with an inferior ovary located behind the flower at the top of the stem. Thus, every bloom features this same design and mechanism, and may mature into the seeds of additional vines.

As with *D. muscipula*, the prey is slowly digested, providing nutrients and moisture to the plant. Unlike *D. muscipula*, *V. simiictii* can make use of anything that intrudes upon its blooms, and can and will bite at something that brushes against the leaf edges without passing within. The razor edge of the leaves ensures that, even if the entire creature cannot fit into the trap, the bit that does intrude will likely be severed, and blood shed, thus providing additional nutrients and moisture. More than one soldier has lost the first joint of a finger from incautiously poking at a peculiar flower. Given the number of blooms on a vine, it's quite possible that an animal that stumbled against a spray of *V. simiictii* could suffer multiple bites, possibly enough to die by exsanguination if the animal were the size of a hare or smaller.

No live specimens or seeds will be provided. If someone from the Society wants an exemplar badly enough, they may come to the Gruv and collect it themselves.

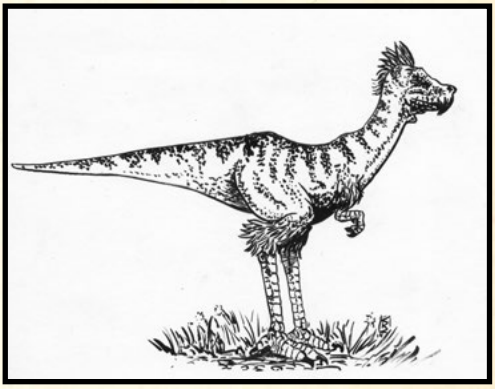
DEX: 7	**STR:** 3	**TOU:** 4
PER: 3	**WIL:** 5	**CHA:** 3
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 4	
Attack (See Rules): 8	**Social Defense:** 4	
Damage:	**Physical Armor:** 0	
Bite (6): 9	**Mystic Armor:** 2	
Death: 20	**Recovery Tests:** 2	
Unconsciousness: 16	**Knockdown:** 6	
Wound Threshold: 6	**Movement:** NA	
Adventure Award: Initiate Tier		

Rules

The number of attacks is determined by the number of blooms in contact with the target. Brushing against or falling on the vine brings the target in contact with a number of blooms determined by its size. A small animal contacts 1d4 blooms, a large animal 1d6 blooms, a human-sized target 1d8 blooms, and a troll-sized target 1d10 blooms. Each bloom gets to make an Attack Test on the vine's Initiative. If the Damage Test results in a Wound, the target takes an additional Step 4 bleeding damage per round for three rounds, or until the bleeding is stanched with a Physician Test or similar effort.

Harpy

Animalia Chordata Sauropsida Ornithomimidae Harpimimus velocicursans



As loathe as I am to grant Mr. Marsh further credit, I find that anatomic similarities between *H. velocicursans* and similar bird-like saurians require me to apply the taxonomy of *Ornithomimidae*, bird mimics, although I find his use of the family as a wastebasket taxon offensive and unscientific. A taxon should only include those species firmly related by anatomy and habit, not simply by general resemblance. One might as well try to put the Irish Catholics, the Scots Presybterians, and the Brighton Anglicans in the same pew on the basis that they are all human Christians.

Known to the Saurids as T'salithandi, singular T'salithan (and I am quite sure I am making a terrible hash of the words trying to write them down, as I am a biologist, not a philologist), the harpy, as our soldiers call it, serves as a primary mount. Standing five to six feet at the shoulder, and measuring ten to twelve feet from beak to tail tip, *H. velocicursans* provides a somewhat rough ride, given its bipedal stance, but moves twice as fast as a horse at full gallop and can take a jump that would stall a champion hunter-chaser. Most of its brownish-greenish hide is softly pebbled, like that of a lizard, but it sports rudimentary plumage from elbow to wrist of its vestigial forelimbs, at knee and ankle of its hind legs, and as a crest from the top center of its beak up between its eyes and over the top of its head down to the posterior base of the skull. *H. velocicursans* has molars in its lower jaw, but no dentition in the upper, instead possessing a leathery beaklike structure with a horny tip, giving its muzzle the look of a horse spliced rather roughly with a bird. An omnivore, *H. velocicursans* prefers a diet of greenery and insects, seeking out the foliage of trees suffering from infestation, but will in a pinch dine on small rodents and whatever else comes ready to hand.

Given its relatively docile nature, and its disinterest in dining on anything larger than it can swallow in a single bite, *H. velocicursans* can be introduced into a paddock with horses, mules, oxen, and other Terrestrial herbivores of burden with little incident, once the initial trauma is overcome. Our military has already begun a breeding program, and I am told that entrepreneurial civilians are raising *H. velocicursans* as potential mounts for travelers in the Gruv. I suppose I am going to have to learn to ride one myself, if I ever want to see more of this land than can be reached by rail and on foot.

DEX: 9	**STR:** 7	**TOU:** 8
PER: 4	**WIL:** 7	**CHA:** 6
Initiative: 9	**Physical Defense:** 13	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 8	**Social Defense:** 8	
Damage:	**Physical Armor:** 3	
Trample (2): 9	**Mystic Armor:** 4	
Death: 48	**Recovery Tests:** 4	
Unconsciousness: 40	**Knockdown:** 11	
Wound Threshold: 12	**Movement:** 15	

Adventure Award: Initiate Tier
Powers: Enhanced Senses [Listen, Smell] (2): 6, Great Leap^{S} (4): 13, Sprint^{S} (3)

Hunchbeak

Animalia Chordata Reptilia Saurischia Deinonychosauria Dromaeosauridae Ornithodesmus Pandospinus nidorovehemens

Accompanying this report is a set of photographic plates, three complete sets of bones, and two intact hides, preserved in salt. Without such evidence, I fear that even with corroborating reports from the cavalry I would be suspected of perpetrating a fraud upon the Society.

On the western end of the Grosvenor Peninsula, the civilian settlers discovered a large animal that, according to their first reports, resembled a giant chicken. While edible, and providing enough meat for an entire village at one go, what caught attention was the settlers' report that some of their men had managed to ride the beasts, imitating the local Saurid warriors, using an improvised hackamore. Captain Jenkins of the Twelfth Royal Lancers investigated the reports, and discovered that the supposed "chickens" were in fact bipedal saurians. With training, and either a mask or a strong stomach on the part of the rider due to the tremendous odor of the beasts, they have proven useful as mounts. Sadly, at the point where I was called in to make scientific observations, the beasts had already acquired the name "hunchbeaks", due to their posture and birdlike appearance, and no effort of mine was sufficient to dislodge it in favor of something more elegant.

The hunchbeaks are massive bird-like reptilians, a sort of transitionary species between the ancient saurians and modern birds. They walk on two legs, with vestigial wings kept folded tight to their bodies. They have more of a beak than a snout, leathery but tough and with a horn-like tip. They carry their heads low, below the peak of their highly curved back, and have heavy scales running up their spine in a saurian fashion, providing natural armor to the vulnerable neck. Heavy claws tip each of three toes, while the thumb has a nasty curved claw that can eviscerate a man. The evidence of this lies in two graves at the settlement. The females stand an average of six feet at the shoulder, with the spine peaking two feet or so above that, large enough for a grown man to ride. The males are noticeably larger than the females, measuring at least eight feet at the shoulder, and highly aggressive. Training them for war mounts has been difficult, but the Saurids have done it, and thus the British cavalry cannot back down from the challenge.

As a taxonomic note, I have placed the hunchbacks in the same group with the raptors, or birdlike dinosaurs, and specifically the transitionary clade placed between the saurians and modern birds. It is my hope that the physical evidence I have provided will justify associating a living species with a clade known to have been extinct for millions of years. The genus I have given

translates as "sickle spined", following the most notable characteristic of the general type of creature. I had originally thought to name the species Squamopinna, or "scale feathered", but on first personal contact became firmly convinced that "strong odor" was the most notable distinguishing characteristic of the specific creature.

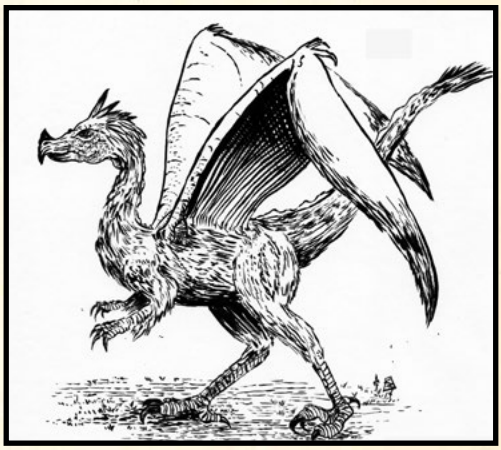
DEX: 8	**STR:** 9	**TOU:** 9
PER: 4	**WIL:** 8	**CHA:** 7
Initiative: 8	**Physical Defense:** 11	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 14	**Social Defense:** 10	
Damage:	**Physical Armor:** 8	
Claw (5): 14; Trample (3): 12	**Mystic Armor:** 5	
Death: 55	**Recovery Tests:** 4	
Unconsciousness: 46	**Knockdown:** 13	
Wound Threshold: 14	**Movement:** 10	

Adventure Award: Novice Tier

Powers: Charge (4); Enhanced Senses [Listen, Smell] (2): 6, Great Leap^{S} (2): 10, Sprint^{S} (3); Swift Kick^{S} (4): 12

Jabberwock

Animalia Chordata Reptilia Saurischia Deinonychosauria Dromaeosauridae Ornithodesmus Megaraptor carrolliensis



While not resembling John Tenniel's famous illustration perhaps quite as much as the initial field reports would have had it, the jabberwock, *M. carrolliensis*, certainly has enough features in common, along with its size and predatory nature, to make the comparison inevitable. According to the report from the first encounter, one of the soldiers referred to it as a gryphon. The Color Sergeant took exception to this, pointing to his regimental badge. His words, as transcribed: "This's a gryphon, ye glaikit dobber. Yon's a bastit great jabberwock. Now up wi' yer rifle afore it skelps yer erse."

Based on study of the available partial specimens, as Lt. Faversham has been most adamant that we will not be seeking out a live specimen for field observation, I have to place *M. carrolliensis* in the proposed suborder of *Theropoda* that Mr. Marsh has defined. As my uncle was wont to say, even a blind hog can find an acorn. Ranging in size from 23 to 36 feet in length, snout to tail tip, and six to nine feet at the shoulder, *M. carrolliensis* is a larger and considerably more advanced form of theropod that either Mr. Marsh or Dr. Cope have thus far excavated.

I do not expect my classification to hold for very long. While *M. carrolliensis'* physiognomy matches that of the *theropoda* up to a point, with a slender body, long neck, and much longer tail, a notable variation suggests the possibility of a new family, possibly even a new order. *M.*

carrolliensis has six limbs: two large, muscular hind legs, two smaller, agile forelimbs equipped with the requisite sickle-shaped claws of the dromaeosaurs, and a pair of large, vaguely birdlike wings, connected to a second shoulder girdle placed above the first that supports the arms. While these are partly membranous, like the wings of a bat, the leading edges are feathered, with pinion feathers at the tips. This combination makes *M. carrolliensis* somewhat ungainly in the air, poor at close-order maneuvering, and more likely to use its aerial capabilities to stoop upon its prey in a single rushing glide from a stationary perch, or to gain a temporary height advantage in combat. Additional feathers may be found in the usual locations of the deinonychosaurs, those being the shoulders, base of the skull, and tail plume. *M. carrolliensis* has the customary dentition of the deinonychosaurs as well, with the emphasis on incisors one would expect in a carnivore.

I intend to propose the classification of *Draculosauriae* for the six-limbed saurians of the Gruv, when (or if) we find another such. Certainly, while they do not breathe fire, these creatures would fit the physiognomy ascribed to the dragons of legend.

DEX: 10	**STR:** 12	**TOU:** 13
PER: 5	**WIL:** 8	**CHA:** 8
Initiative: 10	**Physical Defense:** 14	
Actions: 1	**Mystic Defense:** 7	
Attack (2): 16	**Social Defense:** 11	
Damage:	**Physical Armor:** 9	
Bite (5): 17; 2x Claw (4): 16	**Mystic Armor:** 6	
Death: 83	**Recovery Tests:** 6	
Unconsciousness: 70	**Knockdown:** 21	
Wound Threshold: 20	**Movement:** 11/12 *	

Adventure Award: Journeyman Tier

* The second number is the jabberwock's Flying movement.

Powers: Charge (5); Down Strike^{S} (4): 16; Enhanced Senses (Listen, Sight) (4): 9; Heat Sight; Low-light Vision; Shake It Off^{S} (3): 16

Rules

The jabberwock must make a Dexterity (8) Test to change direction when airborne, as it's much more of a straight-line glider than an actual flying creature.

Jeanne-Jean

Plantae Angiospermae Eudicots Fabales Fabaceae Amyntankathis jeannebaret

I have taken advantage of the soldiers' failure to notice this particular woody shrub, remarkable for its tenacity, its adaptivity, and its utility, to name it after Jeanne (nee Jean) Baré (or Baret), a determined, resourceful sort her (or him) self. Pronounced "zheen-zhon" for those of you with no exposure to French, *A. jeannebaret* has previously been recorded with the nicknames "touch me not", which could result in confusion with the terrestrial genus *Impatiens*, and, you may pardon my indelicacy, the "sod-off", which of course cannot be used in polite society. These nicknames were bestowed in recognition of the plant's defensive capabilities. Its young leaves bud out in tightly rolled spines, similar to gorse (genus *Ulex*, twenty species), in between sharp hairs that cause considerable irritation to the skin when touched. *A. jeannebaret's* flowers have tiny, recurved thorns on the outer surface of the calyx. The flowers close up if the sepals are disturbed, presenting

the thorns to anything attempting to eat the bloom. Pollinating insects, of course, land on the corolla, and never touch the calyx.

Most notably, *A. jeannebaret* is a dioecious plant that switches from male to female or vice versa according to climactic conditions and the presence or absence of either gender in nearby plants. (Compare to *A. trichopoda*, the phenotype of the *Amborellaceae*.) A plant that has produced male blooms in previous seasons, or in the same season, can produce female blooms if the surrounding area has substantially more male plants than female, or if weather conditions turn poor, triggering the plant to go to seed. The converse has also been observed, with plants that have produced ovarian blooms subsequently producing staminate blooms.

The Saurids collect the leaves after the plant's seed pods have ripened, wash them in the river, then pack them, still wet, into clay jars, which they seal and bury. Six months later, they dig up the jars, let the leaves and fungus inside dry out, then grind the material to a powder they call "amuloth", loosely translated as "vision smoke". The adults then smoke this concoction as part of their religious rituals, when seeking visions or contact with the spirit world. They use small clay pipes holding no more than a pinch, measure out the amuloth carefully, and set aside two to three days for preparation, ritual, and recovery. Humans who have tried the powder have reported mixed results, ranging from nagging headache and a persistent cough, to mild visual and auditory hallucinations (colored spots and strange noises), to deeply mystical religious experiences. The reaction seems to be related to the attunement of the individual to the spiritual world. Boojums experience more of a reaction than normal humans. Members of religious or mystic orders, using whatever mental disciplines their order teaches for preparation for such an experience, have the most profound reactions. I will leave it to the chemists and to Monsignor Sherrard to comment further, as this article has already strayed very far from proper botany.

DEX: 6	**STR:** 3	**TOU:** 5
PER: 3	**WIL:** 3	**CHA:** 3
Initiative: 6	**Physical Defense:** 8	
Actions: 0	**Mystic Defense:** 4	
Attack (0): 0	**Social Defense:** 4	
Damage:	**Physical Armor:** 2	
Thorns 7	**Mystic Armor:** 3	
Death: 27	**Recovery Tests:** 2	
Unconsciousness: NA	**Knockdown:** NA	
Wound Threshold: 8	**Movement:** NA	
Adventure Award: Initiate Tier		
Rules		

Saurids also use the vines to make fernweave armor. The name "fernweave" is a very bad translation of the Saurid term.

Josisaur

Animalia Chordata Reptilia Saurischia Maniraptora Formiraptosauris posterodentus

Quite a bit closer to a bird than a saurid, the josisaur stands approximately two feet tall on a pair of thick, heavily scaled legs mounted to a backward-pointing hip. Evident only in dissection, the reversed hip process, together with an ossified sternal plate and the protofeathers that enshroud the josisaur in fluff, render the animal very nearly avian not only in appearance but in structure. Its upper limbs betray this resemblance, though, as they are decidedly not wings, but arms, long for the size of the creature, with a three-fingered hand equipped with large, blunt claws. An insectivore, the josisaur prefers burrowing colony insects, the Gruv equivalent of ants and termites. Its feathers provide protection from the bites and stings of the nest defenders. Its heavy claws provide the perfect tool for ripping apart a termite mound. Its long, snoutlike beak can probe deep into a nest while keeping its eyes and nostrils well clear. Back at the base of the mandible are five rows of molars, which it uses to crack the exoskeletons of its meal, giving its feeding a head-bobbing rhythm as it alternately licks up insects, then chews and swallows, that humans, especially younger ones, find amusing.

F. posterodentus takes its common name from Josie Bauer, the daughter of a colonist at the Zion settlement, who apparently was the first to make a pet of one. Josisaurs are easily domesticated, especially if hand-raised from eggs. They forage well afield during the day, but return to their roost at sundown very much like chickens. Given their prodigious appetite for burrowing insects, a number of farmers have started keeping them as working animals. A simple open hutch with a nesting box and a handful of whatever larvae are ready to hand keeps them happy and attached to their human keepers.

The Saurids have been somewhat confused about the relationship between humans, especially children, and the josisaurs. Apparently, Saurids find *F. posterodentus* quite tasty, and don't quite understand the concept of keeping something so delectable as a pet. While at some point the colonists may start breeding josisaurs as a food source, at this point it's really best to keep the family josisaur out of sight when Saurids are visiting, as confusion over whether or not it's intended as dinner may ensue.

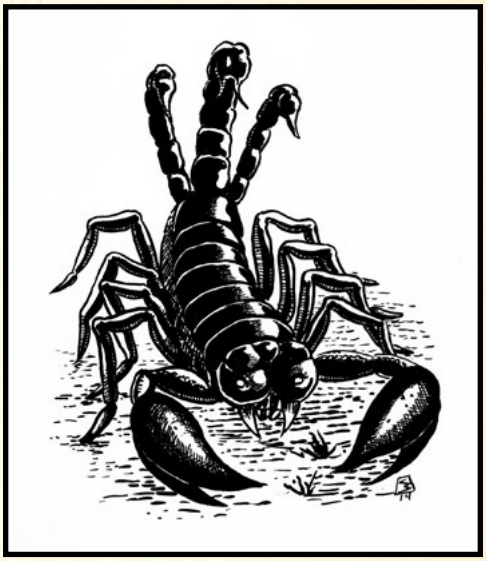
DEX: 7	**STR:** 5	**TOU:** 6
PER: 4	**WIL:** 3	**CHA:** 3
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 7	**Social Defense:** 4	
Damage:	**Physical Armor:** 2	
Peck (3):8; Claw (4) 9	**Mystic Armor:** 1	

Death: 34
Unconsciousness: 28
Wound Threshold: 9
Adventure Award: Initiate Tier
Rules
Recovery Tests: 3
Knockdown: 8
Movement: 7

Like birds, josisaurs will imprint on whoever raises them, and will follow that animal or person around until well after they mature.

Mordslanger

No Acceptable Taxonomy



Some of the creatures brought to my attention have set me quite a puzzle. They do not fall into any obvious terrestrial taxonomic classification, and have little in common with the taxonomy of the Gruv. After considerable effort, I have come to the only viable conclusion. These creatures are unnatural.

As an example, let us examine the mordslanger. Originally encountered by the Prussians, the name they bestowed upon it translates loosely as "long murderer". Given its extreme aggression, ravenous appetite for animal flesh, and considerable effectiveness in battle, such a name will do quite well, especially given the lack of any acceptable classification. Standing four feet high at the center of the carapace, six feet wide, and twelve long, not counting the three tails or the profusion of legs, it most closely resembles what one would achieve by merging a small pile of scorpions into a single misshapen beast.

First off, it has far too many limbs. Terrestrial scorpions, being arachnids, have eight, six propulsive legs and a front pair with pincers. The Concamerata of the Gruv also have eight limbs. The mordslanger has ten, four pairs of motive legs and a pair of pincer-equipped forelimbs. Its chelicerae, developed into fangs rather than pedipalps, curve sharply inward, apparently being mainly for the purpose of keeping prey from escaping the mordslanger's mouth. The fangs contain no venom ducting, which makes sense given that the tips point directly back at the creature, making them ineffective for injection. The mouth features multiple tooth-like projections along the upper and lower margins, suitable as incisors, another feature not seen in either terrestrial arachnids or Concamerata.

Secondly, it has too few eyes. A single pair occupy armored protrusions directly above either side of the mouth, facing forward. The remaining six eyes that would be expected of an arachnid simply are not present. This does give the mordslanger's opponents an advantage, in that the creature cannot see to its sides, above, or behind. Those facing a mordslanger should attempt to flank rather than confronting it head-on.

Thirdly, the mordslanger has three tails. Dissection of the fragmentary specimens available has provided me with no clear explanation as to how the spinous process trifurcates, or indeed if there is a spinous process at all. The nervous connections required to drive such a complicated anatomy must by necessity be complex themselves, but the critical junction is quite probably buried deep in the cephalothorax, and thus protected by the carapace. The center tail has two stingers, while the outer ones have one stinger each. This suggests to me a splicing of four scorpions into a single creature, with the thicker center tail being the result of combining two metasomae into one. The venom produced by the glands at the base of the stinger has both hematotoxic and neurotoxic effects, in addition to being caustic. Nowhere in nature, either on Earth or in the admittedly limited part of the Grosvenor Land that we have seen, does venom have such a profusion of characteristics. As a side note, the Prussians found vinegar to be reasonably effective at dispersing mordslanger venom, due to the acid-base reaction.

I am a biologist, not a tactician, but the conclusion seems obvious even to my lack of military experience. Given the increasing frequency of mordslanger encounters, I suspect that the peninsula that we occupy was once a proving ground for biological weaponry, and that either old caches of said weaponry are opening, or the creators are releasing new versions into the wild. The Samsut have the ability to animate a corpse. Perhaps they also have the ability to modify living organisms. If not, then some other civilization, either current or past, performed this work. Such a civilization would represent both a significant source of scientific knowledge and a considerable threat to the Empire.

DEX: 12	**STR:** 15	**TOU:** 16
PER: 7	**WIL:** 9	**CHA:** 9
Initiative: 12	**Physical Defense:** 17	
Actions: 2	**Mystic Defense:** 10	
Attack (2): 18	**Social Defense:** 13	
Damage:	**Physical Armor:** 15	
Bite ((6): 21; 2 x Claw (8): 23; 3 x Sting (7): 22		**Mystic Armor:** 7
Death: 104	**Recovery Tests:** 8	
Unconsciousness: 88	**Knockdown:** 26	
Wound Threshold: 24	**Movement:** 9	

Adventure Award: Warden Tier

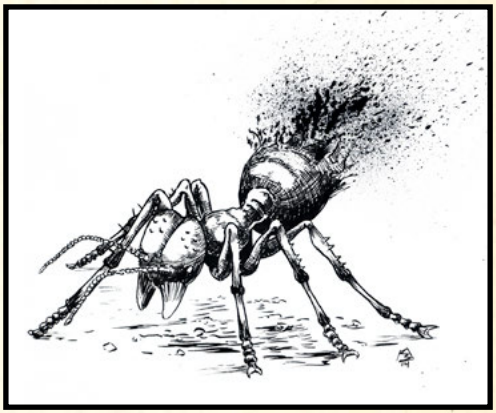
Powers: Charge (5); Poison (Damage/Debilitating) 14; Shake It Off^{S} (5): 21; Tiger Spring^{S} (6)

Rules

Any damage done by a Sting attack is sufficient to introduce the creature's Poison. Note that the Poison has both Damage and Debilitating effects, both of which must receive the appropriate Test if the character fails their Toughness Test to resist the poison. Applying liberal quantities of vinegar to the wound reduces the Poison's Effect Step by -3 Steps, and creates a great deal of noxious foaming which must be washed away before any other treatment can be applied. Repeating the treatment after a one combat round pause reduces the Poison's Effect Step by another -2 Steps. No further reduction via treatment can be attained. Each round that the victim makes their Toughness Test to resist the Poison, the Poison's current Effect Step is reduced by -2 Steps.

Nallshpritzer

Animalia Arthropoda Concamerata Hymenoptera Formicidae Ipsisacrificus virogluten



A genus of carpenter ant found in Malaysia defends its nest by exploding. When the tide of battle turns against the defenders, the workers violently contract their abdomens, squeezing hard on the poison glands that run from their mandibles down the length of their bodies. The pressure surge blows the ants' heads off, and sprays acidic, poisonous glue in all directions from where the head used to be. Thankfully, on Earth, these ants are ant-sized. The Gruv, as usual, is a different story entirely.

I. virogluten, given the common name of nallshpritzer by British troops who had trouble transcribing the Prussian "knallspritzer", measures approximately a foot and a half in length for the workers and nearly two feet for the soldiers, with both standing approximately a foot high and an equal distance wide. The extra length of the soldier is mostly taken up with massively enlarged mandibles. No measurements have been taken of a queen for tolerably obvious reasons. Dissection of specimens shot from a distance, so that they did not have the opportunity to detonate, shows the internal bracing and lightweight crystalline chitin distinctive of the Concamerata. Beyond their class, their physiognomy resembles the terrestrial ant sufficiently to justify the order and family of *Hymenoptera* and *Formicidae*, respectively. Nesting behavior likewise resembles the terrestrial ant. Their prey, of course, are larger, to feed such a large insectoid. Nallshpritzer workers have been observed attacking full-grown buffs, swarming up their legs in numbers too great to shake off, biting, and dropping off, then waiting for the buff to die of the venom before dragging its corpse back to the nest. The venom is hematotoxic, in addition to being agglutinative and strongly acidic. Unfortunately, this means the best option of dealing with a nallshpritzer bite is to cut off (or out) the bitten part. The only good news is that the venom's congealing effect closes off veins in the area, helping to prevent the spread of the venom to the rest of the body.

When threatened, both the workers and the soldiers can detonate themselves. Generally, the workers employ this tactic only to defend the nest, or if cut off from their fellows and obviously doomed. The soldiers, on the other hand, have been observed to charge into the midst of their foes and then explode. In one extraordinary instance, the soldier ran up a tree first, creating an airburst that its pursuers had no hope of avoiding. The resulting spray of sticky, acidic toxin can reach up to ten feet away. Between burns from the acid, poisoning from the venom, and entanglement by the glue-like carrying medium, anything or anyone unlucky enough to be sprayed will have a hard time just surviving, and may wish that they hadn't.

No accurate count has been made of a nallshpritzer nest. One can only assume that there are rather more of them down the hole than one would like to deal with. Like a jilted lover, the best way to deal with them is from as far away as possible. Lt. Faversham tells me that mortars have been issued to the patrol units most likely to encounter a nest.

Worker

DEX: 5	STR: 6	TOU: 5
PER: 4	WIL: 5	CHA: 4
Initiative: 5	Physical Defense: 7	
Actions: 1	Mystic Defense: 5	
Attack (1): 7	Social Defense: 5	
Damage:	Physical Armor: 5	
Bite (4): 10	Mystic Armor: 1	
Death: 27	Recovery Tests: 2	
Unconsciousness: 22	Knockdown: 9	
Wound Threshold: 8	Movement: 7	

Adventure Award: Novice Tier

Powers: Acid Spray (5): 10; Poison 7

Rules

Any damage done with a Bite attack automatically injects Poison. The worker can only use its Acid Spray once, as using it kills the worker. Anyone or anything hit with the Acid Spray is automatically affected by Poison. Using Acid Spray calls 1-8 more workers to the area, arriving within 2-5 rounds.

Soldier

DEX: 6	STR: 7	TOU: 6
PER: 4	WIL: 5	CHA: 4
Initiative: 6	Physical Defense: 8	
Actions: 1	Mystic Defense: 5	
Attack (1): 9	Social Defense: 5	
Damage:	Physical Armor: 6	
Bite (5): 12	Mystic Armor: 1	
Death: 34	Recovery Tests: 3	
Unconsciousness: 28	Knockdown: 10	
Wound Threshold: 9	Movement: 7	

Adventure Award: Novice Tier

Powers: Acid Spray (6): 12; Poison 7

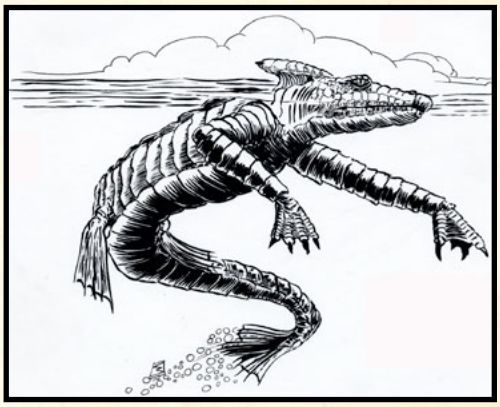
Rules

Any damage done with a Bite attack automatically injects Poison. The soldier can only use its Acid Spray once, as using it kills the soldier. Anyone or anything hit with the Acid Spray is automatically affected by Poison. Using Acid Spray calls 1-8 more soldiers to the area, arriving in 1-4 rounds.

Purpose

Animalia Chordata Sauropsida Plesiosauria Pilosauridae Pteryglodankana parasavroeidius

Now, really, I believe we've carried the references to Professor Hodgson's books quite far enough, thank you. First the Rabbit Hole, and then Fort Alice, and the Jabberwock, and now the soldiers have called this poor creature a Purpose? I fear that the next large creature to be encountered in or near the water shall forever afterward be referred to as either a Walrus or a Carpenter.



If one follows Darwinist thinking, *P. parasavroeidius* may be a distant evolutionary relative of the Saurid race, one whose forebears either stayed in the ocean or returned to it while the ancestors of the Saurids adapted more to land, discovering fire and developing tool-using hands while *P. parasavroeidius* developed shorter limbs and a streamlined, fat-enshrouded body more suitable to life in the frigid depths. Where the Saurids retained only enough gill function for short excursions into the water, *P. parasavroeidius* retained only sufficient lung function to make brief sojourns onto land, spending much of its time at or just below the surface of the waves. The two species enjoy some degree of communication, although humans have not been made privy to it, and have been observed working cooperatively in near-shore fishing operations. The Saurids and *P. parasavroeidius* apparently plan the venture jointly, and divide the spoils with proper etiquette. The nature of the relationship, if any, between *P. parasavroeidius* and the rumored aquatic Saurids remains unknown at this time.

While *P. parasavroeidius* does occupy the niche in the natural order that, on Earth, is held by the porpoise and the dolphin (two species far too often conflated by the layman), in structure it more closely resembles the seal, and in appearance is obviously saurian. Growing to a length of ten to twelve feet for the males, and twelve to fourteen for the females, including the tail, P. parasavroeidius has the streamlined, gently rounded physiognomy of the seal, with an elongated, crocodilian head. A low crest rises from between and just behind the eyes, extending down the short neck and trailing off between the shoulders of the forelimbs. This crest can be raised and lowered, like that of the Saurids, but whether such indicates emotional state or simply physiological function remains a matter of speculation. Coloration shows considerably less variance than their land-dwelling purported cousins, being usually a dusky green on the back and sides, and bluish-white with a bit of mottling on the undersurfaces, as one would expect for a large water-dwelling creature. Occasionally, specimens of a blue or brownish hue are noted in the vicinity of river deltas, with their undersides tinged with green or pale yellow respectively. The forelimbs retain elbow and wrist, in comparison to the flippers of the plesiosaurs, and sport large, non-retractable claws, used in hunting, fighting, and land-based locomotion. The hindlimbs are thicker and flatter, more resembling the aforementioned flippers, and provide only limited propulsion when *P. parasavroeidius* leaves the water. The tail has both dorsal and ventral ridges, making it considerably more effective as both propulsion and rudder.

Fishermen operating off the southern coast of the Gruv report that *P. parasavroeidius* often approach their boats, apparently to observe, although the reports often include mention of croaking and splashing with the forelimbs, as if the creatures were trying to attract the fishermen's attention. Stories have spread of sailors being rescued by *P. parasavroeidius* after nautical accidents, but should be balanced against stories of *P. parasavroeidius* vaulting the gunwales and attacking the crew, although tales of attacks generally seem to involve hunting expeditions targeting the creatures. The few men who will admit to having eaten a specimen of *P. parasavroeidius* state that its meat closely resembles that of a crocodile in flavor and texture. One man who boasted of having consumed such meat, and enjoying it thoroughly, was found a few days later with the hilt of a knife of Saurid make

projecting from his mouth, the blade well down his throat. The Humanitarian Society is currently lobbying Parliament to have *P. parasavroeidius* declared off-limits for hunting and consumption. Given the regard with which the Saurids hold them, I think that would be rather a good idea, for the maintenance of the peace between human and Saurid if for no other reason.

DEX: 9	**STR:** 8	**TOU:** 8
PER: 6	**WIL:** 7	**CHA:** 5

Initiative: 9
Actions: 1
Attack (1): 12
Damage:
Bite (7): 15; Claw (5): 13
Death: 66
Unconsciousness: 55
Wound Threshold: 12
Adventure Award: Novice Tier

Physical Defense: 13
Mystic Defense: 8
Social Defense: 7
Physical Armor: 4
Mystic Armor: 3
Recovery Tests: 4
Knockdown: 13
Movement: #5/12 *

* The first number is land movement, the second is aquatic movement.
Powers: Durability (3); Surprise Attack (3)

Pythonipede

Animalia Arthropoda Concamerata Myriapoda Scolopendromorpha Sputaciduus marleyii

For heaven's sake, can we at least get someone who knows the difference between an arthropod and a reptile to name these creatures?

Decidedly a centipede in morphology, the pythonipede appears to have acquired its common name partly from its uniquely jointed mandibles. While the mouth parts unhinge similarly to a snake's, this is not for the purpose of swallowing prey whole, but rather to clear the line of fire for a targeted spray of gastric juices. Like many insects, *S. marleyii* begins the digestive process prior to swallowing its meal. The acidic spray breaks down the prey, allowing *S. marleyii* to more easily tear loose bits small enough to pass through its throat. *S. marleyii's* tactic of wrapping around its prey, immobilizing its victim with the grip of dozens of pairs of legs, no doubt also contributes to the common name.

S. marleyii fits the physiognomy of the *Scolopendromorphae*, but is anamorphic rather than epimorphic, hatching with only five body segments and three pairs of legs. As it matures, it moults, adding body segments and additional pairs of legs, like all centipedes adding an even number of segments each time and thus maintaining an odd number of leg pairs. *S. marleyii* matures at eighty-

seven body segments, achieving a length of three feet in the largest specimen thus far collected. As with other centipedes, its balance is superb, its speed terrific, and its weight well distributed along its length. While preferring the dark, damp spaces between rocks and under the leaf mould, *S. marleyii* can also be found well up in the trees, flowing along slender branches like water. Between the internal bracing that puts it in the Concamerata, and the flexibility and weight distribution associated with centipedes in general, it can fall up to fifteen body lengths without injury. When falling from a tree, *S. marleyii* writhes in mid-air, lashing out at both ends and more often than not managing to seize hold of a branch, thus saving itself. This same behavior can be seen any time the creature finds itself unexpectedly without support. Lt. Faversham informs me that a soldier picking one up by the aft end found himself abruptly confronting the fore end, and was in hospital for two weeks with acid burns as a result.

We are attempting to verify use of *S. marleyii* as a weapon by the Saurids. The report we have describes an encounter between a British military patrol and a group of hostile Saurids, in which one of the Saurids held a large specimen of *S. marleyii* immediately behind the head with one hand, allowing the creature to wrap about his leather-clad arm, and ran his hand up the creature's body to trigger an acid spray. We have not yet found any evidence of Saurids keeping *S. marleyii* in their villages or war camps, so the question becomes whether the Saurid used a weapon of opportunity, or if the report is simply fraudulent.

DEX: 12	STR: 7	TOU: 7
PER: 4	WIL: 5	CHA: 3
Initiative: 12	Physical Defense: 17	
Actions: 1	Mystic Defense: 5	
Attack (1): 14	Social Defense: 4	
Damage:	Physical Armor: 5	
Bite (7): 14	Mystic Armor: 2	
Death: 41	Recovery Tests: 3	
Unconsciousness: 34	Knockdown: 13	
Wound Threshold: 11	Movement: 12	

Adventure Award: Novice Tier

Powers: Acid Spray (8): 20; Climbing^{S} (9): 21; Spellcasting (5): 9; Venom (8): 13

Rules

The pythonipede's Acid Spray and Venom fire simultaneously. Falling damage is calculated by reducing the falling distance by 15 yards. If a pythonipede fails its Climbing Test, or falls as a result of being knocked down, it makes a Climbing (11) Test to catch itself on the way down.

Rail Runner

Animalia Chordata Reptilia Saurischia Ornithomimidae Tramosaurus cucurriens

One of the first saurian species of the Gruv that I observed in the field, a small covey of *T. cucurriens* scattered from the rails as the train leaving Fort Alice rounded a bend and came upon their feeding ground. In my excitement, I had to be dissuaded from dashing up to the front of the train and demanding that the engineer bring it to a halt, so that I could debark for the purpose of study. Lt. Faversham reassured me that I would see quite a few more of this species on our trip to Saints of Westminster. He was certainly correct in that. The rail runner is one of the more populous saurians of this world, found nearly everywhere in the lowlands.

A three foot long theropod dinosaur, *T. cucurriens* is feathered rather than scaled, with a heavily plumed tail and a head crest, placing it in the recently identified clade of the *Ornithomimidae*, or bird-like dinosaurs. The males sport bold colors in their plumage in the early spring, but molt those feathers as soon as the mating season is over, returning to the same mottled browns and greys of the females. They find a good deal of their prey among the ties and gravel beds of the railroads, and are often seen skittering down the rails, chasing small lizards. Coveys of them scatter before the trains every few miles, bleating mournfully rather like a lost goat.

Some of the towns and villages find *T. cucurriens* useful, as they snap up mice and insects along with lizards, making them good for pest control. In these settlements, it's not unusual to see a few *T. cucurriens* wandering about, keeping together the way that birds do, looking rather like massively oversized and stretched-out chickens as they peck at anything that might be edible. Other settlements consider them a pest, due to their omnivorous diet and willingness to try eating nearly anything, and do what they can to keep *T. cucurriens* outside the walls. In New Islington, a few enterprising souls have constructed a stockade and are attempting to domesticate the species. They are edible, although I must agree with Tissgaxalos, a Saurid of my acquaintance, who said that they fill the stewpot if the hunting has not gone well otherwise.

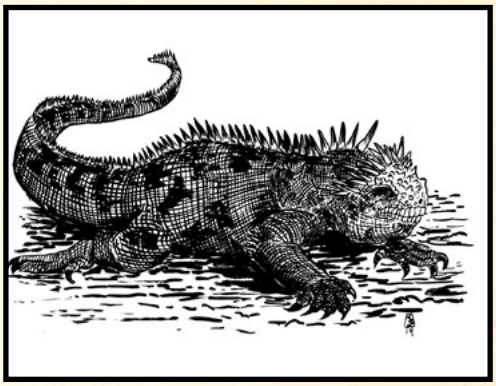
DEX: 7	**STR:** 4	**TOU:** 5
PER: 4	**WIL:** 3	**CHA:** 3
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 8	**Social Defense:** 4	
Damage:	**Physical Armor:** 0	
Peck (3):7	**Mystic Armor:** 0	
Death: 27	**Recovery Tests:** 2	
Unconsciousness: 22	**Knockdown:** 7	
Wound Threshold: 8	**Movement:** 13	
Adventure Award: Initiate Tier		

Reef Dragon

Animalia Chordata Sauropsida Squamata Iguanidae Thalassosayrus pseudopteroisis

Upon encountering the marine iguana of the Galapagos Islands, Dr. Darwin, repelled by their appearance, referred to them as "imps of darkness". I must wonder what he would think of the reef dragon, *T. pseudopteroisis*, although from what I hear of his health, I think it unlikely that my sketches and photographs will reach him in time. Certainly, while the marine iguana is a pugnacious, unattractive creature, not quite in the class of endearingly ugly in which we place the Pug and the English Bulldog, it stands well in the shadow of *T. pseudopteroisis*, a spectacular creature rendered all the more striking by the tremendous danger it presents.

Growing to nearly four feet in length, *T. pseudopteroisis* has the same basic physiognomy of its terrestrial relative, with a blunt head, a laterally flattened tail that propels it swiftly through the water, and legs not quite set underneath the body but lower down than the usual placement in the



lizard phenotype. Striped in red, orange, white, and black, *T. pseudopteroisis* can be seen from a considerable distance against the rocks of the seashore and in the water, and a very good thing that is. Where the marine iguana has a frill and dorsal ridge, *T. pseudopteroisis* sports a ruff of spines the length of my hand, and a spray of similar spines down its back and along much of the length of its tail. Smaller spines radiate from either edge of its mouth, and from all three joints of its legs. A bristle of spines adorns the end of the tail, which it wields like the bony club of an ankylosaur. If *T. pseudopteroisis* were thus protected like the American porcupine, that would be bad enough, but the spines of *T. pseudopteroisis* are envenomed. The poison takes effect within seconds. Smaller animals, small children, the elderly, and the infirm fall dead on the spot, struck down before an antidote can be administered. Strong men have wept and pleaded for an end to their lives while in the grip of the toxin. Besides fearful pain, radiating out from the point of introduction to inflame the nerves throughout the body, the victim suffers nausea, fever, convulsions, vertigo, impaired breathing, and alternating numbness and paresthesia in areas adjacent to the sting. Particularly severe reactions may include heart palpitations, chest pain, swelling of the tongue, and lethal breathing difficulties. Very little can be done for a person in the throes of such a poisoning, although some progress has been made in adapting the plant extracts used by the Saurids for human consumption. Differences in metabolism between human and Saurid preclude the direct use of the Saurid remedies, and human victims are advised that administration of such will only hasten their demise.

The Saurids harvest the reef dragon with great caution, and use its spine venom to coat their weaponry. Having such a toxic advantage allows them to defend their homes from the larger predators of the Gruv. An arrow head coated with *T. pseudopteroisis* poison shot into the mouth of a mordslanger sends the beast into convulsions within seconds, leaving it slightly easier to kill. Unfortunately, obtaining the venom is very nearly as dangerous as confronting the mordslanger without it.

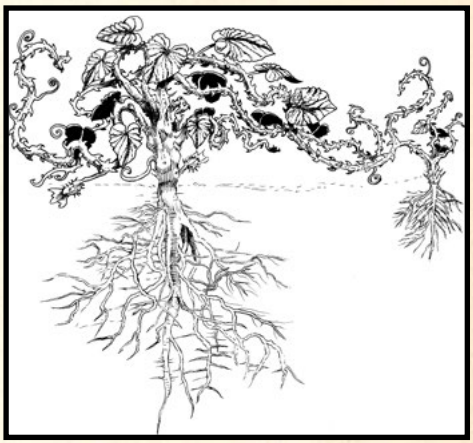
DEX: 8 **STR:** 10 **TOU:** 11
PER: 4 **WIL:** 5 **CHA:** 3
Initiative: 8 **Physical Defense:** 11
Actions: 1 **Mystic Defense:** 5
Attack (2): 12 **Social Defense:** 4
Damage: **Physical Armor:** 5
2 x Claw (7): 17; Tail Swipe (9): 19 **Mystic Armor:** 4
Death: 69 **Recovery Tests:** 5
Unconsciousness: 58 **Knockdown:** 18
Wound Threshold: 17 **Movement:** 8/9 *
Adventure Award: Journeyman Tier
* The second number is the creature's swimming movement rate.
Powers: Poison (Damage/Debilitating) 23

Rules

Any injury inflicted by the reef dragon injects poison due to the spines covering the creature. The Debilitation effect requires a Poison Effect Test once per minute for (22 minus the victim's Toughness value) minutes. If any Debilitation Effect Test scores no successes, no further Tests are to be made. If the cumulative penalty (-1 Step to all Action Tests per success) becomes greater than the victim's Dexterity, Strength, or Toughness Step, the victim dies. The Poison Damage Effect Test is made only once. Anyone affected by the Poison is incapable of using Skills that are Perception-based, or of Sustained Actions.

Ripping Creeper

Plantae Angiosperms Eudicots Caryophyliales Droseraceae Ancistrocladaceae laceratio



Perhaps my having resigned myself to eternal spinsterhood as the cost of my intellectual pursuits was for the best, for most assuredly the scars on my legs would render me less attractive to the usual specimen of man, more interested in the body than the mind. I fear that I owe Lt. Faversham my life, for if it were not for his quick wits, speed, and strength, most assuredly I would have ended my days as fertilizer, an ironic twist for one who has spent much of her life in the study of plants.

We were on a perambulation through the southern foothills, following a previously scouted path to see if it would be useful for someone like myself, of a physical condition more suited to parkland strolls than mountain climbing, when a rattling hiss drew my attention. Bringing my walking stick to bear and expecting something akin to the American rattlesnake, I failed to perceive the true nature of the threat. Alfred, Lt. Faversham that is, leapt forward, drawing his saber, and struck down just as the first vine wrapped about my ankle. I'm afraid the next few moments are rather a blur, as thorns tore through my walking skirt and into my calves, and I was thrown hard to the ground. I remember Alfred hacking at the vines that had entangled me, and addressing them with pulpit words not used in the Sunday fashion. The next that I knew, Alfred had carried me some distance back down the hill, and was tending to my injuries with a cloth and water from his canteen.

What I had run afoul of was a stand of ripping creeper, *A. laceratio*, which gathers its own fertilizer by wrapping passing creatures with its vines. Along the vines are thorns a good inch long, curved back toward the main body of the plant so as to make tearing free substantially more difficult and likely to cause severe bleeding. The vines can reach a length of eight to ten feet, approximately a half inch in thickness at the tip and three to four inches at the base, where they connect with the squat, barrel-shaped main stem. Given that our route had been surveyed only two weeks previous, *A. laceratio's* growth rate must be prodigious to have produced so large and aggressive a specimen in such a short time.

Further observations, made from a prudent distance and after I had a few days to heal so that the stress of the climb would not reopen my wounds, show that *A. laceratio* reproduces much in the manner of the wandering jew or spider plant, throwing out a long vine with a potential new plant

at the tip. Once the new plant is properly rooted, the vine attaching it to the parent withers and drops away, and the process begins again. Lt. Faversham was courageous enough to procure a fresh vine sample from a small plant. Examination shows that the movement is created by rapid pumping of water through the vine's tissues, causing sections to contract or expand in a fashion similar to the muscle tissue of the animalia. This movement uses large amounts of energy, which *A. laceratio* must replenish from the stores in the central stem. Experimentation has shown that this limits A. laceratio to no more than three attacks in an hour, and then only during the hours of daylight. At night, with no ready source of energy renewal, the plant may make a single attack, but then must wait until dawn to replenish itself and regain its mobility.

Taking advantage of this vulnerability, we have obtained juvenile specimens for observation. Pruning shears are sufficient to keep the vines down to a few inches in length, but a single day without trimming the plants could prove dangerous. I shall request a greenhouse assistant, to ensure that this sort of routine task is handled when I am not available, either due to field work or recuperation from the same. Captain Statham of the Medical Corps has expressed considerable interest in what extracts might be made from the vines and the central stem, comparing A. laceratio loosely with cacti. His research alone will require large quantities of cuttings and whole plants. With careful attention, a field of ripping creeper could possibly be established as a defensive barrier. I must, however, recommend strenuously against importation of seed or live specimens to our world. The peril if *A. laceratio* were to escape into the wild should be obvious.

DEX: 8	**STR:** 9	**TOU:** 7
PER: 4	**WIL:** 8	**CHA:** 4
Initiative: 8	**Physical Defense:** 11	
Actions: 2	**Mystic Defense:** 5	
Attack (3): 12	**Social Defense:** 5	
Damage:	**Physical Armor:** 6	
Thorn Whip (5): 14	**Mystic Armor:** 3	
Death: 59	**Recovery Tests:** 3	
Unconsciousness: 49	**Knockdown:** NA	
Wound Threshold: 11	**Movement:** NA	

Adventure Award: Journeyman Tier

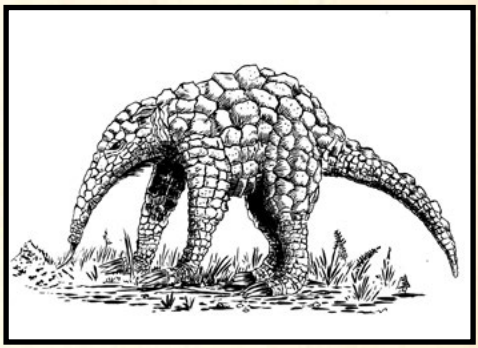
Powers: Durability (3), Silent Walk^{S} (2): 10; Unarmed Combat^{S} (3): 11

Rocky Anteater

Animalia Chordata Mammalia Xenarthra Pilosa Vermilingus Myrmecophaga terrestarmatus

Prey engenders predators, or so the Darwinist dictum would have it. Looking at the rocky anteater, I can find no other reason for its existence save for the galvanant. Certainly, without an electrical prey, a predator would not need to be capable of absorbing electricity itself.

Standing approximately two feet high at the shoulder, and measuring nearly five feet in length including its prodigious snout, *M. terrestarmatus* in general physiognomy resembles the terrestrial giant anteater (*M. tridactyla*). It has the same long, sticky tongue, the same heavy claws on the fore paws. There, however, the resemblance ends. Where its Earthly cousin has long, thick fur, to prevent the ants it dines upon from getting to its skin and driving it away with hundreds of tiny bites, *M. terrestarmatus* has armor plating, vaguely in the style of a pangolin. Instead of neatly shaped overlapping scales resembling Roman armor, though, *M. terrestarmatus* has lumpy, irregularly shaped scales that misled those observers who first beheld it into believing that the



anteater had somehow glued rocks to its body, hence the common name. These scales contain a substantial amount of iron and silica, in layers that provide insulation to the anteater, and allow it to both store and discharge electricity. Further study is required, but I suspect that *M. terrestarmatus* somehow processes the sand and gravel that inevitably cling to its tongue along with its prey, routing the mineral content to its epidermis. The upshot of all this, of course, is that *M. terrestarmatus* can safely consume galvanants, accumulating the charge released for later use in its own defensive discharge. Anything, or anyone, touching a rocky anteater without its permission receives a substantial jolt, enough to put a grown man in hospital with severe burns and nerve damage.

The good news is that *M. terrestarmatus* only stores enough electricity for two or three such jolts. Lt. Faversham and I were able to capture a live specimen by dint of using grounded metal poles to drain off the creature's energy, rendering it safe to lasso and pop into a cage. We quickly found that, deprived of its stored charge, *M. terrestarmatus* seeks to replenish it, and that carrying such a charge is apparently necessary for its well being. Kept away from its favored prey, *M. terrestarmatus* becomes sluggish and loses interest in food. I believe it is safe to assume that death would follow, but was not willing to let my specimen starve to death to find out, and so provided it with a box of galvanants forthwith.

The bad news is that *M. terrestarmatus* will seek to replenish its charge from any handy source. In nature, there are very few. In human civilization, there are many. Batteries, generators, telegraph lines – so many things carry electricity in our world these days. The mechanics have started fitting cover plates and metal shrouds to keep *M. terrestarmatus* away from the batteries in our vehicles, used (so I am told) to ignite the coal stream in a microsteam injection engine. The Prussians have been especially plagued, given their greater use of electricity. A report came to us of the generator for one of the electrical lances at Torgau Freistadt failing. Upon investigation, a charred *M. terrestarmatus* was found with its tongue wrapped around part of the generator. Apparently the poor creature attempted to recharge itself from a source much too strong for it to handle, resulting in its death and considerable damage to the equipment. Lt. Faversham has been rather grumbly about this. It's bad enough, he told me, that you have to keep the wild animals out of your water and your rations when encamped, but now we have to keep them out of the arc-light batteries and engine compartments.

DEX: 6	STR: 10	TOU: 11
PER: 5	WIL: 7	CHA: 4
Initiative: 6	Physical Defense: 8	
Actions: 1	Mystic Defense: 7	
Attack (1): 11	Social Defense: 5	
Damage:	Physical Armor: 9	
2 x Claw (9): 19	Mystic Armor: 5	
Death: 69	Recovery Tests: 5	
Unconsciousness: 58	Knockdown: 17	
Wound Threshold: 17	Movement: 7	

Adventure Award: Novice Tier
Powers: Crackling Armor (5): 12; Lightning (5): 12
Rules
The Rocky Anteater can only use its Crackling Armor and Lightning powers a total of 1d4 times before running out of charge. Thus, if the die result is a 3, the creature could use one power twice and the other once. A Rocky Anteater kept from replenishing its charge, either through its normal diet or other sources, becomes *Fatigued* (pg.231) and takes Step 6 Strain every eight hours.

Sabertooth

Animalia Chordata Mammalia Carnivora Feliformia Nimravidae Plagisilium edwardii

The Gruv sabertooth, *P. edwardii*, is not actually a true cat, but a predecessor, of the *Nimravidae* family, as identified by Dr. Edward Drinker Cope in the Great Bone Rush of the American West. The *Nimravidae* have shorter legs and a shorter tail than the *Felidae*, but the most readily noticeable difference is in their ears. True cats have an external structure that houses the middle ear, resulting in a rigid base, and the entire ear swiveling as a unit. The ears of the *Nimravidae* have a cartilaginous structure, with the middle ear being internal to the skull, resulting in a more flexible ear that bends and swivels at the same time. Identification of this species in the Gruv validates Dr. Cope's classification of the family from the American fossils, putting paid to Mr. Marsh and his attempts to discredit Dr. Cope by using wealth as a substitute for science.

Something that was not indicated in Dr. Cope's fossils was the coloration. *P. edwardii* bears a remarkable pattern of stripes across its flanks and posterior, somewhat resembling a thylacine in that regard. Its forequarters are pale brown, the combination of which allows the sabertooth to lie partially in shade and blend in at the edge of any patch of vegetation. An ambush hunter, *P. edwardii* waits for its prey to venture out into the open, away from cover, then makes a dash and pounce, using its long, dagger-like canine teeth to sever an artery, preferably in the neck, then standing off and waiting for its victim to bleed to death before moving back in to feed. *P. edwardii* is a social animal, living in prides like lions. Hunting parties flank the target, with some individuals fanning out behind the intended prey and others moving ahead into the likely escape route. The first to eat their fill then take pieces of the prey back to the denning area for the kits. When hunting alone, prey tends to be restricted to large birds and small mammals, but prides prefer to take on animals their own size or larger, which can include (and sadly, has) children and even adults of both the human and Saurid races. Males in rut, which occurs in the early fall, become highly territorial, and will attack anything that moves, consistent with the behavior of terrestrial large cats.

Lt. Faversham has thus far resisted my attempts to organize an expedition to capture a pair of sabertooth kits. I keep telling him that I have no interest in pets, and want them to send to Dr. Cope, but he doesn't seem to be able to see past his preconceptions of women and juvenile animals.

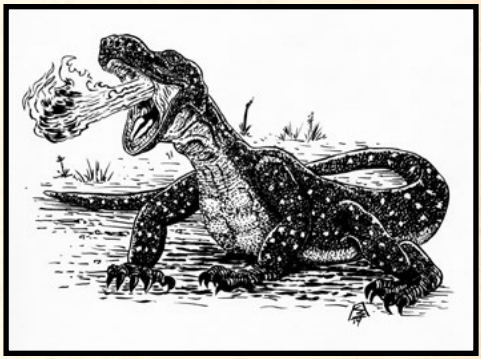
DEX: 7	**STR:** 8	**TOU:** 6
PER: 5	**WIL:** 5	**CHA:** 3
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 7	
Attack (3): 8	**Social Defense:** 4	
Damage:	**Physical Armor:** 3	
Bite (9): 17; 2 x Claw (4): 12	**Mystic Armor:** 2	
Death: 34	**Recovery Tests:** 3	
Unconsciousness: 28	**Knockdown:** 9	
Wound Threshold: 9	**Movement:** 7	

Adventure Award: Novice Tier

Powers: Climbing^{S} (3): 10, Enhanced Senses (Listen, Sight) (2): 5, Great Leap^{S} (4): 11, Heat Sight; Low-Light Vision; Silent Walk^{S} (3): 10, Sprint^{S} (5), Tiger Spring^{S} (5)

Salamander

Animalia Chordata Reptilia Squamata Varanidae Varanus phlogistens



Some debate exists as to whether the salamander is a naturally-occurring species, or if the species was created by selective breeding by the Saurids, with the specimens in the wild being the feral descendants of escaped domesticated beasts. I myself question the use of the term "domesticated" in that sentence, as I am not completely convinced that the Saurids have actually tamed their salamanders. They occupy much the same social and cultural niche as British hunting hounds, dogs bred not for companionship but for controllable savagery.

In physiognomy closely resembling the Terrestrial monitor lizards, the crocodile monitor and the Komodo monitor, as well as fossil specimens discovered by Sir Richard Owen, *V. phlogistens* matures at a length of seven to eight feet, including the tail, and a height at the shoulder of two feet. Little sexual dimorphism is present, other than enlarged bony crests over the eyes in the male, and a change in coloration during the mating season, when the males turn a brilliant scarlet for a few weeks. They are highly agile, having been noted to climb trees, swim like a crocodile, dive to the bottom of streams later measured at a depth of fifteen feet, and run at speeds equal to a horse at a canter or jog. Carnivores like all such lizards, *V. phlogistens* has an offset double row of serrated teeth. These create a sawing effect when the animal grips its prey and shakes its head, rapidly and effectively removing the bit grasped. Both fore and hind limbs sport heavy non-retractable claws. Similar to the crocodile monitor and the true crocodile, the dorsal surfaces are armoured with osteoderms, while the underside has overlapping transverse plating.

What truly differentiates *V. phlogistens* from all other members of its family is its digestive system. Where a crocodile or monitor lizard has a highly acidic digestive tract, allowing it to quickly break down large chunks of animal flesh and bone, *V. phlogistens* has a triple stomach system like a ruminant. Digestion requires more time, and produces considerable amounts of intestinal gas, which

is stored in the first stomach and used as a weapon. A small pair of electrocytic glands in the lower mandible, directly behind the incisors, create electrical potential. When faced with a particularly tough opponent, *V. phlogistens* belches up its accumulated digestive gas, ignites it with a spark from the electrocytic glands, and exhales a cloud of fire. The Saurids prize **V. phlogistens** for this ability, and may well have bred it from some presumably extinct wild predecessor specifically for it. With training, and the supervision of a skilled handler or packmaster, *V. phlogistens* presents a formidable opposition to the Samsut's undead infantry. Belching forth volleys of flame in rotation, projecting the burning gas up to twenty feet in distance or up to ten feet across, a pack of *V. phlogistens* can put paid to a platoon of skeletons or stinkers in a matter of seconds. The volley, unfortunately, is not repeatable more than twice, as *V. phlogistens* requires considerable time to build up more digestive gas.

Lt. Faversham believes that the British military should send some of its men to be trained as packmasters by the Saurids. While I concur that packs of *V. phlogistens* are effective against the Samsut, I pray that the kennels for any British packmaster units are built several miles downwind. The miasma produced by the Samsut stinkers is horrid, a charnel-house putridity of violent unwholesomeness, but the stench of the fire produced by *V. phlogistens* is nearly as awful, the pong of a burning sewer in high summer. Given a choice to be made between one and the other, I would find it difficult to select the lesser of the two evils.

> What difference does it make if you've to wear a miasma mask anyway? D'ruther have t' salamanders myself, and I agree wi' t' Lt. Let's get it started.
>
> Sgt. Brown

DEX: 8 | **STR:** 7 | **TOU:** 9
PER: 4 | **WIL:** 8 | **CHA:** 7
Initiative: 8 | **Physical Defense:** 11
Actions: 1 | **Mystic Defense:** 5
Attack (2): 11 | **Social Defense:** 10
Damage: | **Physical Armor:** 7
Bite (5): 12; 2 x Claw (4): 11 | **Mystic Armor:** 4
Death: 55 | **Recovery Tests:** 4
Unconsciousness: 46 | **Knockdown:** 15
Wound Threshold: 14 | **Movement:** 9
Adventure Award: Novice Tier

Powers: Breath Weapon (Fire) (7): 15; Climbing^{S} (3): 11; Enhanced Senses (Smell) (2): 6, Swimming^{S} (4): 12; Sprint^{S} (2)

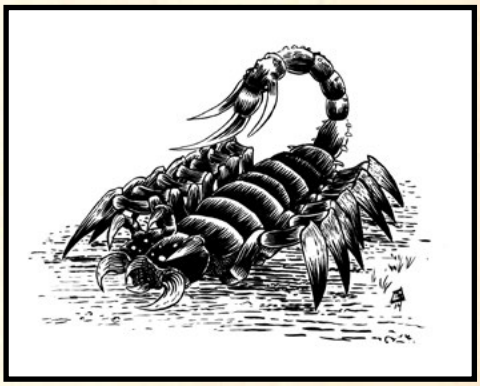
Rules

Salamanders may only use their Breath Weapon twice in any 8 hour period.

Scorpiodied

No Acceptable Taxonomy

One expects a plant or animal to pick a single type of symmetry and stick with it. We humans exhibit bilateral symmetry, having our left and right sides as mirror images. Many other species, from butterflies to baboons, exhibit this same sort of bilateral reflective symmetry. Starfish



are rotationally symmetric, their limbs iterating in progression about a central hub. Many species of plant exhibit helical symmetry, with their leaves spiraling about a central stem. Often, this will combine with reflective symmetry, where the leaves themselves can be folded on a central axis to show that each side mirrors the other.

Combining bilateral, trilateral, and rotoreflective symmetry in a single creature is, however, simply too much. One wonders if, long ago, the biological weapons designers of the Grosvenor Land engaged in a bit of one-upmanship, the sort of absurd competitiveness that men sometimes indulge themselves in, with the scorpiodied being the end result. One imagines the women of the time shaking their heads, and telling the men fine, as long as you don't let it loose in the house, and off the scorpiodied went to the remote desert, with no expectation that something so ungainly could possibly survive.

And yet here it is. Two feet long, if one doesn't unfurl the metasoma, eight to ten inches wide, and with metasoma raised to the striking position, a foot and a half high, the scorpiodied makes life miserable for everything else trying to survive in the dry lands of the eastern Gruv. Voracious eaters, these small terrors will happily devour anything that can't shake them off, including each other, using the three chelicerae that surround the head to snare their prey, the four fangs that surround the mouth at top, bottom, and sides to inject a combination of paralytic toxin and digestive juices, and the tooth-like projections lining the oral opening proper to keep bits from escaping as it's shoveled frantically in. The long central spine and two smaller, flanking barbs on the metasoma have no poison glands, but serve quite well as fighting equipment, being not only wickedly pointed on the tip but sharp on the edges. Seven pairs of motive legs, each attached to an independently jointed section of the exoskeleton, grant the scorpiodied not only excellent stability, but considerable speed and grasping power.

Prolifically reproductive, the female scorpiodied need only mate once to be able to lay multiple clutches, storing the male's seed for future use. Considering that she tends to eat her mate after completing fertilization, this enhances the survivability of the species. The eggs hatch in approximately a month, releasing nymphs an inch long, which, like most similar species, dine on each other until the strongest and swiftest are sated or flee the scene. They molt repeatedly until full growth is achieved, assuming that they survive that long. Quite a few species of bird and several of the Concamerata happily dine on young scorpiodieds. Not nearly enough, however, if one asks the soldiers who must patrol the land, or the cavalrymen whose mounts have been lamed or killed, or the prospectors who sometimes return with mineral wealth and wild tales but more often are never seen again. As far as the adults go, their only natural enemies are each other, as very few creatures beyond the largest Concamerata will take the risk necessary to make a meal of a full grown scorpiodied. Fortunately, they aren't large enough to be resistant to small arms fire, which has led to their use for target practice by the desert patrols. Lt. Faversham tells me that bored junior officers place wagers as to who can kill the most before the senior officers tell them to stop wasting ammunition.

DEX: 9	**STR:** 7	**TOU:** 8
PER: 3	**WIL:** 6	**CHA:** 4

Initiative: 9
Actions: 1
Attack (2): 9
Damage:
Bite (4): 11; 2 x Claw (5): 12
Death: 48
Unconsciousness: 40
Wound Threshold: 12
Adventure Award: Novice Tier
Powers: Poison (Paralysis): 14
Physical Defense: 13
Mystic Defense: 4
Social Defense: 5
Physical Armor: 5
Mystic Armor: 2
Recovery Tests: 4
Knockdown: 13
Movement: 8

Rules

Scorpiodieds will attack the closest Wounded target by preference, whether it's a prey animal, a person, or another scorpiodied. Any Bite attack that does damage injects Poison.

Shardraqx

Animalia Arthropoda Chelicerata Concamerata Nefarispinum Valenvenatorus Parvamatus achmedii

Tracing the etymology of the common name led me eventually to the conclusion that this was a particularly egregious example of hanklyn-janklyn borrowing, the result of a soldier of Arabic descent attempting to transcribe the Saurids' word for the creature. The Q is pronounced rather like the CH in German, at the back of the throat, making the transition to the final X nearly impossible for native English speakers. Unfortunately, as common names are wont to do, it has passed into general usage, and renaming the creature with something that fits a little better into an Englishwoman's mouth is simply not possible.

P. achmedii would be less of a problem itself if it occurred in the singular. Being approximately the size of a Welsh corgi, one man with an Enfield can make short work of one shardraqx. Unfortunately, shardraqxi hunt in coveys of two dozen or more, and use swarming tactics to bring down large prey. The forelegs carry heavy armor and talons, suitable for fighting and ripping at prey, while the three pair of motive legs end in long, sharp spines. The tail has no stinger, but instead a curved blade with a sharp inner edge. The chelicerae curve toward each other, narrowing abruptly to sharp points. The repetition of "sharp" should indicate why this creature resides in the *Nefarispinum* order. When attacking its prey, *P. achmedii* drives its motive legs into the victim's flesh for anchoring, and rips with both chelicerae and tail blade. If counterattacked, it lets go and drops off, to climb back up for another attack while the prey is dealing with the rest of the swarm.

Study of the life cycle has been simple enough. *P. achmedii* lays eggs in a spot warmed by the sun, kicks a bit of sand over them, and strolls off, leaving the eggs and subsequent hatchlings to fend for themselves. Like most arachnid species, the hatchlings devour each other until only the strongest remain, then set forth in search of better prey, becoming a new covey. Gestation runs

approximately seventy days, during which the eggs are vulnerable to cold and predators, for which we may give thanks, as otherwise the Gruv might be overrun.

As a side note, it would seem that the Saurid warriors use the eggs for a particularly rough sort of humor, involving sneaking an egg close to hatching into a rival's meditation hut or other private retreat. I am given to understand that our own soldiers have proposed delivering the eggs by the boxful to the Samsut.

DEX: 6	**STR:** 7	**TOU:** 5
PER: 4	**WIL:** 4	**CHA:** 3
Initiative: 6	**Physical Defense:** 8	
Actions: 1	**Mystic Defense:** 5	
Attack (3): 9	**Social Defense:** 4	
Damage:	**Physical Armor:** 4	
Bite (5): 12; 2 x Claw (4): 11; Tail Strike (6): 13		**Mystic Armor:** 2
Death: 27	**Recovery Tests:** 2	
Unconsciousness: 22	**Knockdown:** 9	
Wound Threshold: 8	**Movement:** 9	

Adventure Award: Journeyman Tier

Powers: Climbing^{S} (2): 10; Maneuver^{S} (4): 10; Sprint^{S} (5); Unarmed Combat^{S} (Grapple Only) (5): 11

Rules

Shardraqxi attack in swarms of 8-32 (4d8). Against targets larger than themselves, they make a Climbing Test against their target's Physical Defense, then a Grappling Test to anchor themselves to the target, then use a claw-claw-tail strike attack the next combat round. For determining if the target is Harried, 2 shardraqxi count as one human-sized opponent, so 6 are required before the target is Harried. If damaged, shardraqxi let go of their target and drop to the ground, then Maneuver for a better strike the next combat round.

Sihrstuulah

Animalia Chordata Sauropsida Pterodactyloidea Pterosauria Azhdarchidae Simurghopterus sihrstuulah

If "jabberwock" hadn't already been in use, perhaps we might not have tried so hard to render the Saurid term for their flying mounts into something that fits into an English mouth and onto paper. Even from a distance, the sihrstuulah is terrifying. I have politely declined the offers of the Saurid cavalry officer to inspect his mount up close. Given Lt. Faversham's reaction while translating, I suspect that there was something ungentlemanly in the Saurid's phrasing.

Much closer to the pterosaurid than the avian, *S. sihrstuulah* measures twenty-five to thirty feet long from beak tip to clawed feet, with a wingspan thirty feet across or more. On the ground, it travels on all fours, walking on the second joint of the wing with the third section folded up, giving it a nightmarishly giraffe-like appearance, if giraffes were carnivores that stabbed or plucked up their prey with five-foot-long sharply pointed beaks. *S. sihrstuulah* has neither scales nor plumage, its wings being naked membranes and the body covered in pycnofibres, a hairlike protofeather vaguely similar to that found on the kiwi, but non-branching. The head is adorned with a bony, inflexible crest, the most prominent trait of sexual dimorphism shown in the species. Females have a small crest, dark green most of the year, that turns blue for a few days when the beast is ovulating. Males, on the other hand, sport a large, showy crest, a dull orange most of the time, that turns brilliant

red during the mating season, and can turn red at any time when the beast is enraged, which appears to be often. A Saurid phrase loosely translated as "flaunting red" indicates that the person's anger and readiness to fight are clearly visible to everyone, and that caution might be advised.

While *S. sihrstuulah* does exist in the wild, in the far west of the Gruv and apparently, from Saurid reports, in the land across the Straits of Darwin, it is principally encountered as mounts for Saurid warriors. The Saurids have been breeding *S. sihrstuulah* for many generations, and have quite a few legends involving airborne warriors, their battles, and their adventures. Recently, a breeding and training program has begun here at Fort Alice, to see if British cavalry can learn to ride flying mounts. I begin to fear that my advice at a distance will not be sufficient, and that at some point I shall be requested to visit the stables and put forth an opinion on the care being provided.

DEX: 8 **STR:** 9 **TOU:** 9
PER: 5 **WIL:** 7 **CHA:** 6
Initiative: 8 **Physical Defense:** 11
Actions: 1 **Mystic Defense:** 7
Attack (1): 11 **Social Defense:** 8
Damage: **Physical Armor:** 0
Peck (4): 13; Claw (3): 12 **Mystic Armor:** 0
Death: 55 **Recovery Tests:** 4
Unconsciousness: 46 **Knockdown:** 13
Wound Threshold: 14 **Movement:** 5/14 *
Adventure Award: Novice Tier

* The second number is the creature's Flying movement.

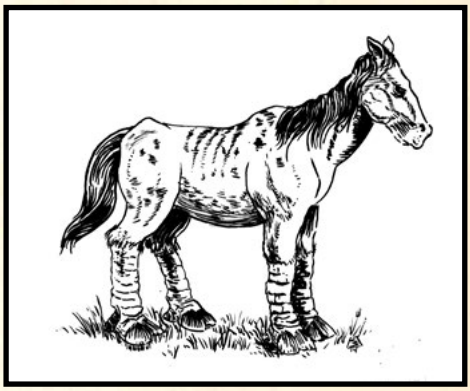
Powers: Cobra Strike^{S} (3): 11; Down Strike^{S} (3): 12; Enhanced Senses (Sight) (5): 11

Sisnapishtu

Animalia Chordata Mammalia Perissodactyla Equidae Equus banunapishtu

I have not observed living specimens myself. The following is condensed from field reports by military officers and civilian observers, some of whom have traveled into the Samsut lands under flag of truce or as ambassadorial delegations.

Thousands of years ago, the ancestors of the Samsut brought horses from Earth when they migrated to the Gruv. Over the centuries, they attempted to interbreed these somewhat fragile animals with local stock to improve their hardiness and adaptation to the Samsut homeland. These attempts failed until the Samsut mastered the Life-Giver technology. Two breeds resulted, one being the still-recognizable sisnapishtu, translated into English as "the horse given the breath of life".



In physiognomy strongly resembling the original Terrestrial breeding stock, the sisnapishtu has a few obvious differences and several that are not apparent without extended observation. The animal's neck is slightly longer than the usual for the domesticated horse, and a bit more muscular to compensate. Its jaws are more heavily muscled, to handle the tougher grasses of the Gruv. Its legs are thicker, with tough, rhino-like hide over the lower portions, and thicker, harder hooves, to survive both the sharp edges of the prairie grasses, and the occasional small predator that will bite something much larger than itself.

More significantly, the sisnapishtu has better forward vision, its eyes being set more closely together so that it has no blind spot, better color perception and more sensitive night vision than its Terrestrial ancestor. Its digestive tract is more efficient and less prone to colic and torsion. Sisnapishtun can survive on half the feed of a horse, with half the chance of developing health problems from feed or posture. The ability to regurgitate, missing in the Terrestrial horse, was bred in, along with an additional stomach, turning the sisnapishtu into a ruminant, able to chew its cud, and reject bad feed instead of having to try to digest it and possibly die in the attempt. This also means that the sisnapishtu, like the camel and the llama, can spit its cud if annoyed.

No further work, other than standard bloodline tracking and farm breeding, is being done with the species. Under the laws of the Balance, the Samsut do not employ the Life-Giver for manipulating living animals for hybridization purposes.

DEX: 7	**STR:** 10	**TOU:** 10
PER: 5	**WIL:** 7	**CHA:** 6
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 7	
Attack (2): 10	**Social Defense:** 8	
Damage:	**Physical Armor:** 3	
Bite (4): 14; Trample (4): 14	**Mystic Armor:** 3	
Death: 62	**Recovery Tests:** 5	
Unconsciousness: 52	**Knockdown:** 15	
Wound Threshold: 15	**Movement:** 10	

Adventure Award: Novice Tier

Powers: Acid Spray (3): 10; Enhanced Senses (Listen, Smell) (2): 7, Great Leap^{S} (2): 9; Low-light Vision; Shake It Off (3): 13; Sprint (4)

Rules

Sisnapishtun are never encountered in the wild. Any herd encountered in the Edeesmatu is a stock herd belonging to a Samsut breeder, and will normally be accompanied by guard animals and a handler or two.

Sissetbandura

Animalia Chordata Mammalia Artiodactyla Entelodontidae Seniopodae equiformes

As with the sisnapishtu, I have made no direct observations of this species, but have relied

on the field reports of military officers and civilian observers. Verification of these reports by qualified scientific observers has not yet occurred.

When the Samsut mastered the Life-Giver technology, one of the purposes toward which they directed its power was hybridization. Animals brought to the Gruv from Earth do not always survive, partly due to the unfamiliar food sources, and partly due to predation. As has been noted, the Gruv is rich in large predatory species. Profligate use of the Life-Giver allowed the Samsut to hybridize their horses with the ravager pig, a feat simply not possible without excessive technological intervention. The result they named the sissetbandura, translating roughly as "built with six legs", which accurately describes the beast.

Low-slung and heavy-bodied, the sissetbandura has everything required to survive in the Gruv: impressive teeth (both molars and incisors) backed up by massive jaw muscles, the ability to digest any plant or animal put in front of it, hide sufficiently tough to turn a dagger thrust, and a pugnacious attitude that brooks no nonsense. Facially resembling the pig more than the horse, its eyes are directed forward, over a short, heavy snout. The males sport tusks a handspan in length, like those of a boar, which the Samsut usually leave in place, being useful in a war mount. The bridle used with the sissetbandura has no bit, but instead clips that connect to rings put through the nostrils, as the beast's mouth simply isn't that sensitive and its jaws could chew through anything less than tool steel. The coarse, heavy mane begins at the top of the head and ends at the forward withers. Coat color varies from light brown to dark brown, with the mane a uniform black. The muscular, relatively short legs end in a broad split hoof, evidence of two toes and thus the classification into the *Artiodactylae*.

The central pair of legs connect to a shoulder girdle more closely resembling the withers than the hips, suspending a good deal of the creature's body weight at the midpoint of its spine. This has the advantage of giving the beast a good deal more load-bearing capability, but does present problems as to where the rider is to sit. Two solutions to this problem have been developed, neither completely satisfactory. The forward saddle puts the rider between the forward and central withers, resulting in a jolt from behind at each step of the central legs. The space between the central withers and the hips tends to be used for cargo in this arrangement. Riders using the forward saddle are generally found in the pack train, or in a support capacity with field troops, being more mobile than a wagon or cart. The aft saddle puts the rider between the central withers and the hips, a bit closer to the traditional seat of horseback, but with the shorter body length between withers and hips, the saddle feels crowded, and the central legs impart a rolling motion to the gait that is difficult to adjust to for a trained horseman. In this arrangement, the forward withers tend to be used as a hardpoint for a large, pintle-mounted railgun or other weapon. Aft-saddle riders are thus the equivalent of mobile artillery, carrying a gun roughly equivalent to a three-pounder cannon. No satisfactory arrangement has been made, or at least seen, to allow carrying a heavier gun, as the combination of weapon, rider, and ammunition exceeds the carrying capacity of a single animal.

Again similarly to the sisnapishtu, the sissetbandura was the result of substantial Life-Giver usage, and is only seen in the more radical city states, the ones who desire more use of the Life-

Giver, and have been campaigning to bring back contra-gravity artillery. Observing this beast in the field means that one is dealing with Samsut who find the Balance restrictive, and may press the boundaries of their culture and laws in other ways.

DEX: 8	**STR:** 11	**TOU:** 10
PER: 5	**WIL:** 7	**CHA:** 6
Initiative: 8	**Physical Defense:** 11	
Actions: 1	**Mystic Defense:** 7	
Attack (3): 11	**Social Defense:** 8	
Damage:	**Physical Armor:** 7	
Charge (12): 23; Tusks (8): 19	**Mystic Armor:** 4	
Death: 92	**Recovery Tests:** 5	
Unconsciousness: 77	**Knockdown:** 17	
Wound Threshold: 15	**Movement:** 9	

Adventure Award: Journeyman Tier

Powers: Charge (6); Durability (5); Enhanced Senses (Listen, Smell) (2): 7; Momentum Attack^{S} (3): 11; Shake It Off^{S} (3): 13; Sprint^{S} (4)

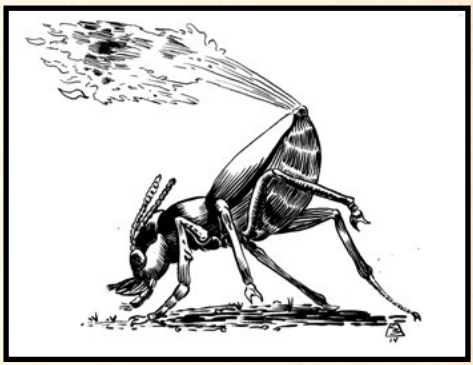
Loot: Tusks worth 3d10 pounds

Rules

Sissetbandurun are never found in the wild. The Samsut keep very close control of their breeding stock and trained mounts.

Sparker

Animalia Arthropoda Insecta Coleoptera Carabidae Concameratae Megalogaster luciferens



The Terrestrial bombardier beetle secretes hydrogen peroxide and hydroquinones, storing these volatile compounds in sacs in its abdomen. When threatened, it mixes the two with an assortment of catalytic enzymes in a combustion chamber, the result being to fire a burst of boiling, foul-smelling liquid at whatever has provoked the insect.

The sparker, *M. luciferens*, about the size of a man's fist, related to the Concamerata and given a similar family name, takes the effect one step further. Sparkers, when threatened, turn about and let fly with a mixture of fluids from glands at the base of the thorax. They do not have a combustion chamber for tolerably obvious reasons. While assaying is not complete, initial results suggest that one fluid contains complex hydrocarbons, similar to a mix of kerosene and creosote, while the other is rich in phosphorus, which as any chemist worthy of the name knows combusts upon exposure to air. The resulting spray of fire and sparks, about what you'd get if you violently waved a torch, generally dissuades enemies. Some predators have learned to pounce and retreat a few times, exhausting the sparkers' ammunition supply, at which point they make for easy prey.

Unfortunately, sparkers feel threatened by a horse putting a hoof down within arm's reach, or a man walking by a little too closely. Sometimes they just seem to be having a particularly trying day, and vent their frustration on anything passing within range. The sticky, burning fluid they eject

does not douse with water, requiring smothering to extinguish it. This has put a number of soldiers and field workers into hospital, a few into the cemetery, and killed several draft animals. Trying to work out a way of detecting a threat that appears to be a large stone until it explodes has proven difficult.

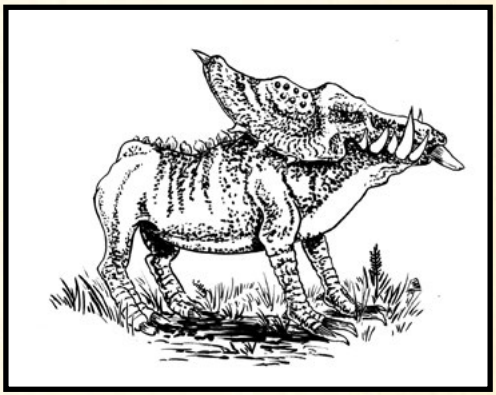
DEX: 6	**STR:** 3	**TOU:** 4
PER: 4	**WIL:** 3	**CHA:** 4

Initiative: 6
Actions: 1
Attack (1): 4
Damage:
Bite (2): 5
Death: 20
Unconsciousness: 16
Wound Threshold: 6 Movement: 4
Physical Defense: 8
Mystic Defense: 5
Social Defense: 5
Physical Armor: 2
Mystic Armor: 2
Recovery Tests: 2
Knockdown: 6
Adventure Award: Initiate Tier
Powers: Spellcasting (5): 9; Spell: Bolt (Fire burst, Range 5 feet, Effect Step 8)
Rules

The sparker's Fire Burst can only be used a maximum of 3 times in any 8 hour period. Any person, creature, or object hit by the Fire Burst continues to take the Effect Step in damage per round for 1d4 rounds, unless the fire is smothered.

Spikejawed Sandhog

No Acceptable Taxonomy



If one needed further evidence that at some point in the history of the Grosvenor Land party or parties unknown tinkered with the lifeforms, creating biological weaponry and releasing a variety of annoyances into the wild, one need look no further than the spikejawed sandhog. Gaining its name from its most pronounced anatomical feature and its determined burrowing, "sandhog" being lower class slang for a tunnel excavation worker, this creature combines features of saurids and insectoids in a way that I simply cannot believe occurred naturally. The backswept frill at the rear of the cranium and the serrated bony protrusions along the spine suggest a ceratopsian, or frilled saurid, but the skull lacks a rostral bone, and the creature has no tail at all. Tusks flank the lower mandible, in a profusion of spikes with no real order to them, coming very close to blocking access to the mouth. A single fang, centrally placed at the center of the upper mandible, originally suggested a downward-pointing horn, and possible relation to the ceratopsians, but proved to be a tooth, not either a proper horn nor a keratinaceous structure like the horn of a rhinoceros. Sixteen eyes adorn the top of the skull, twice the complement seen in the arachnidae, in two sets of seven to either side of the centerline, and two larger eyes set along the sagittal crest in a vertical

alignment that precludes their being used for depth perception. The beast's hide resembles a reptile more than a rhinoceros or elephant, pebbled like that of a snake rather than scaled like a saurid.

While this conjunction of features, and the lack of any creature even vaguely similar thus far to be located, precludes placing the sandhog in any currently defined taxonomic class, it does create a formidable problem for anyone or anything confronting the beast. The young hatch from eggs roughly the size of a peck basket, hungry and ready to fight within minutes of emergence. They grow to roughly six feet in length for the males, and eight for the females, devouring anything that doesn't move faster. The tusks, while too cumbersome to be really useful in battle, excel at excavation. Between those and the heavy claws on its two-toed feet, the sandhog can rip through hardpan and soft stone the way I can toss aside soft loam with a trowel. I have met badgers that were less irascible than a female sandhog guarding a nest. Trying to remove a nesting female, who odds on has dug her burrow under a railway or in a farmer's field or underneath a livestock barn, presents a considerable challenge. When attacked, the female not only fights savagely, but sets up a piercing shriek that calls every male within hearing range to her defense. Establishing a perimeter with heavy guns becomes a necessity before engaging the primary target. If one were to try to design a creature to inflict maximum annoyance upon one's enemies, were it to be loosed within their lands, one would be hard pressed to come up with something better than the sandhog. I really must petition the Society to fund a research team dedicated to uncovering the origins of these beasts. Lt. Faversham tells me that the military may be interested in funding such work, as locating the enemy's stronghold, even if they are long since gone from this world, would tell us much about what we are facing.

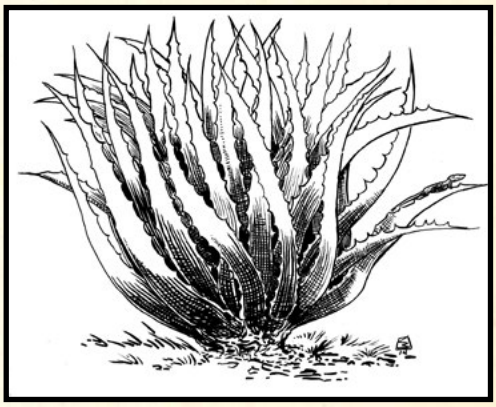
DEX: 6 **STR:** 11 **TOU:** 11
PER: 3 **WIL:** 7 **CHA:** 5
Initiative: 6 **Physical Defense:** 8
Actions: 1 **Mystic Defense:** 4
Attack (3): 11 **Social Defense:** 7
Damage: **Physical Armor:** 12
Bite (6): 17; Charge (8): 19; Gore (4): 15 **Mystic Armor:** 7
Death: 69 **Recovery Tests:** 5
Unconsciousness: 58 **Knockdown:** 18
Wound Threshold: 17 **Movement:** 7
Adventure Award: Journeyman Tier
Powers: Charge (4), Enhanced Senses (Listen, Smell) (2): 5
Rules

A female under attack issues an alarm call. Any male within one half mile will respond at top speed. How soon the male arrives depends on its distance, which must be determined by the Gamemaster.

Splithee

Plantae Angiospermae Monocots Asparagales Xanthorrhoeaceae Asphodeloideae Pseudaloe splithens

"Splithee" is the closest approximation to the Saurids' name for this plant humans are able to produce. There's a bit of a trill on the final syllable, and I think the vowel in the first syllable really ought to be some sort of *ui* dipthong, but I'm a biologist, not a philologist, dash it all.



I find myself dissatisfied with the taxonomy. *P. splithens* is not quite a proper aloe. While the leaves are fleshy, with a spiny edge and tapering to a fine point, they grow in a spiral formation about a central stalk, instead of from a basalar rosette, more resembling a palm tree (*Arecaceae* family) or pineapple (*Bromeliaceae* family). I gave the last family consideration, but had to discard it as a possible classification due to *P. splithens* having superior ovaries, where inferior ovaries are the defining characteristic of the *Bromeliaceae*. The *Asparagaceae* family was also under consideration, but the leaf formation does not follow the family structure, and the fluid storage in the leaves puts P. splithens more firmly in the *Asphodeloideae*.

The sap makes an excellent sweetener, which is how it came to the attention of the Empire. Friendly Saurids recommended it when our early troops ran short of sugar and honey. Only a drop or two of the sap is sufficient to sweeten an entire pot of tea. *P. splithens* came under serious study when the medical corps discovered that, due to differences in Saurid and human physiology, the sap becomes terribly addictive to humans when added to tea. Ingestion of *P. splithens* sap in tea produces no depressive effects, such as with opium, or manic activity, as seen with coca extracts, but does produce a mild feeling of well-being. The effects only manifest after repeated exposure, followed by removal of the sap from the victim's diet. The withdrawal symptoms are horrific, including delirium, fever, diuresis, hypertension, tachycardia, convulsions, and, in over half the cases, death. Survivors of splithee withdrawal rarely recover fully, having suffered damage to the nervous system, with symptoms ranging from weakness in the limbs to partial paralysis to dementia, often in combination.

This has brought an entire new line of blackmail into being. The victim is dosed with splithee extract a few times without their knowledge. Once the withdrawal sets in, the splithee dealer offers a ready supply of the extract in return for money, goods, favors, or treason. Seventeen cases of splithee blackmail have been documented across the Gruv in the past year. God knows how many men and women are currently in the thrall of splithee dealers. Thus far, neither antidote nor palliative have been discovered to cure the addiction or ease the withdrawal. I find myself for the first time in my career as a biologist recommending the extermination of a species. The Saurids find the splithee useful, and I do not like the idea of depriving them of part of their world. Even more so, the idea of deliberately rendering a species extinct disturbs me to the core. If seeds or cuttings were to somehow reach our world, however, and there find proper growing conditions, the consequences for our way of life would be dire in the extreme.

Physical Statistics: Irrelevant

Powers: Sap, when mixed with Terrestrial tea, is addictive, with an Effect Step of 17. Make an Effect Test against the Toughness Step of the person consuming the splithee. Two or more successes indicate addiction. Withdrawal inflicts the Effect Step in damage each day for (15 – Toughness Step) days. Each Wound taken indicates permanent damage, to be determined by the Gamemaster. Suggested damage includes -1 Step reduction to an Attribute, loss of 2 Ranks of a Skill, or paralysis of one limb.

Springvine

Plantae Angiosperms Eudicots Rosales Rosaceae Rubus flagrospinae

Springvine, also known as whipthorn, presents both a hazard and a resource. The bramble yields thumb-sized berries throughout much of the summer season, much sought after by Saurids and humans alike. Tasting similar to blackberries or blackcurrants, they can be served fresh, made into a cobbler or pudding, or processed into jam or wine. The brambles themselves, however, are another matter entirely, presenting a significant hazard to life and limb not only for the would-be berry pickers, but for any living creature.

R. flagrospinae vines grow to lengths of twelve feet or more, up to two inches thick, and loop under each other in the process. This puts the vines under significant tension. When a bramble is disturbed, vines shaken loose whip through the air at terrific speed, much faster than a tree branch pushed aside and then released. Considering that these vines carry inch-long thorns, curved back toward the base of the vine and wickedly sharp, the intruder risks being flayed. A single vine-whip across unprotected skin can easily open an artery, as we have seen with injuries to incautious soldiers in the early days of exploration. Lt. Faversham and I observed a bramble at the base of a low overhang that had a large, partially disassembled skeleton in its midst. We surmised that the creature had fallen from the overhang into the bramble, and been torn apart by the frantic lashing of the vines. An experiment with a large stone, hurled from a safe distance into a nearby bramble, certainly proved that our hypothesis was feasible. Add to this the fact that the brambles spread rapidly, with each bramble covering an area of up to thirty feet across, growing wherever the ripened berries are flung by whipping vines, and the danger presented reaches terrible proportions. While *R. flagrospinae* could possibly be used for area denial in a military installation, keeping the brambles cut back and contained would quite probably be more effort than it was worth.

We now know why the Saurids have been so eager to purchase aviator's goggles. Their leather crafting is sufficient to produce protective garments, but protective lenses for berry gatherers requires technology that they either do not have or are reluctant to use. This also explains the occasional missing eye among the non-warrior Saurids.

DEX: 9	STR: 10	TOU: 9
PER: 4	WIL: 8	CHA: 4
Initiative: 9	Physical Defense: 13	
Actions: 1	Mystic Defense: 5	
Attack (1): 16	Social Defense: 5	
Damage:	Physical Armor: 5	
Vine Whip (7): 17	Mystic Armor: 2	
Death: 55	Recovery Tests: 4	

Unconsciousness: 46 **Knockdown:** NA
Wound Threshold: 14 **Movement:** NA
Adventure Award: Novice Tier
Rules

Treat springvine as a trap, with the Trigger being physical contact, and the Effect being the plant's Attack and Damage options.

Sticksand

Animalia Cnidaria Anthozoa Octocorallia Alcyonacea Alcyoniina Xeniidae Raptipedes ossogluto

Al-Biruni classified coral as an animal in the 11th Century. Sadly, it took until the 18th Century and the invention of the microscope before scientists in the West believed him. If Christian scholars had encountered sticksand, perhaps they would have been more ready to believe their Muslim counterpart.

From a distance, sticksand appears to be nothing more than an area of small pebbles, remarkable only for their uniformity of size. Examining it closely reveals something else entirely. Not actually a mineral formation, sticksand is instead a type of ahermotypic land coral. Each pebble, no larger than a fingernail, is an individual polyp. Rather than secreting mineralized structures in which to live, like the hermotypic corals, sticksand polyps accrete sand to their bodies with a sticky secretion, like some species of insects glue leaves and forest-floor detritus to themselves for camouflage.

Sticksand polyps are small, agile, and carnivorous. They attack by swarming, using their collective weight to immobilize and drag down their prey. A large patch can immobilize a man or a horse in a matter of seconds. Once down, it only takes the polyps a few minutes to reduce their prey to bone. The polyps will continue to gnaw at the bones until they are reduced to fragments, which then accrete to the polyps along with sand, dirt, and whatever else comes along. Patrol leaders have thus been trained to look for patches of gravel that seem a bit lighter than their surroundings.

I find myself of two minds regarding *R. ossogluto*. Under most circumstances, I would prefer that the natural world be left to its own devices. Following the Hindu tradition of ahimsa, doing no harm, a dangerous animal is better avoided than slain. Sticksand tests my principles considerably. I find myself compelled to advise the patrols and settlers to carry kerosene, and to set alight any patch of gravel that looks suspicious, rather than risk a horse or a fellow human dying in such a gruesome fashion. Electricity of sufficient voltage causes the polyps to curl up, paralyzed, for several minutes. Reach for your galvanic discharge device the instant the sand stirs, as shocking yourself is the only way to get the sticksand off quickly enough, and hope you have a friend to pull you to safety.

DEX: 6 **STR:** 7 **TOU:** 5
PER: 4 **WIL:** 5 **CHA:** 3
Initiative: 6 **Physical Defense:** 8
Actions: 1 **Mystic Defense:** 5
Attack (3): 13 **Social Defense:** 4

Damage:
Bite (8): 15
Death: 27
Unconsciousness: 22
Wound Threshold: 8
Adventure Award: Novice Tier
Powers: Climbing^{S} (6): 12
Physical Armor: 7
Mystic Armor: 2
Recovery Tests: 2
Knockdown: 8
Movement: 4

Rules

The statistics given are for an average sized patch of sticksand, eight feet in diameter. The Gamemaster may increase the Strength and Toughness, with corresponding increases in the damage Step and the Death and Unconsciousness Ratings, for larger patches. The patch makes a Climbing Test against the Physical Defense of the target. If successful, the sticksand polyps swarm the victim, and make an opposed Strength Test to try and pull the victim down through sheer weight. Each round, the polyps will repeat the Strength Test as well as using their Bite attacks. If the swarm fails its Knockdown Test, the polyps fall off the victim. Attacks that target single polyps or small groups have very little effect. To do serious damage to sticksand, the attack must target the patch as a whole, such as using fire or acid. Sticksand takes double damage from electrical attacks, but the attack has to hit the patch as a whole, or be conducted through the victim, to be effective.

Storkasaur

Animalia Chordata Sauropsida Pterosauria Pterodactyloidea Azhdarchidae Akkadiopterus vehemens

Honestly, I've just given up protesting the ludicrous names the soldiers tack onto these poor creatures. The taxonomic name, *A. vehemens*, will have to suffice for proper nomenclature. Granted, *A. vehemens* does somewhat resemble the result of a mating between a pterosaur and a stork. Measuring approximately fifteen feet from beak-tip to feet when outstretched, with a wingspan averaging eighteen feet, *A. vehemens* consists mostly of wings, neck, and head, with a body almost cartoonishly small in relation. Its beak measures nearly as long as its neck, which does provide some advantage in both ground-based hunting and in air-streaming when aloft. The beak does not seem quite so absurd in its length when looked at as a spear, which function it performs when the creature is either feeding or fighting. The neck, leading edges of the wings, and legs are covered in dark grey down, not quite feathers but decidedly advanced over scales. The wings themselves and the large membranes that stretch between the body and the ankles, and perform the stabilizing function that a true bird's tail provides, are plumed in off-white and light grey, proper flight feathers that give *A. vehemens* substantially greater maneuverability than its more saurian cousins.

Unfortunately, I've not been able to observe a live specimen either in the wild or in captivity. All of my enclosed drawings have been made from deceased, and frequently partial, specimens, although I have attempted to pull together a composite. The other drawings enclosed with this report have been made by soldiers and field observers with the military at the front lines. Whether or not

A. vehemens even exists in the wild, or is solely a domesticated species, remains unknown at this time, as the creature's home lies in the Samsut lands. The specimens that have been encountered in British territory have all been in the possession of the Samsut, who use them to draw their sky chariots. The vehicles themselves I shall leave to a more engineering-minded individual to describe, and will only say here that a team of four *A. vehemens* draw the smaller two-person chariots, while the larger ones that have gunners and a crew of four or more require a team of six or eight. Someday I should very much like to see one of these chariots in flight, as I am certain they would compare favorably to the portraits of Apollo I have seen in the British Museum, which always seemed a bit dubious with their depictions of horses drawing the chariot across the sky. However, unless the hostilities resolve, I do not foresee that occurring. Lt. Faversham tells me that I shall not be visiting the front lines, and I am for once disinclined to argue with him.

DEX: 8	**STR:** 8	**TOU:** 8
PER: 4	**WIL:** 7	**CHA:** 6
Initiative: 8	**Physical Defense:** 11	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 11	**Social Defense:** 8	
Damage:	**Physical Armor:** 0	
Peck (4): 12; Claw (3): 11	**Mystic Armor:** 0	
Death: 48	**Recovery Tests:** 4	
Unconsciousness: 40	**Knockdown:** 11	
Wound Threshold: 12	**Movement:** 4/12 *	

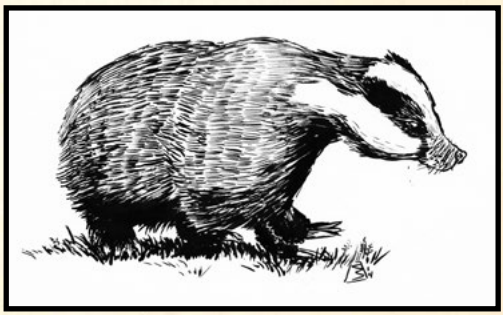
Adventure Award: Novice Tier

* The second number is the creature's Flying movement.

Powers: Cobra Strike^{S} (3): 11; Down Strike^{S} (3): 11; Enhanced Senses (Sight) (5): 9

Storsventok

Animalia Chordata Mammalia Carnivora Caniforma Musteloidea Mustelidae Meles gigantens



While no less irascible than the European badger, *M. gigantens* is substantially more sociable. The creatures live in cetes ranging anywhere from three to fifteen based on observation, although theoretically larger warrens could exist. Mind you, a cete of fifteen badgers each four to five feet in length should give anyone pause at the thought of trying to run them out of one's garden.

M. gigantens, like its European cousin, is omnivorous. In practical terms and layman's language, this means that *M. gigantens* will eat pretty much anything – insects, plants, smaller animals, or whatever comes ready to hand. At its size, this means a considerable amount of food per day. A colony of *M. gigantens* can strip an area of edible plants, small mammals and lizards, and colony insects in a single season. When food runs short, smaller cetes abandon their warren and move to new digs elsewhere. Larger cetes may also, but are more likely to hive off before the food supply runs out, a small group of the younger animals moving out to find territory of their own well away from the parent cete.

Prodigious claws on both fore and hind feet allow *M. gigantens* to tunnel quickly through hard-packed soil. In some cases, warrens have been found to extend into softer layers of rock, such as limestone. The tunnels themselves average four feet in diameter, with wider areas every so often to allow animals to pass each other, and dens easily the size of a small London flat. Warrens always have at least three entrances, and drainage channels, so diverting a stream into one of the entrances only results in wet angry giant badgers, as colonists in the western forest have discovered. M. gigantens has the same lateral condyles as its terrestrial relatives, making its jaw nearly impossible to dislocate, and giving it the infamous ability to bite into an opponent and not let go regardless of thrashing. *M. gigantens* defends its young and its warren fiercely, every badger in the cete coming to the defense once battle is joined.

The common name comes from the Norwegian for "giant badger". For once, we know exactly who to thank for it: Sverre Isaksen, a farmer and amateur biologist in the village of Nytt Stronsay, settled by colonists from the Orkneys. In his report, which came to my desk and resulted in this monograph, he referred to the creatures in Norwegian, using the old Norse name, sven-tok, instead of the new, grevling. Since his neighbors had taken up the name, I have acceded to the populace and left the common name unchallenged. It may be worth noting that the Saurid name for this creature is seskale, pronounced as three syllables, ses-kah'-lay.

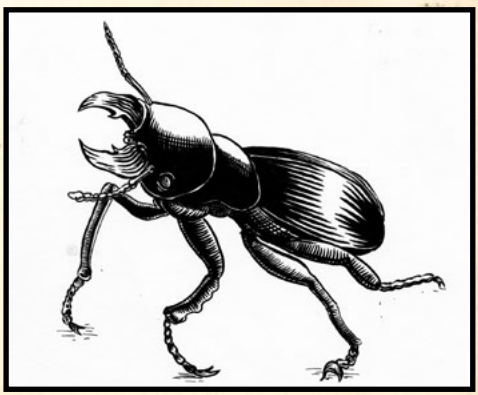
DEX: 6	**STR:** 8	**TOU:** 7
PER: 4	**WIL:** 5	**CHA:** 6
Initiative: 6	**Physical Defense:** 8	
Actions: 1	**Mystic Defense:** 5	
Attack (2): 8	**Social Defense:** 8	
Damage:	**Physical Armor:** 5	
Bite (6): 14; 2 x Claw (5): 13	**Mystic Armor:** 4	
Death: 65	**Recovery Tests:** 3	
Unconsciousness: 54	**Knockdown:** 12	
Wound Threshold: 11	**Movement:** 7	

Adventure Award: Initiate Tier

Powers: Climbing^{S} (2): 8; Durability (4); Enhanced Senses (Smell) (2): 6

Tar Beetle

Animalia Arthropoda Insecta Coleoptera Polyphaga Scarabaeoidea Pyrimachidae bitumenophagus



In coming to the Gruv, humanity has had to make adjustments in living arrangements, diet, mode of dress, and in the materials used for the artifacts of civilized existence. Analogs have had to be found for many of the substances we take for granted on Earth. Some have had to be abandoned entirely. In the case of coal tar, a substance so pedestrian and in such commonplace use on Earth that one utterly fails to notice it, usage in the Gruv has had to be severely restricted because of the tar beetle.

P. bitumenophagus, as the name indicates, feeds in the natural world on the pitchlike sap

of several species of tree. The Saurids gather the sap and use it for sealing the outer hulls of their canoes and skiffs, which, since they are kept in the water, do not suffer P. bitumenophagus infestation. Locomotives and rail-ties are another matter entirely.

Creosote accumulates in the stacks of coal-burning engines. Periodically, the stacks must be cleaned so that the coal tar deposits do not choke off the exhaust. In the early days of the Gruv, this did not incur problems, as locomotives were only allowed to go cold at the servicing yard of Fort Alice. The beetles that flitted around the top of the stack at the coaling facilities at New Islington, the first settlement to have such, became a nuisance, but adding a wire-mesh screen to the top of the stack kept them from flying into it and adding to the carbonized mess within. (While heat resistant, *P. bitumenophagus* is not actually fireproof.) The first time, however, that a locomotive was allowed to cool down for routine maintenance at New Islington, the beetles swarmed into the stack the instant the screen was removed, and proceeded to gorge themselves on the coal-tar creosote caking the inner surfaces. The gluttonous beetles fed until they could not fly, falling to the bottom of the stack and fouling the flue and blast pipe when their overstuffed bodies burst on impact. Maintenance was subsequently confined to Fort Alice until a solution could be found. Field observation discovered that *P. bitumenophagus* did not approach Fort Alice any more closely than a half of a mile. Experimentation showed that captured beetles brought within that limit grew steadily more agitated until they dashed themselves to bits against their enclosure. Some property of the Rabbit Hole is currently posited to be affecting the beetles, and if that property can be discovered and replicated, we might have a way of repelling them. Until such a time, however, railway maintenance must be done in fully enclosed, regularly fumigated sheds. As an aside, coke-burning engines, such as those used in airships, do not build up creosote, as the coal tar has already been extracted from the fuel during the coking process. And that is more than I ever thought I would need to know about steam engines. I am a biologist, not an engineer.

No one gave a thought to other uses of coal tar until a train running from Fort Alice to Saints of Westminster derailed, killing eleven people, badly damaging the engine, and destroying a passenger car and a flatbed loaded with farm machinery. The ties had collapsed, being infested with *P. bitumenophagus*. Railroad ties on Earth are treated with coal-tar creosote to make them resistant to rotting and weathering. An expensive and lengthy effort had to be undertaken by the Alice and Gruv to replace all rail ties further than a half mile from the Rabbit Hole with ties treated with wood-tar creosote, which was proven by experimentation to be unattractive to *P. bitumenophagus*. This has raised expenses for the railroad considerably, as wood-tar creosote does not have anywhere near the preservation effect of coal-tar creosote, thus the ties have to be replaced much more frequently.

As a word of caution, one must also see to their rainproof foul weather gear. A proper Mackintosh is sealed with vulcanized rubber. The cheap imitation coats sold in the lower-class markets, however, are sealed with coal tar. As a rule of thumb, if your raincoat smells like a pencil rubber, it's safe to bring to the Gruv, but if it smells like a road on a hot day, the tar beetles will eat it. I have also had reports of soldiers being swarmed after using delousing shampoo, as it contains coal tar as the active ingredient. Sadly, even the most hygienic of persons must occasionally have resort to such products, as the exigencies of field expeditions put one's head far too close to the ground and with only the canvas of the tent between the scalp and the aggressions of insects.

DEX: 4	**STR:** 3	**TOU:** 3
PER: 3	**WIL:** 3	**CHA:** 3
Initiative: 4	**Physical Defense:** 5	

Actions: 1
Attack (1): 4
Damage:
Bite (1): 4
Death: 13
Unconsciousness: 10
Wound Threshold: 5
Mystic Defense: 4
Social Defense: 4
Physical Armor: 0
Mystic Armor: 0
Recovery Tests: 1
Knockdown: #5
Movement: 4/6 *
Adventure Award: Initiate Tier

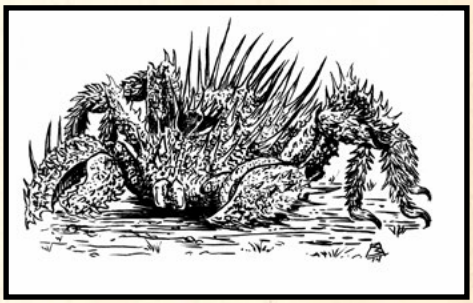
* The second number is the creature's Flying movement.

Rules

Tar beetles take half damage from heat and fire based attacks. They can and will consume anything containing or contaminated with coal tar, coal creosote, or similar substances, doing damage to the item's Barrier Rating as appropriate with their Bite attack.

Thorny Molecrab

Animalia Arthropoda Chelicerata Concamerata Nefarispinum Perfodies Eremiticus imperviens



The early field reports on this species speculated as to whether it was a crustacean or an insect. I can definitively say that the thorny molecrab, *E. imperviens*, like so many other gargantuan insectoid species of the Gruv, is most certainly not an insect. Dissection of several partial specimens (an intact specimen not being available for tolerably obvious reasons) has revealed the complex internal structure definitive of the Concamerata class of the Chelicerata subphylum. Thus, it is neither crustacean nor insect, but a member of the transitional class so prevalent in this world.

Named, once again by soldiers, because of the prominent spines, its burrowing, and its resemblance to Terrestrial arthropods, *E. imperviens* has proven itself a significant problem in the expansion of human activity in the Gruv. Measuring three to four feet across and high, and six to seven feet in length, *E. imperviens* is a dusky brown in color, although at its size protective coloration is pointless. The tips of its spines are barbed, so that when a spine breaks off in an opponent, it's difficult to remove and results in a festering wound. The carapace itself has knife-sharp edges, making specimens difficult to transport and even incidental contact hazardous. As with all species of the Concamerata class, pistol fire has little to no effect on the tough chitin. Large-calibre heavy rifles are required. The standard military response to an *E. imperviens* presence involves cannon. While powered saws and drills will cut through the exoskeleton, as proven in my dissections, they require far too close a proximity to be safely used on a live specimen.

E. imperviens, like most burrowing creatures, is opportunistic, and prefers to dig into soil that is already loosened. Thus, it is all too frequently encountered around human construction activity, such as building foundations, plowed fields, and railroad beds. This last has caused the Empire tremendous setbacks and significant casualties. Rail beds undermined by *E. imperviens* result in conflict with the creature and days of repair work at the very least. In some cases, rail lines have had to be re-routed to go around the destabilized ground, taking weeks to pull up the tracks and

lay them in their new beds. At least twice, train derailments have been traced directly to a previously undetected *E. imperviens* burrow. Colonel MacIan, the director of rail for the Grosvenor Land, has offered ten pounds for every dead molecrab brought to Fort Alice, and a thousand pounds to anyone with a solution to *E. imperviens* infestation that does not involve large amounts of explosives.

E. imperviens should be treated with extreme caution. Highly aggressive, it attacks anything of equal size or smaller without hesitation, using its enlarged front legs as bludgeons, staying in motion and bringing its other three pairs of legs into play for trampling. Thankfully, this genus does not have a metasoma, or striking tail, like a scorpion. Thus far, *E. imperviens* has only been observed in the singular, and no nests have been found. Given its hostile nature and obvious territoriality, it's quite possible that *E. imperviens* only meet each other during the mating season, but we have not yet determined if that is true, and, if so, when the mating season occurs. Anyone with information as to this should address it to Lady Jennings, in care of Fort Alice.

DEX: 8 **STR:** 12 **TOU:** 12
PER: 4 **WIL:** 8 **CHA:** 7
Initiative: 8 **Physical Defense:** 11
Actions: 2 **Mystic Defense:** 5
Attack (2): 17 **Social Defense:** 10
Damage: **Physical Armor:** 15
2 x Claw (9): 21; Bite (7): 19; Trample (11): 23 **Mystic Armor:** 8
Death: 106 **Recovery Tests:** 6
Unconsciousness: 89 **Knockdown:** 20
Wound Threshold: 18 **Movement:** 7
Adventure Award: Journeyman Tier

Powers: Charge (6); Disease (8), Durability (5); Momentum AttackS (3): 15; Shake It OffS (3): 15

Rules

The thorny molecrab receives a free Attack Test against all targets hit by a Charge or Trample Attack, representing the spines and sharp edges of its carapace, using its Bite Damage Step if the Attack hits. Targets taking a Wound from a Claw, Charge, or Trample attack may be afflicted with Disease, representing the infection from an embedded spine.

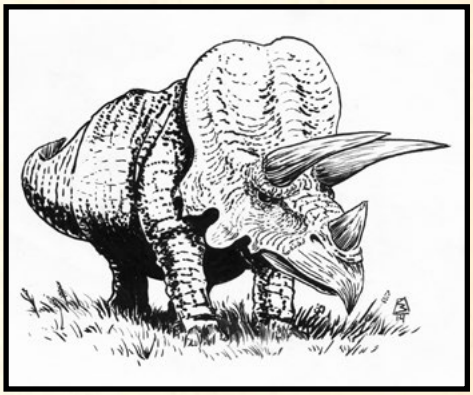
Disease: Infection
Type: Debilitation
Onset Time: 1 day
Effect Step: 8
Duration: Chronic

The infection results from a bit of spine broken off and embedded in the wound. The disease continues to affect the character or creature, with a daily Effect Step Test against the victim's Toughness Step, until a successful Physician (8) Test is made to remove the spine and drain the infection. The Wound cannot be healed until this is done.

Trihorn

Animalia Chordata Ornithiscia Ceratopsidae Agathaumas grosveniensis

One must perhaps forgive Mr. Marsh for his initial misidentification of the Denver ceratopsian fossils as a new species of buffalo, bison alticornis. Such errors do occur when one is in a rush to publish. Fortunately, others had been at work in the Laramie Formation. Fossils there,



located seven years ago by Dr. Cope, proved the three-horned skull to be that of a gigantic lizard, and native to the Cretaceous period, not the Pliocene. While Dr. Cope felt that he did not have enough remains to create a taxonomic family, Mr. Marsh has since proposed the family of Ceratopsidae, which, while it has not received sufficient approval from the scientific community to be cited, will do for now. We will have to wait and see what results come from Dr. Cope's suggestion of the family Agathaumidae. In the meantime, *A. grosveniensis* provides us with complete and living specimens from which to gauge the relative merits of the taxonomic arguments.

A. grosveniensis' most distinctive features are the large bony frill rising from the base of the skull, which performs much the same function as a gorget, and the three facial horns, one extruding from the top of the snout and the other two from the brow ridges. Like all such quadrupedal dinosaurs thus far encountered, *A. grosveniensis* is an irascible herbivore, prone to charging at perceived threats to itself or its young. Like the African rhinoceros, *A. grosveniensis* spends most of its waking time browsing whatever vegetation is ready to hand, requiring substantial amounts of food to fuel its massive frame. It travels in small herds, usually consisting of a dominant male, several females, whatever young may be currently extant, and two or three juvenile males that serve both as sentries and as potential challengers for dominance of the herd.

The young hatch from leathery-shelled eggs approximately the size of a rugger ball, after an incubation period of approximately three months, and grow swiftly. The females tend the nests, piling sand and dirt over the eggs to keep them warm at night and clearing the soil away in the morning to expose them to the sun. The young generally stay with the mother for seven to eight months before beginning a period of wandering further away, ending at the age of approximately a year with independence and either their own place in the herd, absorption into another herd, or in the case of unsuccessful males, solitary wandering. The females mature at about two years of age, reaching a length of twenty-five feet and a height at the shoulder of nine feet, with an average weight of seven to eight tons. (As an aside, taking the weight of *A. grosveniensis* requires leading the beast onto the cargo scales at a railway depot, which tends to cause substantial consternation among the railway employees.) Males can reach a length of thirty feet or more, a height of eleven feet at the shoulder, and a gross weight of up to twelve tons, assuming they survive the challenges not only from predators but from their own kind, as they compete for dominance. The more aggressive dominant males will sometimes cut females from another male's herd to be absorbed into their own, or challenge other males and take the entire herd if they win the combat. Battles between dominant males are brutal, gory, and earthshaking, and far too often end with both combatants too grievously wounded to survive. Predators and scavengers gather nearby, and await the outcome and the inevitable feast to follow.

The Saurids have domesticated the trihorn, using it sometimes as a beast of burden but more often as a mount for warfare. The Saurids cut out the juvenile males from their herds when they start to show signs of independence, and keep them penned in isolation from each other, subsequently training them for mounts. Females and breeding males are not put at risk, and are pastured close to the village. They are sometimes the target of theft by rival tribes, somewhat like cattle and horses

were stolen in raids during the olden days in the Scottish Highlands. A bull trihorn is a fearsome opponent in a charge to begin with. Put three or four Saurids with bows and atlatls in a howdah atop, plus one more to hold the reins, and the trihorn becomes a battle platform of frightening effectiveness. Unlike the harness of a chariot horse, the reins do not connect to a bit and bridle. Instead, they pass under the base of the neck frill and connect to rings piercing the trihorn's nostrils. This arrangement provides the double advantage of controlling a beast that could readily get a bit in its teeth and run amok by tugging on sensitive tissues with a lead that cannot be readily dislodged, and protecting the reins from being cut in battle by passing them close to the beast's head and then up behind the armor of the frill.

While I am not particularly fond of large animals, preferring to leave them to the husbandrymen and veterinarians, I must admit that there is a certain charm to seeing a herd of trihorns grazing. I would not recommend them for importation to Earth, however, unless they were to be taken to Africa, where the savannahs would provide both sufficient forage and territory. Seeing what the weight and feeding habits of such massive animals do to the soil leads me to believe that a single A. grosveniensis turned loose on the moor would reduce the land to churned mud in less than a year.

DEX: 7	**STR:** 14	**TOU:** 13
PER: 4	**WIL:** 6	**CHA:** 6
Initiative: 7	**Physical Defense:** 10	
Actions: 1	**Mystic Defense:** 5	
Attack (1): 15	**Social Defense:** 8	
Damage:	**Physical Armor:** 9	
Gore (8): 22; Trample (9): 23	**Mystic Armor:** 3	
Death: 83	**Recovery Tests:** 6	
Unconsciousness: 70	**Knockdown:** 22	
Wound Threshold: 20	**Movement:** 9	

Adventure Award: Novice Tier

Powers: Charge (7); Enhanced Senses (Smell) (3): 7; Shake It Off (3): 16

Rules

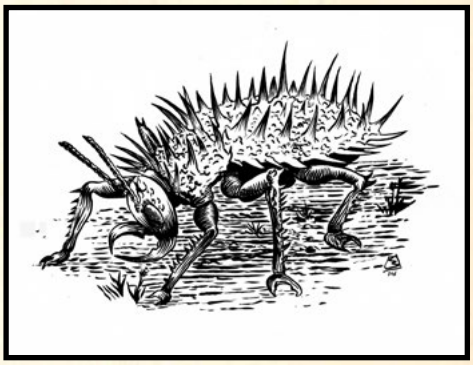
The statistics given are for a bull, the sort normally encountered on the battlefield. For females and juvenile males, reduce Strength and Toughness by 3 Steps each and recalculate as required.

Tusk'r

Animalia Arthropoda Chelicerata Concamerata Nefarispinum Valenvenatorus Ferrospinum ingendens

Apparently the apostrophe in the name originated in a poorly written field report. What should have been a letter E was transcribed by a typist at Fort Alice as punctuation, and the error, once committed, became part of the official record. Given that the original report was written in pencil by a sergeant escorting the wounded remnants of his patrol back to the fort at the best speed their horses could make, the poor penmanship is excusable. But really, would it have been that difficult to walk over to the dispensary and ask the man about how the creature's name was spelled before turning in the transcript for approval and filing?

Yet another of the oversized insectoid species that litter the Gruv, F. ingendens has both the crystalline chitin and internal bracing of the *Concamerata*. With six legs, and no extra limbs, pedipalps, or other protuberances, it drops neatly into the *Arthropoda*. Beyond that, however, it represents a bit of a puzzle chemically speaking, and a significant annoyance from a tactical



standpoint. Standing an average of two feet in height at the top of the carapace, and measuring four to five feet in length, and being voraciously carnivorous, *F. ingendens* presents a serious threat to a platoon of soldiers. This threat is substantially magnified by the iron content in the carapace. Excess iron in its diet, rather than being excreted, is incorporated into the chitin, giving *F. ingendens* its rusty brown coloration, and hardening the chitin considerably. When iron is lacking in its food supply, *F. ingendens* will seek out and ingest small pebbles of iron-bearing ore, and somehow extract the iron in its gut, excreting the remnants of the stone a day or so later. The process by which this occurs is of serious interest, but capture of a live specimen for study has thus far not been accomplished. Dead specimens are of no use, other than to confirm that the gut contains a powerful acid, as said acid reduces the internal organs to smoking mush within minutes of death. The flanges and spikes that place *F. ingendens* in the *Nefarispinum* contain enough iron to make them the equivalent of poorly forged blades. Note should be made that, as with any wound caused by rusted metal, injuries resulting from contact with *F. ingendens* spines present a significant threat of lockjaw. Small arms fire tends to ricochet from the carapace in a shower of sparks. The eyes and mouth are of course vulnerable points, but placing a shot into such a small target presents a serious challenge, especially when that target is in motion.

The females are, as is common in many arthropods, larger than the males. They lay their eggs in carrion, which feeds the grubs until they pupate. Females have been observed to pile up carrion to ensure that their grubs will have sufficient food. Any stack of dead animals should be approached with caution, as the female tends to remain in the area until pupation begins. Once the grubs pupate, the female moves on, and the young, once emerged, scatter quickly, ignoring each other and searching for easier meals. *F. ingendens* molts a few times before reaching full adult growth. A few settlers have taken to gathering the discarded carapaces and burning them to extract the iron. While this may be an easier way of obtaining iron than mining, the yield would be small and the danger of poking about in a tusk'r's territory high.

As a side note, I really must find the opportunity to spend time with my fellow scientists. My language becomes more and more like that of the military each day, and I worry that I may not be thinking so much intellectually as strategically. Without proper academic socializing, I fear that my speech habits may coarsen and my thoughts wander very far afield from the realm of pure research where they belong.

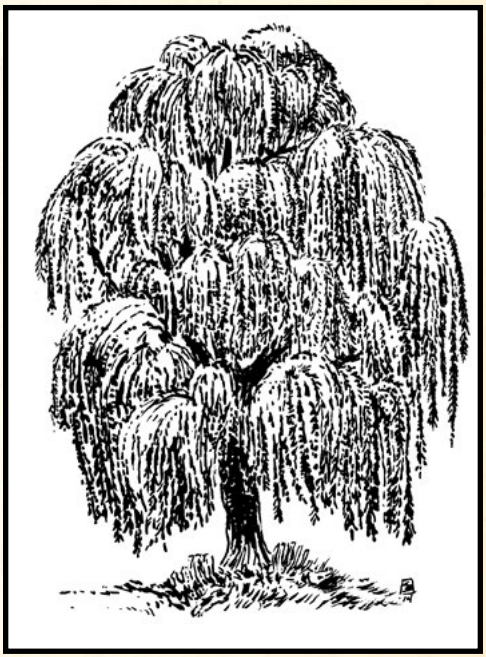
DEX: 11	STR: 8	TOU: 10
PER: 4	WIL: 5	CHA: 6
Initiative: 11	Physical Defense: 16	
Actions: 2	Mystic Defense: 5	
Attack (2): 14	Social Defense: 8	
Damage:	Physical Armor: 13	
Bite (7): 15	Mystic Armor: 2	
Death: 62	Recovery Tests: 5	
Unconsciousness: 52	Knockdown: 16	

Wound Threshold: 15 **Movement:** 8
Adventure Award: Novice Tier
Powers: Disease (9); Great Leap (2): 13
Loot: Carapace worth d10 pounds if sold to a smith or ironworks
Rules

The tusk'r receives a free Attack Test against all targets hit by a Bite Attack, or who have a Rule of One result against the tusk'r in melee, representing contact with the sharp edges of its carapace, using its Bite Damage Step if the Attack hits. Targets taking a Wound from this attack may be afflicted with Disease. Make a Disease Effect Test against the target's Toughness Step. On two or more successes, the target is afflicted with lockjaw (pg.235).

Whipping Willow

Plantae Angiospermae Eudicots Rosids Malphigiales Salicaceae Salix satoflagellus



Any hunter can affirm that the female of the species must be approached with substantially greater caution than the male. In England's fair country, men have long joked that they were in greater fear of their wives than any worldly danger. With the advent of equality in the military and the factories, universal suffrage, and female achievements in academia, men have become increasingly aware of the power of women. In the case of the whipping willow, there can be no doubt at all, for the male of the species stands passive, but the female represents a threat to life and limb to any passing near.

From a distance, *S. satoflagellus* appears little different from any Earthly willow tree. The branches are long and pliant, and spill down in a curtain enshrouding the trunk, long pinnate leaves with serrated margins alternating down their length. The species prefers damp areas, on the edge of bogs and the banks of streams and slow rivers. *S. satoflagellus* is deciduous, its leaves falling at the beginning of winter, and growing out from buds along the branches in early spring. To this point, one could easily mistake *S. satoflagellus* for any European variety of the Salix genus, associated with lazy summer afternoons and maudlin landscape paintings.

Treading on the stoloniferous roots of the female reveals the danger. While the central root of the tree extends downward, in proper taproot fashion, stolons grow horizontally just under the soil, reaching outward not quite to the edge of the foliage. Like the trigger hairs of *D. muscipula*, these stolons detect vibration and pressure. When the disturbance is sufficient to indicate an animal larger than a housecat, the nearest hanging branches spasm, whipping downward and striking at the location of the disturbance. Anyone growing up in England knows the cutting power of a willow

switch. *S. satoflagellus* does not strike to discipline, but rather to impregnate. The impact knocks loose seeds from their pods, leaving them embedded in the wound. Once implanted, the seeds quickly germinate in the moist, warm environment of the animal's tissues, sending rootlets out through the surrounding flesh. This eventually kills the animal, which then becomes fertilizer for the new tree as it digs down through its initial host and into the soil. Like buttercups, one must remove or destroy the roots, or the plant will grow back, posing a serious problem to surgeons attempting to remove *S. satoflagellus* infections from their patients.

The male trees bear rose-colored buds that open into orange and purple catkins, elongated puffs that bear nectar glands at the base of the stamens to attract pollen-carrying insects. The female trees have smaller catkins, looking more like the cone of an evergreen, with a single ovary and nectar gland at the base of each scale. Thus, the danger must be detected not by the presence of flowers visible from a distance, but rather by their absence. By the time one is close enough to clearly see the seed-bearing catkins, small brownish nodules no larger than the last joint of my thumb, one is quite likely within the tree's striking range.

As with many of the Gruv's more aggressive species, the military sees potential in *S. satoflagellus*. Planting female specimens as a defensive barrier, perhaps with small bells tied to the branches, has been discussed. The most obvious problem with this plan is, of course, that the trees are only aggressive during the late spring and early summer, when they are seed-bearing. Controlling the spread of the trees would be another concern, as would sexing the seedlings, not nearly as simple a task as one might think. This plan seems likely to end up in the bottom of a file-drawer, best forgotten.

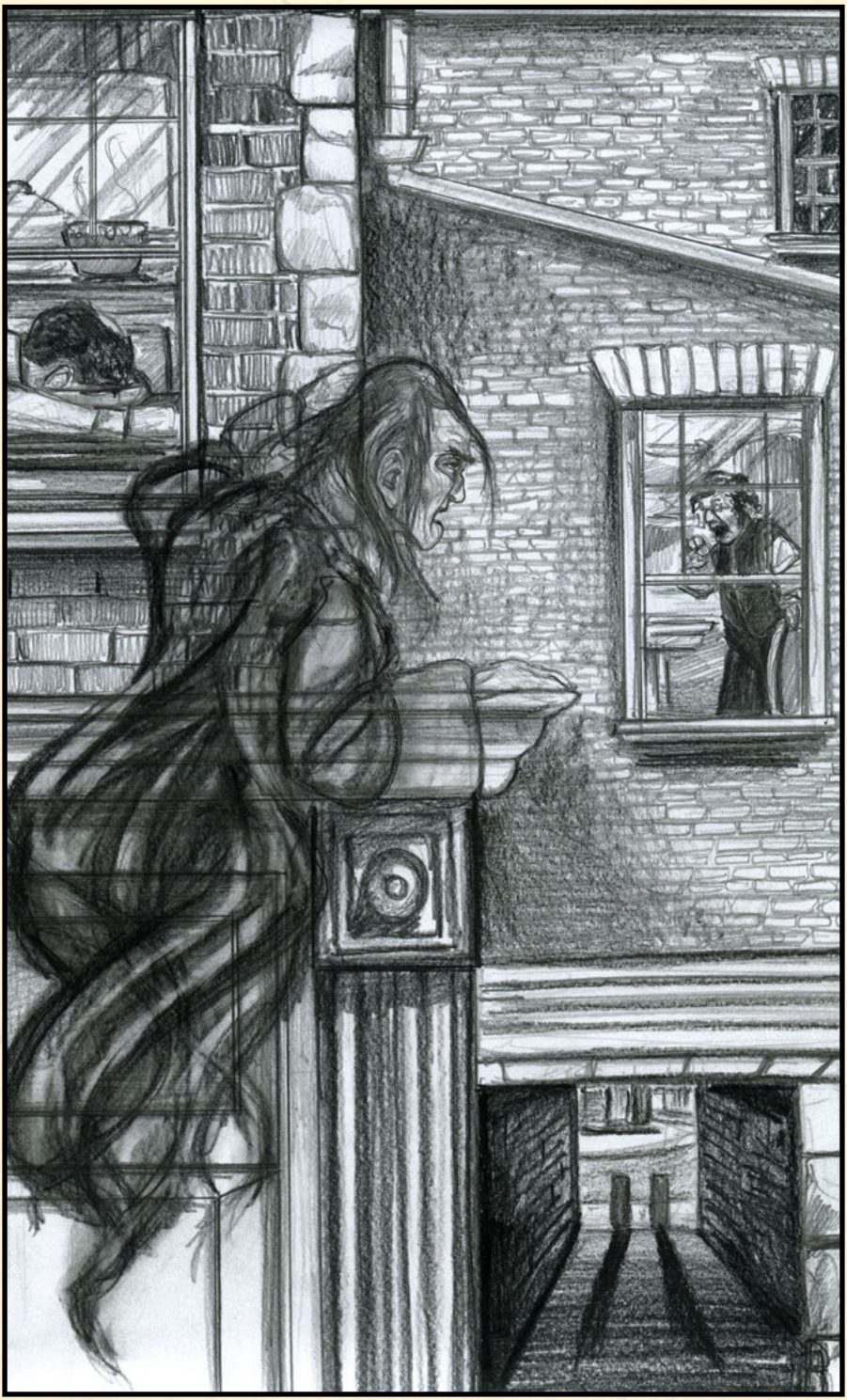
DEX: 9	**STR:** 9	**TOU:** 8
PER: 3	**WIL:** 5	**CHA:** 3
Initiative: 9	**Physical Defense:** 13	
Actions: 1	**Mystic Defense:** 4	
Attack (1): 12	**Social Defense:** 4	
Damage:	**Physical Armor:** 4	
Whip (5): 14	**Mystic Armor:** 2	
Death: 48	**Recovery Tests:** 4	
Unconsciousness: 40	**Knockdown:** NA	
Wound Threshold: 12	**Movement:** NA	

Adventure Award: Initiate Tier

Powers: Disease (11)

Rules

The whipping willow never attacks first. If it wins the initiative, it holds its action until a character or creature moves within its striking range, then immediately attacks that target. If the attack does a Wound, the target is automatically infected with an implanted seed. The disease makes its Effect Step Test against the victim's Toughness Step daily until the seed is removed or the seed germinates. Once the disease Effect Test succeeds, indicating that the seed has germinated, the victim takes the Effect Step in damage daily, with the Step increasing by +1 per day. Cutting back the seedling where it emerges from the victim's body reduces the Step to its original value of 11, but does not kill the plant. The cycle simply begins again at the base Effect Step. A successful Physician Test must be made against the current Effect Step to remove the seed, or seedling and root structure if the seed has germinated.



1879 GAMEMASTER'S GUIDE

A Treatise Regarding the Astral Plane

Though for the most part entirely unconscious of it, man passes the whole of his life in the midst of a vast and populous unseen world.
– C.W. Leadbeater, "The Astral Plane: Its Scenery, Inhabitants, and Phenomena"

Astral Space and Its Perilous Nature

Beyond the physical world lies another world, a realm just beyond the perceptions of most. A source of endless speculation, conjecture and wonder, the font from which all magic springs, home to countless spirits and the birthplace of supernatural creatures —this is the world of astral space. This section provides information on astral space for the Gamemaster. It describes methods that enable adventurers to enter and explore astral space, a general survey of the inhabitants of astral space, and describes a number of different locations in astral space and the netherworlds. It also provides some general advice for incorporating astral space and astral sensing into adventures and campaigns.

Using Astral Space in Adventures and Campaigns

As described in the *1879* Player's Guide, astral space is intimately connected with the physical world. Because of this connection, and the abilities of magicians to view astral space, the Gamemaster

often needs to provide descriptions and details for this realm. This section will provide some advice and suggestions for incorporating astral space and astral sensing into your games.

First of all, like many other aspects of the *1879* rules, only use as much detail as you (and your players) are comfortable with. If your group doesn't show a lot of interest in the astral counterparts of the places they visit, don't emphasize it too much. As the players gain experience with the *1879* setting, and gain familiarity with how the physical and astral worlds are connected, they are likely to begin exploring it in more depth. You can add more detail as your game progresses to keep your players interested, as well as provide clues for their characters to follow up.

At the same time, don't allow astral sensing to give everything away. Astral sensing is a useful tool, but it can't do everything. There are Skills and spells better suited to learning certain types of information, so don't allow astral sensing to duplicate those effects (at least without achieving higher result levels). This is especially true when it come to detecting or analyzing tainted areas. While the general level of astral corruption can indicate the presence or influence of something nasty, astral sensing shouldn't reveal the exact nature and origin of the corruption except in remarkable circumstances.

One advantage to the progression of characters through their Professions, from Initiate to Master, is that their ability to view and interact with astral space grows with them. As novices, the duration and Step Number of their astral sensing Skills are usually low, limiting the amount of information they can learn. At this level, magicians are usually using astral sensing to get a feel for the level of astral corruption, sense magic items, or other broad applications.

As characters make the transition from Novice to Journeyman, astral space becomes more significant, especially for Professions that deal with the denizens of astral space, such as the Medium and the Shaman. Their astral sensing Step Numbers rise, allowing them to see more detail, and learn more from examination of astral space and astral patterns. They may start using astral sensing to duplicate more specialized Skills or spells.

As their power grows into Warden and Master levels, characters may begin venturing into astral space, or even the netherworlds in pursuit of various goals. The **Astral Locations** section later in this chapter discusses places characters may wish to travel to, but the full range of the astral realms is beyond the scope of this text. The infinite depths of the netherworlds are limited only by your imagination.

Exploring Astral Space

Perhaps because it is so mysterious and dangerous, the vast, uncharted frontier of astral space appeals to countless adventurers intent on exploring its reaches. This section provides rules on entering, acting in, and moving around astral space; descriptions of beings that astral explorers are likely to encounter; and descriptions of the potential hazards of astral exploration.

Once a magician takes on an astral form, they become subject to the laws of all astral beings. This means that, for instance, the magician may be summoned as if they were a Named spirit, provided the summoner knows the magician is in astral space and can meet the requirements of the Summon Skill (see the **Skills** chapter of the *1879* **Player's Guide**).

Entering Astral Space

Beings may enter astral space using natural abilities, magical means, or astral projection, though traveling between the physical world and astral space is not an easy or safe task. More often than not, cataclysmic events brought about by wars or perverted uses of powerful magic create the rare natural gateways that connect the two realms. Such a gateway may be found in Greenwich Park, known as the Rabbit Hole, although traveling out the sides of the trod that leads to the Gruv requires special permission and is risky in the extreme, due to the presence of the Iron Tunnel and the attention it has brought from the denizens of the astral.

Entering via Natural Ability

Certain creatures and spirits exhibit a natural ability to enter and leave astral space. Some single-natured creatures show an aptitude for entering and exiting astral space, but these beasts do not appear to display any common characteristic that might explain this ability. The capability to move between the astral and physical worlds seems to come from their natures, rather than from magical spells or powers.

Entering via Magical Means

Adventurers may enter astral space using magical means such as the Spirit Portal spell and the Astral Portal spirit power. The Spirit Portal spell is probably the safest method of entering astral space, though what constitutes safety in astral space is open to much interpretation (see the **Spells** chapter of the ***1879* Player's Guide**). The spell enables a magician to create a portal between the physical and astral worlds. When a subject passes through the portal, the gateway alters the subject's form from physical to astral or vice versa. When an adventurer uses a portal to pass from the physical to the astral plane, for example, the portal melds the adventurer's body with its astral imprint to create an astral form. The effects of the spell are not permanent, but they do last long enough for an adventurer to enter and exit the portal multiple times.

The spirit power called Astral Portal functions in the same manner as the Spirit Portal spell (see **Special Abilities of Spirits**, later in this chapter). Using this power, a spirit can create a portal that enables people (and other entities) to enter and exit astral space. In fact, many magicians summon spirits for the sole purpose of having the spirit create such portals.

Astral Projection

Astral projection is a limited form of astral travel that enables a magician to send their spirit into astral space while their body remains in the physical world. Certain Skills and Professional abilities will allow this. Astral projection provides a magician with near-perfect control of their astral imprint, though the duration of the effect may be severely limited.

While in astral space, the magician can pass through many barriers that exist only in the physical world. Any attempts to pass through objects with a True Pattern require the magician to make a Skill Test, using the Skill that brought the magician into astral space, against the object's Mystic Defense. If successful, the magician can continue on past the obstacle. When traveling in astral space, the magician can move no faster than their Movement Rate.

Like other methods of entering astral space, astral projection entails certain risks, including damage based on the type of astral region the magician travels through. During the time they spend projected, the magician is exposed to the dangers of astral space. Each minute of travel, the magician

suffers damage dependent on the level of astral corruption in the region, as determined by the Gamemaster. The magician's natural Mystic Armor Bonus protects against this damage. The **Astral Damage Table** shows the damage that the magician takes during each minute of travel, based on the astral region's classification. See **Travel in Astral Space**, further in this section for more information about the hazards of astral travel.

Astral Damage Table

Region Type	Damage per Minute	Mystic Defense
Safe	Step 4	+0
Open	Step 8	+2
Tainted	Step 12	+5
Corrupt	Step 16	+12

The magician may use the astral pollution to their advantage, obscuring them from the view of any astral denizens or characters viewing astral space. This obscuring effect is also dependent on the type of astral region through which the magician is traveling. The pollution adds a bonus to the magician's Mystic Defense, as shown in the **Astral Damage Table**, based on the region's classification.

Adventurers in Astral Space

To enter astral space, a magician or other adventurer must transform from a physical being into an astral being. Most often, magicians accomplish this transformation by using the Spirit Portal spell or Astral Portal spirit power, but rumors exist of artifacts and powers that may create similar effects. During the transformation, the magician actually refocuses their pattern, removing their body from the physical world and converting it to astral energy. The magician joins this astral energy with their astral imprint to create their astral form. The magician's life essence provides their astral form with definition, and because the magician's mind and consciousness enter the astral form during the transformation as well, the magician can control the form as they would control their physical body. Like astral imprints, an astral form resembles its subject's true nature. Only the most powerful disguises or illusions can alter the appearance of a magician's true form. Radical alterations to a magician's pattern will produce a blurred, double-image astral form, but other characters will be able to discern the two images in the form (see **True to Form** in the **Magic Theory** chapter of the *1879* **Player's Guide**).

A True Pattern only represents its subject. The astral form is the subject completely present in astral space. The subject is alive, "solid" and can interact with other purely astral forms. Magicians may also transport inanimate objects or matter into astral space. In such cases, the object or matter ceases to exist in the physical world and takes on an astral form. Any astral being can pick up the astral form by making a conscious effort and may then carry the item with no further thought.

Astral Attributes, Abilities and Possessions

The values and functions of a character's Attributes, Skills, and most other characteristics remain unchanged when the character assumes astral form. The character's Physical Defense Rating remains the Target Number for resolving physical attacks in astral space, their Mystic Defense Rating is used for attacks made with spells and magical abilities, and so on. Characters suffer

damage from attacks in astral space the same as they do in the physical world, and their Damage Ratings are used in the same manner. Likewise, characters in astral form use their standard Movement Rates and abilities.

Physical objects worn or carried by a character when they assume astral form are transformed as well. However, non-magical objects do not take on substance in astral form and remain much like their astral imprints. Such objects can be carried, dropped, picked up, and so forth, but they have no true astral substance and therefore no effect on astral beings. For example, a non-magical sword transported into astral space can be swung and thrust, but it cannot do damage to an astral being. Magical items, in contrast, take on solid astral forms and may be used normally. Such items include magical weapons and armor, Weird Science devices, blood charms, and potions. Items dropped in astral space remain there unless the character retrieves them before returning to the physical world.

Blood Magic in Astral Space

Because a character becomes an astral being when in astral space, their use of blood magic becomes more effective. This benefit reduces the Strain damage a character suffers when using a Skill or ability by 1 point, to a minimum of 1 Strain. For example, the Riposte Skill normally causes 2 Strain. In astral space, using the Skill causes only 1 Strain.

Combat in the Astral Plane

Combat in astral space is resolved in the same manner as combat in the physical world. Initiative is determined as normal, except that non-magical armor does not impose Initiative penalties. Initiative penalties from magical armor still apply. Physical attacks are resolved as normal, using the target's Physical Defense as the Target Number. Likewise, attacks made with spells or other magical abilities are made against the target's Mystic Defense, and Social Skill Tests are made against a target's Social Defense.

As described above, attacks made with non-magical weapons in astral space cannot cause damage to a target. When determining damage with non-magical weapons, use only the character's Strength Step. Magical weapons possess substance in astral space, so use standard rules when determining damage from magical weapons. Natural weapons (like an animal's claws, or a Saurid's tail) are part of the individual's solid astral form, and are also used normally.

Armor works the same way as weapons in astral space. Non-magical armor offers no protection against physical attacks in astral space. Magical armor, such as fernweave, provides its normal protection against physical attacks and imposes its standard Initiative Penalty. Any armor that provides a Mystic Armor bonus is considered magical for the purposes of this rule.

Damage in astral combat is resolved as normal and may render a character unconscious or dead. Characters still suffer Wounds and combatants must make Knockdown Tests as normal. Damage is healed as normal (see the **Combat** chapter in the ***1879* Players' Guide**).

Like most other activities, spellcasting in astral space follows standard rules. The risks of casting raw magic are greater for astral beings however, so Warping and Damage Tests made for any character casting with raw magic gain a +3 step bonus (again, see the ***1879* Players Guide**).

Travel in Astral Space

Generally, travel in astral space differs little from travel in the physical world. Character and creature Movement Rates remain unchanged in astral space. Few adventurers bring mounts into astral space because the bizarre appearance of astral space spooks most animals. Because travel on foot is fairly slow, adventurers usually enter astral space as close to their destination as possible – assuming, of course, that the adventurers know the location of their destination.

There are two key differences when traveling in astral space. First is the ability of astral beings to move through the astral imprints of non-magical and non-living objects. Theoretically, this ability enables astral travelers to simply walk through many obstacles, but doing so can cause significant disorientation. Second, astral corruption causes damage to those exposed to it. Each minute that a character is in astral space, they suffer damage using the Step Number shown on the Astral Damage Table. Mystic Armor and the character's Mystic Armor Bonus protect against this damage.

Spirits and other native astral denizens are not bound by the same restraints as people while in astral space and can fly about and move through non-magical objects without penalty. They also do not suffer damage from exposure to corrupted astral energy – though such corruption may have other effects on such beings.

Astral Locations

Traveling through astral space offers adventurers a chance to visit dark and dismal locations, places of breathtaking beauty and dark reaches where only foul entities best not mentioned stalk. Just as sites in the physical world can be Named, sites in astral space may become Named by a significant event or overwhelming emotion. Naming imparts True Patterns to these places, which allows magic to interact with them. Just as adventurers can travel to Named places in the Gruv or on Earth, they can also journey to Named areas in astral space.

The Netherworlds

The netherworlds are alternate physical realities connected to astral space in the same way that the world of *1879* is connected to astral space. They coexist with the physical world of *1879* and serve as the source of spirits, True elements, and other entities.

Each netherworld is unique, with its own natural laws. Some netherworlds support complete realities, much like the physical world known to Terrestrials, while others are little more than single chains of limited events that continually repeat themselves. Most netherworlds combine these two models, giving the appearance of complete worlds but existing only as chains of events and important locations. Very little has been learned thus far about the netherworlds, and the scanty surviving fragments of ancient texts that appear to discuss them have proven unreliable. Scholars do not know whether these fragmented realities are the natural states of the netherworlds, the result of otherworldly intervention, or simply a false impression created by the limited astral travel abilities of Earthly magicians. So early in the serious study of magic, figuring out the right questions to ask is still an issue.

The landscape of a netherworld can be chaotic or stable. At least one netherworld, known as Sylvar, seems completely stable though it comprises little more than wide expanses of barren, ravaged ground. Other charted netherworlds consist of massive conflagrations, the most tranquil of forests, or landscapes roiling with tainted magical energy. The age-old quest for knowledge and

power draws many magicians to the netherworlds, for a journey to these places may yield invaluable experience and insight into astral space and magic. Fortune draws others, who seek more direct access to True elements or hope to find unusual artifacts.

Gateways to the Netherworlds

Like the physical world of *1879*, each of the netherworlds creates an imprint in astral space. To travel to a netherworld, an adventurer must first locate the astral imprint of the netherworld. To locate a netherworld's astral imprint, the adventurer must locate the gateway that connects the netherworld's imprint with that of the physical world.

Most often, gateways to the netherworlds appear as portals much like those established by the Spirit Portal spell, or like the Rabbit Hole. Like much of astral space and its inhabitants, the appearances, locations and workings of these gateways follow no rhyme or reason. One gateway might appear as a doorway, while another might take the form of the mouth of some hideous creature, such as the Mayan Witz Monster – in which case the adventurer must be swallowed by the creature to pass through the gateway.

Most gateways can be opened only with the use of specific types of spells, or with the help of spirits, or under unusual or extreme conditions. For example, the Rabbit Hole opened when a massive Weird Science experiment was unexpectedly struck by lightning at a critical moment. The Gamemaster should feel free to invent any type of requirements for accessing the netherworlds.

As adventurers pass through a gateway, they enter the astral imprint of the netherworld. The adventurers may then pass from the netherworld's astral imprint to the netherworld itself using an appropriate ability or spell, such as a spirit's Astral Portal power, or by finding an exit portal, such as that leading out of the Rabbit Hole and into the Gruv. The adventurer may return to the physical world by simply reversing the process. Because the first step of that process is to locate the portal back into astral space, and because astral travelers may forget the location of a netherworld gateway or become lost in the netherworld itself, returning rarely proves easy. For these reasons, adventurers often employ spirits as guides when journeying to the netherworlds, because a spirit can always locate a gateway that it has passed through without any Test and without error. (Astral explorers rely heavily on this little-known spirit ability.)

In some instances, the locations of netherworld gateways correspond to the astral locations of extraordinary sites in the physical world, such as specific spots in the Transylvanian Alps, deep within the Black Forest, or areas of great mystical significance. For example, in Egypt, rumors abound of a gateway deep in one of the Great Pyramids. This gateway supposedly leads to a terrifically dangerous netherworld filled with tomes of forbidden lore and powerful magical artifacts, one that few over the ages have seen and survived. Adventurers seeking this gate in astral space would see the astral imprint of the secret chamber within the pyramid, as well as the gateway in its center.

Some scholars believe that other netherworld gateways exist in deep or high astral zones that correspond to physical areas beyond the reach of all but the most intrepid explorers. Airships have been chartered or built to search for these, but thus far, if any have been found, the explorers have not returned to tell the tale.

The Elemental Planes

Each of the elemental planes embodies a single element in its purest form: fire, water, air, earth, and wood. Despite the obvious hazards of going to a place consisting of nothing but a single element, magicians can and do travel to the elemental planes, usually in an attempt to harvest True

elements or contact elemental spirits. Though conditions in the elemental planes make it extremely dangerous for Terrestrials to linger there more than a few minutes, attempts to gather True elements by traveling to the elemental planes generally yield more kernels of greater potency than any other method of gathering True elements.

Areas of the physical world that possess features similar to the elemental plane often offer access to the elemental planes. Though not of the right nature for an astrally traveling magician to pass through, these fissures between the physical world and the elemental plane allow kernels of True elements to escape into the physical world. One such crack connecting the physical world to the elemental Plane of Fire exists in the caldera of Vesuvius, in Italy.

Adventurers can reach the elemental planes through astral space. Unlike the netherworlds, however, the elemental planes have no astral imprint: an adventurer who enters a portal in order to reach one of the elemental planes leaves the physical world, takes on astral form, and steps directly into the elemental plane. Generally speaking, the nature of magic should make it possible for adventurers to protect their astral forms in the elemental planes through the use of magical items, spells and Skills. Players and Gamemasters should work together to determine how such protection can be fashioned in their game.

Though the elemental planes show no physical signs of damage, the fact that some astral gateways to them lie in Tainted or Corrupt astral space implies that those planes could be impacted by violence or other sources of corruption. Exactly why this is so remains a mystery to most magicians, but some believe the close link between the physical world and the elemental planes, and the wide variety of corruptive influences, from war to genocide to accidental mass deaths, may explain how this is possible.

The Plane of Air

The elemental plane of True Air is devoid of any trace of other True elements. The buoyancy of True Air supports any traveler to the Plane of Air. All travelers to this plane may also breathe True Air regardless of their physical nature. Terrestrials often become giddy when breathing the pure element, however, and doing so for more than a few minutes without taking suitable precautions may render the person's lungs incapable of breathing normal air again. Astral gateways to the Plane of Air are usually located within Safe or Open regions.

The Plane of Earth

Of all the elemental planes, the Plane of Earth draws more adventurers than any other. Numerous pockets of True Air and True Water exist in this plane, but passing between them is impossible for any being unable to move through solid earth. Adventurers who make the journey and survive the plane's harsh conditions will find the spirits that inhabit the Plane of Earth to be quite cooperative. Of all the elemental planes, the Plane of Earth has suffered the most over Earth's history, and nearly all its gateways appear in Tainted or Corrupt regions of astral space.

The Plane of Fire

The Plane of Fire is the most hostile of the elemental planes. Most everything that enters this plane, be it a person, a spirit (save for fire spirits), even a small amount of True Water, is immediately consumed by the True Fire of the plane. Any person foolish enough to enter the Plane of Fire is incinerated almost instantly, though some powers and spells may grant protection from the plane's dangers for brief periods of time. Gateways to the Plane of Fire are generally found in Open regions, though occasionally they are located in Tainted astral space.

The Plane of Water

As with any underwater travel, moving through the Plane of Water offers many challenges, not the least of which is breathing. Diving suits and Weird Science devices can be used to stay alive in this elemental plane, but only for short periods of time. True Water does not offer a great deal of oxygen to extract. Bubbles of True Air large enough to sustain a single person, probably created by kernels of True Fire colliding with the True Water, occasionally drift through the Plane of Water, and while adventurers fortunate enough to find one of these bubbles may stay in the elemental plane for several minutes, they often risk the same dangers as staying too long on the Plane of Air. Gateways to this plane are almost always located in Safe regions of astral space.

The Plane of Wood

No magician has ever traveled to the Plane of Wood and returned. Only the existence of True Wood and plant spirits supports the theory that this elemental plane exists.

The Nature of Spirits

Various forms of astral beings reside in astral space, ranging from spirits to other more unusual denizens. Most reside in the netherworlds of astral space, but many of them venture into areas of astral space where astral travelers are likely to encounter these unpredictable entities. Magicians recognize four major categories of spirits: tasked spirits, elemental spirits, ally spirits, and Named spirits. Full descriptions of the different spirit types appear elsewhere in this chapter.

Astral space is home to all manner of spirits, including those of the elemental planes, the Named spirits of deceased people, and strange spirits that inhabit the more unusual netherworlds. With the exception of those who are summoned, elemental spirits are rarely encountered outside their native planes. On rare occasions, elemental spirits roam other areas of astral space, most often near sites that resemble or evoke their native planes. For example, fire spirits are likely to roam astral space near Vesuvius, while water spirits might be encountered in astral space along the

Danube or the Volga. Wood spirits might be found in the Black Forest. Elemental spirits usually avoid Terrestrials and will flee back to their home planes upon meeting such an astral presence.

Ally spirits from the netherworlds possess a natural curiosity, which sometimes inspires them to travel through astral space to observe the physical world or to seek out people in astral space. These spirits exhibit a mischievous streak as well, which can prove dangerous to astral travelers. In fact, numerous legends tell of ally spirits that lead adventurers into dangerous or precarious predicaments so the spirits can observe the adventurers' attempts to save themselves. Their unpredictable nature can make ally spirits quite dangerous indeed.

The spirits of the deceased are by far the most easily identifiable that astral travelers are likely to encounter. Most retain forms that are very similar to the physical forms they possessed in life, but this is not always the case. Because people sometimes hide their true natures, an ancestral spirit might possess a form that is larger, smaller, more grotesque or more beautiful than its former physical body. The spirits of Priests or Shamans commonly show radical differences because of the intense mental and emotional focus and magical power they achieve, as do the spirits of anyone who stressed a single side of their natures to the exclusion of all else. The behavior and attitudes of an ancestral spirit may also vary greatly from the behavior and attitudes the person exhibited in life. Such changes may result from the traumatic transition from a physical to an astral existence, or from the spirit's interaction with the powerful energies of astral space. Interacting with the purer energies of the astral realm may foster purity of thought in the spirit, along with a desire to battle astral corruption. On the other hand, interacting with corrupted energies may twist a spirit into a monstrous apparition bent on inflicting pain and suffering. Such spirits may attack astral travelers without provocation. Most spirits, however, fall somewhere between these extremes. For more information about spirits, including their abilities and powers, see the **Spirits** section further along in this chapter.

> This entire passage ignores the hypothesis that so-called ancestral spirits are not in fact the souls of the dead, but instead an astral entity merely taking on the appearance of a deceased ancestor for some inscrutable purpose. This idea should be explored, cautiously, as it has many disturbing implications.
>
> – Nesrin Arikan, London Chapter, Theosophical Society

Spirit Force Ratings

Not all spirits are equally powerful. A spirit's Force Rating is an approximate measure of its power level in relation to other spirits. The higher a spirit's Force Rating, the more powerful the spirit, both in its base statistics and in the powers at its disposal.

Each increase in a spirit's Force Rating enhances the spirit's characteristics and grants it additional powers and abilities. Refer to the **Spirit Descriptions**, pg.455, for details. Because a spirit's Force Rating directly affects its Mystic Defense, summoning spirits with a significant Force Rating can be extremely difficult.

Increasing Spirit Force Ratings

A spirit's Force Rating can increase in two ways. First, the rating grows as the spirit ages. Second, repeated summonings can increase the rating. Increases due to age accumulate slowly and account for very little growth in a spirit's Force Rating. Generally, the older the spirit, the higher its Force Rating. However, the two factors are not always so directly proportional. For example, a 100-year-old spirit might have a Force Rating of only 4 or 5, while a 500-year-old spirit could have a Force Rating of 10 or more.

The primary way a spirit's Force Rating increases is through repeated summonings. Whenever a spirit is summoned, the summoner uses magical energy to reach out to the spirit's pattern and draw it toward the summoner. As is the case with most magic use, under ordinary circumstances the magical energy dissipates once the spirit has been summoned. When a specific spirit is summoned repeatedly, however, the spirit learns to recognize that it is being summoned and to absorb a little of the magical energy used in the summoning before the energy dissipates. The vast majority do this to increase their Force Rating in an attempt to eventually become too powerful to be summoned.

Summoners recognize this phenomenon and have found a way to avoid it, because a spirit becomes harder to control as its Force Rating increases. The section on **Repeated Summonings** (pg.406 in the *1879* **Player's Guide**) details how summoners may repeatedly summon a spirit without adding to its Force Rating.

Great Form Spirits

Spirits with Force Ratings of 15 and higher are referred to as Great Form spirits, and have Names. The difficulties of summoning and controlling such powerful spirits prevent most magicians from ever attempting the feat. When they do try to summon such spirits, they usually use ritual magic, because few magicians possess enough power to summon a Great Form spirit by themselves. Any Great Form spirit that breaks free from its summoner by winning a Contest of Wills (pg.407 in the *1879* **Players' Guide**) is likely to wreak havoc in order to express its displeasure at being summoned before returning to its native astral habitat.

The templates in the Nature Spirits and Ally Spirits sections of this chapter only list spirits up to a Force Rating of 15. To create statistics for spirits with even higher Force Ratings, add +1 to their Attribute Steps per point of Force Rating above 15, and recalculate all dependent statistics accordingly.

Named Spirits

Summoning a Named spirit requires the summoner to make use of the Law of Contagion, one of the laws governing the use of the magic flowing through the fabric of the universe. The Law of Contagion states that once a connection has been forged between two things, they remain connected forever. A dragon's scale is always part of that dragon, even if he sheds it. The place of his birth is a part of a man's life until the end of his days, even if he journeys far away from it. The lineage of a woman remains a defining characteristic of her existence. As a result, the summoner is required to either know the spirit's True Name, have an important item that once belonged to the deceased person, or, in the case of an ancestral spirit, be directly descended from the ancestor.

Named ally spirits are almost always the spirits of deceased persons, usually referred to as ancestral spirits. Usually, these spirits were people with knowledge and experience that can greatly help their summoners. Elemental spirits may also be Named. Tasked spirits are almost never Named.

Though difficult to summon, Named spirits are sometimes easier to control than other powerful spirits if the summoner possesses at least one of the spirit's key items. Being their lineal descendent gives a family relationship that can be traded on, although this may require some bargaining and the usual apologies for not calling just to say hello.

Learning a spirit's True Name or obtaining a Named spirit's key items are difficult, and may require journeys into astral space and the netherworlds. On very rare occasions, a magician may learn the Name of and/or obtain a key item belonging to a spirit native to the netherworlds. Summoning Named elemental spirits remains an extremely difficult proposition, chiefly because obtaining a pattern item of such a spirit is nearly impossible. Because of these difficulties, magicians usually only summon a Named spirit when no other spirit will fit their needs.

Descent is an accident of birth, but gives the summoner a lineage of spirits going back for generations that can be summoned. Ancestral spirits can be important sources of knowledge of past myths, tales and legends. Calling up one's ancestors, though, has problems of its own, as cultures with a shamanic tradition normally regard their ancestors with great respect. Summoning them is therefore never done lightly.

Magicians may also summon Named spirits in order to use the spirit's powers or abilities. For example, a powerful Named spell might require the presence of a specific Named spirit. A scholar studying an ancient tome may summon the spirit of the legendary scribe Hurriyah ibnat Intiîar al-Maasar to aid his research.

Named Spirit Powers and Force Ratings

The powers of specific Named spirits are determined by the spirit's type (ancestor, ally, or elemental) and Force Rating. Most Named spirits have several of the powers available to spirits of their type and possess Force Ratings of 8 or higher. The Force Rating of an ancestral spirit always equals or exceeds the Tier of the summoner.

Characters as Named Spirits

When adventurers enter astral space, they become subject to the same laws as other residents of astral space. This means a person traveling in astral space may be summoned. To do so, the magician must use the Summon Skill to summon the person as though they were a Named spirit. A summoned person appears in astral space near the summoner and is bound to serve the summoner as any other summoned spirit.

Ally Spirits

Magicians summon ally spirits when they need an astral assistant or servant. In this respect, ally spirits resemble tasked spirits (see below), but allies are much more powerful and versatile because their existence is not tied to the completion of a specific task. Ally spirits may assume astral or physical forms, but generally prefer to remain in their astral incarnations. When they do physically manifest, ally spirits appear as ghosts or apparitions. They never take on truly solid physical forms, but they can attack and be attacked by physical beings.

Individual ally spirits may vary widely. Some are astral denizens of the netherworlds, while others are the spirits of the deceased. A magician never knows which type of ally spirit will arrive when one is summoned, and most ally spirits prefer to reveal as little about themselves as possible.

The Gamemaster determines the exact powers and abilities of a summoned ally spirit, though magicians may specify services they want an ally to perform. In these cases, the spirit's powers and abilities generally reflect the type of service. For example, a spirit that is summoned to meld with a person will have the Possession power. An ally spirit summoned to aid a magician in combat will have relatively high physical statistics, or perhaps specific combat-related abilities. A spirit summoned to aid a magician in ritual magic or spellcasting will likely have relatively high Perception and Willpower Steps.

Alternatively, magicians may summon ally spirits with specific powers and abilities, as noted in the Summoning rules (pg.403 of the *1879* Players' Guide).

Ally Spirits and Names

Most ally spirits have Names, but they cannot be forced to reveal them. Summoning an ally spirit as a Named spirit provides the summoner with greater control and power over the spirit. See **Summoning** (pg.403 of the *1879* Players' Guide) for more information.

Elemental Spirits and Elementals

Elemental spirits are the astral form of spirits from the elemental planes. Five types of elemental spirits exist, one for each True element: air, earth, fire, water, and wood. Elemental spirits may switch between their astral and physical forms at will, though these spirits are very reluctant to assume physical form and usually must be coerced to do so. Physically manifested elemental spirits are called elementals. For example, an elemental air spirit in astral form would be called an air spirit. In its physical form, the same spirit would be called an air elemental. Elementals appear in a multitude of guises, based on the elements they embody. For example, a water elemental may appear as a soft mist, a whirlwind of water, or a quiet pool. A wood elemental may take the shape of any plant.

Summoned elementals may serve as champions for magicians who prefer not to fight an opponent themselves. Most magicians summon these spirits with extreme care and the utmost respect, because they believe the elemental spirits have lived in the elemental planes since before humans walked on the earth (or Saurids on the Gruv). In the view of a magician, summoning an elemental spirit is like summoning the sacred elemental planes themselves.

Elemental Spirits and Names

Most elemental spirits have Names. Elemental spirits need not be summoned as Named spirits, however, and cannot be forced to reveal their Names. Summoning an elemental spirit as a Named spirit provides the summoner with greater control and power over the spirit, a benefit most magicians feel is worth the extra difficulties the method presents.

Tasked Spirits

Tasked spirits are the most common and least dangerous type of spirit encountered in *1879*. These spirits are brought to the physical world solely to provide specific services for their

summoners. They may perform any number of duties, such as dusting, guarding a valuable item, scouting for danger or annoying a specified target. Unlike other types of spirits, tasked spirits commonly manifest in physical form. Most of the time, a tasked spirit's physical appearance is related to the task it performs. For example, tasked spirits may manifest as brooms, mice, shadows or any other form that suits the task and the game environment.

These spirits are summoned by different spells and/or Skills for specific tasks. Examples of tasked spirits include the spirits summoned by the Steno Spirit spell and the Orbiting Spy Skill. Any magician with the appropriate spell or Skill may summon a tasked spirit. The spirit's game statistics are always listed with the Skill or spell in question.

Tasked spirits' Force Ratings increase only under very unusual circumstances. They do not gain points to their Force Rating from repeated summonings. Tasked spirits cannot refuse to obey a summoner and may only provide the services described by the spell or Skill used to summon them. Tasked spirits can be banished like any other spirit. However, anyone other than a tasked spirit's summoner must achieve two or more successes to banish the tasked spirit.

Other Astral Denizens

In addition to spirits, adventurers in astral space may encounter creatures that defy easy classification. Usually, such creatures frequent the netherworlds, but some have been known to venture into other areas of astral space as well. These creatures include highly magical beings restricted to the astral plane, and a seemingly endless variety of astral forms that appear to reflect physical creatures belonging to the infinite number of unidentified worlds and realities also connected to astral space.

Making Alliances

Most spirits prefer to remain in astral space and only manifest in the physical world when forced to do so by their summoner. Once a spirit has manifested physically, it can affect physical objects and characters in the same way as any other physical being. The spirit can also be affected by physical objects and characters, a situation most spirits find profoundly uncomfortable.

More often than not, spirits have thoughts, feelings, likes, dislikes, and memories like people do. Magicians should treat all spirits with caution and respect. Spirits usually find a way to punish those who treat them poorly. Perhaps more importantly, spirits exhibit an impressive capacity to learn. As a result, some of them possess great wisdom, while others have become quite cunning and treacherous. Still others have learned to cast spells, and some carry the knowledge of all those who have summoned them, making them a valuable asset to any magician.

Motivations, Attitudes and Personality

Like people, spirits have unique motivations and attitudes. Those of spirits may seem bizarre and alien. The very nature of spirits precludes the living from truly understanding the workings of the spirit mind. Despite their mysterious behavior, spirits do seem to possess personalities as distinct as any person. Each individual spirit is a unique creature with a unique outlook.

A rare few spirits enjoy being summoned and put to use, while the great majority strongly resent being disturbed by people too ineffectual to solve their own problems. Many spirits consider themselves so superior that they feel insulted when a magician summons them. A few others relish the idea of exploring a bit of the physical world every now and again.

Any spirit may be summoned, even those with the most abrasive personalities, but magicians usually try to summon spirits with reasonable personalities. Of course, until a magician has summoned one such reasonable spirit, and can then bring that spirit back later, they must take what they get.

Bargaining and Reputation

Negotiation with elementals or nature, ally, or Named spirits rather than giving peremptory orders is always a good idea. Interaction Tests may be used with spirits as with any GMC. Note that social Skills used in Interaction Tests are designed for use with the living, and may or may not be effective in dealing with spirits. The summoning magician may offer a bargain instead of commanding service. Spirits deal in information, such as the Names of rivals and the locations of gateways, and in magical energy, such as Karma. Offering a Great Form spirit a point of Karma from each magician taking part in the ritual casting may prevent a Contest of Wills from occurring. Some spirits have interests in the physical world, and may desire services from the magician in return for their own efforts. For example, an earth spirit wishing to extend its domain may ask the magician to plant a tree in its Name in the domain of a rival. This sort of thing embroils the magician in spirit politics, which in turn can drive adventures all on its own.

A magician who gains a reputation for bargaining can build alliances with the spirit world. Over time, the Gamemaster may grant the character a Step bonus to summoning and bargaining. The magician may, if their reputation with the spirit world becomes sufficient, ask for greater favors or service in return for the promise of future payment. Game mechanics for this would be far too complex, and roleplaying the progress should be sufficient. Players and Gamemasters should use their best judgment as to how to represent gain and loss of reputation in the spirit world.

Special Abilities of Spirits

Ally, elemental, and Named spirits may possess a number of special powers, much like the powers of creatures. The spirit type descriptions list the spirit powers common to each type. As they

increase in Force, spirits may gain new powers as well. Unless a power's description states otherwise, any type of spirit may possess that power.

The following list of spirit powers is not intended to be comprehensive. Gamemasters should feel free to create additional powers for their games.

Game Terms

As with other abilities, spirits must use a Step Number to make Tests with their powers. Most of these Step Numbers are based on one of the spirit's Attributes, usually Willpower, and the spirit's Force Rating. Any increase in a spirit's Force Rating also increases the Step Number it uses to make Tests. If a power's description does not provide a Step Number formula, the power has a specific effect that does not require a Test.

Some powers require the spirit to take a Standard Action to use them. These are noted by the word "Standard" in the "Action:" notation. Powers which do not require an action are noted by the word "Simple" or "Free" in the "Action:" notation. These powers usually require a Spellcasting Test that meets the "Action: Standard" requirement.

Spirit Powers

Adaptability

Step: See below

Action: Free

Water spirits only. This power allows a spirit to increase one of their characteristics by their Force Rating. This effect is restricted to the following characteristics: Initiative, Physical Defense, Mystic Defense, Social Defense, Physical Armor, Mystic Armor, Wound Threshold, Attack Step, Damage Step. This action must be used prior to the spirit's Initiative. The effect may be switched to a different characteristic at the beginning of any round.

Aid Summoner

Step: Force Rating

Action: Standard

The Aid Summoner power allows a spirit to enhance its summoner's magical abilities. To activate this power, the spirit's summoner takes Strain equal to the spirit's Force Rating. For the duration of the power, the summoner may add a Step bonus equal to the spirit's Force Rating to one of their magical abilities when making Tests. The specific ability must be identified when the power is invoked. This includes Skills such as Spellcasting and Willforce, and Profession Abilities such as We Shall Not Want For It. This bonus may be applied to only one ability per summoning. Each time the summoner uses the bonus on an Action Test, they take 2 Strain. Each use of the Aid Summoner power lasts for a number of minutes equal to the spirit's Force Rating.

Astral Portal

Step: Force Rating

Action: Standard

Ally spirits only. This power enables a spirit to create a portal through which the living can enter astral space. The portal remains open for a number of minutes equal to the spirit's Force

Rating × 10. Note that the portal is two-way, allowing entry into and exit from astral space. Astral entities other than the summoner may use the portal to enter physical space if they so choose.

Confusion

Step: WIL + Force Rating

Action: Standard

Ally spirits only. This power enables a spirit to temporarily confuse a target character by passing some of its own energy through the target. The spirit makes a Confusion Test against the target's Mystic Defense. The range of this power is the spirit's Force Rating x 100 in yards, and requires line of sight. If the Test succeeds, the target suffers a –1 penalty to their Perception and Willpower Steps for each success achieved. This penalty affects all abilities based on the reduced Attributes. The effect lasts for a number of minutes equal to the spirit's Force Rating.

Curse

Step: WIL + Force Rating

Action: Standard

Ally spirits only. The spirit makes a Curse Test against the Mystic Defense of a single target, at a maximum range of 10 times its Force Rating in yards. If successful, the target suffers a -2 Step penalty to one Attribute of the spirit's choosing for one hour per success. The penalty affects all Tests based on the affected Attribute. A target can only be affected by one use of this power at a time.

Detect Trap

Step: PER + Force Rating

Action: Standard

Ally spirits only. The Detect Trap power works in the same manner as the Skill of the same name.

Detect True Element

Step: Force Rating

Action: Standard

Elemental spirits only. This power enables an elemental spirit to detect the presence of its own True element. For example, an air spirit could detect only True Air by using this power. Because elemental spirits represent a manifestation of the elemental planes, and because magicians generally use this power to locate True elements for their own use, these spirits do not like to use the Detect True Element power for their summoners. Coercing an elemental spirit to do so requires a Contest of Wills. If the summoner wins the contest, the spirit leads the summoner to any source of its True element within a number of miles equal to the spirit's Force Rating. A spirit cannot detect the presence of its True element beyond this range. Elemental spirits will never aid a summoner in making a Gathering Test (see **Enchanting** in the *1879* **Players' Guide**). Even losing a Contest of Wills cannot coerce a spirit to violate this principle.

Detect Weapon

Step: PER + Force Rating

Action: Standard

Ally and elemental earth spirits only. The Detect Weapon power works in the same manner as the Skill of the same name. This power also enables a spirit to describe the general size, shape and location of the weapon.

Disguise Self

Step: CHA + Force Rating

Action: Standard

Ally spirits only. The Disguise Self power works in the same manner as the Skill of the same name and allows the spirit to physically manifest in the form of any person the spirit has seen.

Durability

Step: Rank

Action: NA

The Durability power increases a spirit's ability to take damage. Each rank in the Durability power permanently adds +7 to the spirit's Death Rating and +6 to its Unconsciousness Rating.

Elemental Aura

Step: Force Rating

Action: NA

Elemental spirits only. When elemental spirits with this power manifest, they are surrounded by a damaging aura of their element. Air spirits may be surrounded by howling winds or crackling lightning, fire by intense heat, earth by a cloud of stinging dust or an intensification of gravity, and water by intense cold. Everything within 4 yards of the spirit takes the spirit's Force Rating in damage each round. Physical Armor protects against this damage.

Empathic Sense

Step: PER + Force Rating

Action: Standard

Ally spirits only. The Empathic Sense power enables a spirit to retain an empathic connection with its summoner, in much the same manner as the Skill of the same name.

Engulf

Step: WIL + Force Rating

Action: Simple

Elemental spirits only. This power enables an elemental spirit to engulf a victim in its element, causing the victim to take damage during each round of exposure. The elemental must be physically manifested to use this power. The elemental must successfully grapple (see **Combat** in the *1879* **Players' Guide**) the target in order to use this power. Once the victim is grappled, it is completely engulfed by a harmful version of the appropriate element (see below) and takes damage each round equal to the result of the Engulf Test. Each round, after taking damage, the engulfed character may make a Strength Test against the elemental's Attack Test result. If the Test succeeds, the victim breaks free of the element.

Air: The spirit is able to make the air around a victim unbreathable. The victim can hold their breath (see **Suffocation** in the **Perils of Adventuring** chapter, pg. 203) and begins to take damage when they fall unconscious. Mystic Armor protects against this damage. Victims might suffocate if engulfed for too long.

Earth: The target takes damage from the crushing weight of the spirit. Physical Armor protects against this damage.

Fire: The target is shrouded in fire and starts to burn. See **Fire** in the **Perils of Adventuring** chapter, pg. 203. Physical Armor protects against this damage.

Water: The spirit is capable of exerting great pressure on engulfed victims. Physical Armor protects against this damage and victims might drown if engulfed for too long. See **Swimming and Drowning** in the **Perils of Adventuring** chapter, pg. 203.

Wood: The target is covered in thorny vines that pierce their skin. Physical Armor protects against this damage.

Enrage Element

Step: WIL + Force Rating

Action: Standard

Elemental spirits only. This power enables an elemental to create a tumultuous whirlwind of its element. Earth elementals may create small storms of flying rocks; air elementals may create whirling winds; wood elementals, storms of spinning twigs; fire elementals, showering sparks; and water elementals, hurricane-like waves. The power affects all targets within a radius equal to the spirit's Force Rating in yards × 2 (hexes × 1). The power's effects last for a number of rounds equal to the spirit's Force Rating. Each round, the spirit makes an Enrage Element Test in place of a Damage Test to determine how much damage each target takes. Physical Armor protects against this damage. In addition, any targets within the area of effect are considered Harried (*1879* **Players Guide**, pg.247).

Evil Eye

Step: WIL + Force Rating

Action: Standard

Ally spirits only. To use this curse-like power, a spirit makes an Evil Eye Test against the target's Mystic Defense. The range of this power is the spirit's Force Rating x 100 yards, and requires line of sight. If the Test succeeds, one of the target's Attribute Steps suffers a –2 penalty for a number of hours equal to the spirit's Force Rating, affecting all abilities based on that Attribute. The spirit or its summoner chooses the affected Attribute. A single target can be subjected to only one use of this power at a time.

Find

Step: PER + Force Rating

Action: Standard

The Find power enables a spirit to trace an item to its origin, as long as it is within a distance no greater than the spirit's Force Rating × 1,000 miles. For example, if a spirit has a lock of hair, it can locate the hair's owner. If it has a piece of a wall, it can locate the building from which the piece came. To use this power, the spirit makes a Find Test against the subject's Mystic Defense. If the Test succeeds, the spirit has located the subject and reports back to the summoner. Tracing

an item can take a long time. As a rule of thumb, the spirits needs one hour per 1,000 miles of distance. The spirit cancels its search if the summoning duration ends, often without reporting back.

Haggle

Step: CHA + Force Rating

Action: Standard

The Haggle power works in the same manner as the Skill of the same name, except spirits may use the power only when bargaining with a summoner.

Insubstantial

Step: NA

Action: NA

Air, ally, fire, and water spirits only. Attacking a manifested spirit with this power using physical weapons (such as a sword or a gun) requires an additional success, unless the attack has an area of effect.

Invisibility

Step: DEX+SR

Action: NA

Air, ally, and water spirits only. These spirits may become invisible to mundane sight at will. The spirit makes an Invisibility test, the result of which is the Target Number for any attempts to detect the elemental. The spirit may be seen normally with Astral Sight.

Karma

Step: Special (see text)

Action: NA

Like dragons, spirits can spend a Karma Point on any Test. Most spirits have a relatively low Karma Step, but this increases as the spirit's Force Rating increases.

Manifest

Step: Force Rating

Action: Standard

The Manifest power enables a spirit to manifest in the physical plane. The duration of the manifestation is limited to a number of hours equal to the spirit's Force Rating. Physically manifested elemental spirits are called elementals. Physically manifested ally spirits appear as ghosts or apparitions and remain insubstantial enough to pass through solid objects, including walls, doors and rock. If the object is thicker than 1 yard, however, the spirit becomes lost inside it and requires an extra round per yard of depth to find its way back out.

Manipulate Element

Step: WIL + Force Rating

Action: Standard

Elemental spirits only. This power enables a spirit to change the basic structure of any object composed of the spirit's native element. The diameter of the area of effect cannot exceed the spirit's Force Rating in yards. For example, an earth elemental can use the Manipulate Element power to

turn an area of solid earth into mud or quicksand. An air elemental could make the air in a certain area toxic. A water elemental could turn a pool into ice. A wood elemental could twist a tree into a cage. A fire elemental could make a dying ember burn white-hot or even explode. The Gamemaster determines the specific effects of each use of the Manipulate Element power. The effects of this power last for a number of minutes equal to the spirit's Manipulate Element Test result, assuming the result is not instant, as in the case of the ember explosion.

Possession

Step: WIL + Force Rating

Action: Standard

Ally spirits only. This power allows a spirit to temporarily possess and take control of a target's physical body. To use the power, a spirit makes a Possession Test against the victim's Mystic Defense. The power requires direct contact between the spirit and the target. If the Test succeeds, the victim is possessed by the spirit for a number of minutes equal to the spirit's Force Rating. During this time, the target is aware of their body's actions but cannot control them. Possessed targets may force the spirit out by making a successful Willpower Test against the spirit's Mystic Defense.

Remove Element

Step: WIL + Force Rating

Action: Standard

Elemental spirits only. This power enables a spirit to remove its native element from an area. The diameter of the area of effect cannot exceed the spirit's Force Rating in yards × 2 (or Force Rating in hexes). For example, an earth spirit could use the power to damage a building by removing the dirt around or under one or more of the building's supporting walls, or a water spirit could remove all the water from a character's body. The spirit makes a Remove Element Test against the target's Mystic Defense. When using the power against a living being, a spirit must achieve three or more successes. When a spirit successfully uses this power to remove the water or air from a person or animal's body, the target takes damage equal to the Remove Element Test result. Mystic Armor protects against this damage.

Share Knowledge

Step: Force Rating

Action: Standard

Elemental spirits only. This power allows a spirit to learn general information about any recent activity in, on, or near its native element. For example, an earth spirit may learn that two horses recently passed along a dirt road, a breeze may carry snippets of conversation to an air spirit, or a water spirit may learn that a boat recently passed along a river. The power enables spirits to learn only of events that occurred within a number of hours equal to the spirit's Force Rating. The Gamemaster determines exactly how much information the elemental learns.

Skills

Step: Special (see text)

Action: Special (see text)

Some spirits have powers based on Skills, denoted by a superscripted 'S' at the end of the power's name. Refer to the **Skills** chapter of the *1879* **Players' Guide** for a description of the Skill in question. Spirits ignore any Karma requirements listed with a Skill.

Soothe

Step: CHA + Force Rating

Action: Standard

Elemental spirits only. This power enables a spirit to produce soothing sounds or smells that cause its target to relax. Sounds and smells might include a cool breeze, the sound of a softly gurgling brook, the smell of fresh dirt, the sound of leaves rustling in the wind, or the sound of a crackling fire. To use this power, a spirit makes a Soothe Test against the target's Social Defense. If the Test succeeds, the character rests more comfortably and gains a +1 bonus to their next Recovery Test.

Spear

Step: STR + Force Rating

Action: Standard

Elemental spirits only. This power allows a physically manifested spirit to form a spear from its elemental essence and throw it at a target. In the case of a water elemental, the spear might take the form of an icicle. For a fire elemental, it might be a flame bolt. An air elemental's spear might appear as a barely visible shimmering that cuts through the air on its way to the target.

The spirit makes a Spellcasting Test against the target's Mystic Defense. The range of this power is the spirit's Force Rating times 10 yards. If the Test succeeds, the spirit makes a Spear Test in place of a Damage Test to determine how much damage the target takes, reduced by Physical Armor. If the target suffers damage, an additional effect occurs based on elemental type:

Air: The target must make a Knockdown test against the damage dealt.

Earth: The target is slowed. Their movement rate is lowered by 2 yards per success on the Spellcasting test.

Fire: The spear does +2 Damage per success on the Spellcasting test.

Water: The spirit may choose one of the bonus effects from another element type.

Wood: The target is Harried (Player's Guide, p. 247) for 1 round per success on the Spellcasting test.

Spellcasting

Step: PER + Force Rating

Action: Standard

The Spellcasting power enables spirits to cast spells using raw magic. When casting spells in this manner, spirits are vulnerable to the same Warping and Damage effects as living magicians. For this reason, spirits rarely use this power unless a summoner forces to them do so.

Spells

Step: Special (see text)

Action: NA

Elemental spirits may only cast spells that deal with their native elements. Generally, ally spirits can cast KAV spells of only one Lodge, though some powerful ally spirits can cast spells of several. The spirit's Force Rating determines the maximum spell Tier it may cast. Thus, a Strength 6 ally spirit could cast any spell up to Novice Tier for any type of magic it knows.

Temperature

Step: WIL + Force Rating

Action: Standard

Ally and elemental fire spirits only. This power enables spirits to alter the temperature of an area up to its Force Rating in yards × 2 (or Force Rating in hexes) in diameter. The spirit raises or lowers the temperature enough to disconcert or discomfit characters within the area of effect, but not enough to endanger the characters. Characters or creatures within the area of effect experience difficulty concentrating and suffer a –1 penalty to their Perception and Willpower Tests. The effect of the Temperature power lasts for a number of minutes equal to the spirit's Force Rating.

Nature Spirits (Elementals)

The following descriptions include simple formulas to calculate a spirit's basic game statistics. The spirit's Force Rating appears abbreviated as 'FR'. For example, air spirits with a Force Rating of 5–8 are listed with a Social Defense of 8 + FR. A Force Rating 5 air spirit would have a Social Defense of 13 (5 + 8). Please keep in mind that these formulas are only guidelines and serve to form the basic game statistics for most spirits. As shown in the examples, these can always be modified to serve a special purpose.

Air Spirits

Air spirits embody the nature of air. Air spirits tend to be extremely perceptive and possess better social skills than any other type of elemental spirit. Most are good-natured as well, but can quickly turn from happy-go-lucky breezes to killer tornadoes when displeased. Most air spirits accept

being summoned without complaint or struggle, and a few occasionally bargain with the summoner to stay longer or to be summoned again. Air spirits prefer to be near the flow of air at all times and become uncomfortable in enclosed spaces. Manifested air spirits may take many physical forms. Air elementals have been known to manifest as whirlwinds, soft breezes, or the sound of breathing. Air elementals often assume humanoid faces that appear as wispy, changing visages floating in the midst of their bodies.

Force Rating 1–4

DEX: 6	STR: 5	TOU: 4
PER: 6	WIL: 5	CHA: 4
Initiative: 6	Physical Defense: 6 + FR	
Actions: 1	Mystic Defense: 6 + FR	
Attack: 6 + FR	Social Defense: 3 + FR	
Damage:	Physical Armor: 4	
See Powers	Mystic Armor: FR	
Death: 28	Recovery Tests: 2	
Unconsciousness: NA	Knockdown: NA	
Wound Threshold: 7	Movement: 20 (flying)	
Adventure Award: Novice Tier		
Karma Points: 2 × FR	Karma Step: 3 + FR	

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (PER + FR), Engulf (STR + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 5–8

DEX: 10	STR: 9	TOU: 8
PER: 10	WIL: 9	CHA: 8
Initiative: 10	Physical Defense: 11 + FR	
Actions: 2	Mystic Defense: 11 + FR	
Attack: 10 + FR	Social Defense: 8 + FR	
Damage:	Physical Armor: 8	
See Powers	Mystic Armor: FR	
Death: 44	Recovery Tests: 4	
Unconsciousness: NA	Knockdown: NA	
Wound Threshold: 13	Movement: 20 (flying)	
Adventure Award: Journeyman Tier (1 per 2 PC)		
Karma Points: 2 × FR	Karma Step: 3 + FR	

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (PER + FR), Engulf (STR + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 9–12

DEX: 14	STR: 13	TOU: 12
PER: 14	WIL: 13	CHA: 12
Initiative: 14	Physical Defense: 16 + FR	
Actions: 3	Mystic Defense: 16 + FR	
Attack: 14 + FR	Social Defense: 14 + FR	
Damage:	Physical Armor: 12	
See Powers	Mystic Armor: FR	
Death: 60	Recovery Tests: 6	
Unconsciousness: 53	Knockdown: NA	
Wound Threshold: 17	Movement: 20	

Adventure Award: Warden Tier (Group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (PER + FR), Engulf (STR + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 13–15

DEX: 18	STR: 17	TOU: 16
PER: 18	WIL: 17	CHA: 16
Initiative: 18	Physical Defense: 21 + FR	
Actions: 4	Mystic Defense: 21 + FR	
Attack: 18 + FR	Social Defense: 19 + FR	
Damage:	Physical Armor: 16	
See Powers	Mystic Armor: FR	
Death: 84	Recovery Tests: 9	
Unconsciousness: NA	Knockdown: NA	
Wound Threshold: 23	Movement: 20 (flying)	

Adventure Award: Master Tier (group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (PER + FR), Engulf (STR + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Rules

Due to its gaseous form, an air spirit only attacks using its Engulf or Spear powers. Choose a number of additional powers up to the air spirit's Force Rating.

Gaseous Form: Attacking a manifested air spirit with most nonmagical, ordinary weapons (such as a sword or a bow) is virtually useless. All damage inflicted with such a weapon is ignored.

Invisibility: Because air can rarely be seen, air elementals may become invisible at will. The air spirit makes a Spellcasting Test, the result of which is the Detection Difficulty for any attempts to detect the elemental.

Vulnerability to Earth: Increase the Damage Test by +2 Steps if the attack was made with an earth-based weapon or spell.

Smoulder (Example Air Spirit)

Long ago, Smoulder had a different Name, and rolled along the nape of the earth in a wave of fog, usually in the company of a water spirit whose Name is lost. Humans moved into the area, and a city was built, and they called it Londinium. As time went by, the river became a sewer, and the smoke from wood and then coal shrouded the city in a pall of toxic fumes. The water spirit, realizing it was slowly being corrupted by the damage to its element in the region, left Earth and returned to its home plane. Smoulder, caught and held by the smoke of London, brooded, alone, and became vengeful.

The embodiment of a London particular, Smoulder has been partly responsible for the rising number of fatalities on days with dense smog. The spirit thickens the murk, deprives the area of breathable air, concentrates the coal dust and other particulates, and either drives people into lethal asthma attacks or smothers them outright. Thus far, Smoulder has evaded all efforts to capture it or drive it back to its elemental plane. Don't bother trying to talk with it, or ask it for favours. The best any summoner can hope for is to contain it for a time.

Force Rating 10 Air Spirit "Smoulder"

DEX: 15	STR: 13	TOU: 12
PER: 14	WIL: 14	CHA: 12
Initiative: 17	Physical Defense: 26	
Actions: 3	Mystic Defense: 26	
Attack: 24	Social Defense: 24	
Damage:	Physical Armor: 8	
14	Mystic Armor: 13	
Death: 64	Recovery Tests: 6	
Unconsciousness: NA	Knockdown: NA	
Wound Threshold: 18	Movement: 20 (flying)	

Adventure Award: Warden Tier (Group)

Karma Points: 20 Karma Step: 23

Powers: Astral SightS (24), Confusion (24), Detect True Element (24), Elemental Aura, Engulf (23), Insubstantial, Manifest, Manipulate Element (24), SpellcastingS (24)

Equipment, Loot: None

Sylphs (Example Air Spirit)

When manifested in their natural form, sylphs are invisible to the naked eye. When viewed astrally, their native form appears as a floating sphere of about 2 feet in diameter. They are capable of radically altering this form when they desire, often appearing as androgynous, semi-transparent

pale blue entities, tending to take on the body type of their summoner, or the majority of the people present if appearing without being summoned.

Sylphs are curious by nature, and enjoy interaction with people on the physical plane of existence. As such, they are quite knowledgeable and understand several languages, though their own speech is imperceptible without the Spirit Talk Skill. They are relatively easy to bargain with, and usually will be content with opportunities to interact with large numbers of people or guidance in learning a new language. Sylphs are most often summoned as scouts or spies, but have a number of other potential uses according to their element.

Statistics are provided for a Force Rating 5 sylph, but other variants are possible.

Force Rating 5 Air Spirit "Sylph"

DEX: 11	STR: 7	TOU: 8
PER: 10	WIL: 9	CHA: 8
Initiative: 12	Physical Defense: 15	
Actions: 2	Mystic Defense: 13	
Attack: 12	Social Defense: 11	
Damage:	Physical Armor: 4	
Unarmed 9	Mystic Armor: 6	
Death: 48	Recovery Tests: 4	
Unconsciousness: NA	Knockdown: NA	
Wound Threshold: 12	Movement: 18 (flying)	

Adventure Award: Warden Tier (Group)

Karma Points: 20 Karma Step: 23

Powers: Aid Summoner (13), Astral SightS (15), Insubstantial, Invisibility (16), SpellcastingS (15)

Equipment, Loot: None

Earth Spirits

Earth spirits embody the nature of True Earth, the element from which all physical objects arise and to which they return. An earth spirit's nature makes it more attuned to the physical world than any other type of elemental spirit. Earth spirits tend to be patient and calm. They speak slowly, take their time when thinking through an idea or making a decision, and they perform tasks with diligence and patience. An earth elemental can be unpredictable when angered, but even when in the grip of rage the spirit remains outwardly unemotional, a characteristic that often frustrates a summoner attempting to gauge a spirit's emotional state. While the living manifestation of their element fascinates earth elementals, most of these spirits prefer to remain in the Plane of Earth, surrounded by their True Earth. They especially dislike being summoned in water or in the air. They will first attempt to manifest in an outcropping of rock or in dirt, or in a clay pot if no other earthen material is available.

Force Rating 1–4

DEX: 3 STR: 6 TOU: 7
PER: 4 WIL: 6 CHA: 4
Initiative: 2 Physical Defense: 4
Actions: 1 Mystic Defense: 7 + FR
Attack: 3 + FR Social Defense: 4 + FR
Damage: Physical Armor: 6 + FR
Unarmed (5): 11 Mystic Armor: 2 + FR
Death: 40 Recovery Tests: 3
Unconsciousness: 32 Knockdown: 6 + FR
Wound Threshold: 11 Movement: 6/5*
Adventure Award: Novice Tier
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 5–8

DEX: 7 STR: 10 TOU: 11
PER: 8 WIL: 10 CHA: 8
Initiative: 6 Physical Defense: 9
Actions: 2 Mystic Defense: 13 + FR
Attack: 7 + FR Social Defense: 10 + FR
Damage: Physical Armor: 10 + FR
Unarmed (5): 15 Mystic Armor: 1 + FR
Death: 56 Recovery Tests: 5
Unconsciousness: 49 Knockdown: 10 + FR
Wound Threshold: 16 Movement: 6/5*
Adventure Award: Journeyman Tier (1 per 2 PC)
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 9–12

DEX: 11 STR: 14 TOU: 15
PER: 12 WIL: 14 CHA: 12
Initiative: 10 Physical Defense: 14
Actions: 2 Mystic Defense: 18 + FR

Attack: 11 + FR
Social Defense: 15 + FR
Damage:
Physical Armor: 15 + FR
Unarmed (5): 19
Mystic Armor: 1 + FR
Death: 72
Recovery Tests: 7
Unconsciousness: 65
Knockdown: 14 + FR
Wound Threshold: 21
Movement: 6/5*
Adventure Award: Warden Tier (1 per 2 PC)
Karma Points: 2 × FR
Karma Step: 3 + FR
Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)
Equipment, Loot: None
* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 13–15

DEX: 15 STR: 18 TOU: 19
PER: 16 WIL: 18 CHA: 16
Initiative: 14 Physical Defense: 19
Actions: 3 Mystic Defense: 23 + FR
Attack: 15 + FR Social Defense: 20 + FR
Damage: Physical Armor: 19 + FR
Unarmed (5): 23 Mystic Armor: 1 + FR
Death: 88 Recovery Tests: 9
Unconsciousness: 82 Knockdown: 18 + FR
Wound Threshold: 24 Movement: 6/5*
Adventure Award: Master Tier (Group)
Karma Points: 2 × FR Karma Step: 3 + FR
Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)
Equipment, Loot: None
* The second value is the spirit's Movement Rate when physically manifested.

Rules

Choose a number of additional powers equal to the earth spirit's Force Rating.

Manifestation Restriction: Earth elementals require the presence of earth to manifest. This requirement only presents a problem when the elemental attempts to manifest aboard an airship, on the upper floor of a wooden building, or under other special circumstances. Earth elementals may manifest as pools of mud, large rocks, clods of dirt, or in many other forms. Often, these elementals shape themselves into humanoid forms.

Vulnerability to Wood: Increase the Damage Test by +2 Steps if the attack was made with a wooden weapon or wood-based spell.

Villupaatu (Example Earth Spirit)

While most frequently encountered in western India, Villupaatu claims as its domain "all of the lands of the Uvasti", but has yet to explain the borders of that region. Most often appearing as a dwarf scholar appearing to be carved roughly from the local stone, Villupaatu shows up at encampments, marketplaces, and anywhere stories are told, waiting quietly until addressed. Summoning the spirit results in a larger form, resembling an ancient warrior out of the Vedas, which is less interested in communicating and more interested in discharging the required service, preferably by violence, and being done with the summoner.

The Teller of Tales and Collector of Stories, Villupaatu knows all of the tales of what has happened within its domain, and quite a few stories of what has happened elsewhere. It will trade any of the stories it knows for a story it has never heard before. This willingness to freely share information has brought the spirit enmity on more than one occasion. After hearing the story of the Battle of Plassey and the fallen Nawab being spotted on the street by a beggar while trying to escape, the spirit told a particularly salacious tale regarding a minister from the Jaipur Residency, resulting in a scandal that forced the minister from office. Efforts by the Rajputana Agency to banish or capture the spirit have thus far failed, and negotiations have not convinced it to withhold so much as one fact. "Information desires its freedom," Villupaatu says, and sinks back into the Earth until a more receptive audience is found.

Force Rating 9 Earth Spirit, "Villupaatu"

DEX: 11	STR: 13	TOU: 14
PER: 14	WIL: 15	CHA: 13
Initiative: 10	Physical Defense: 14	
Actions: 2	Mystic Defense: 27	
Attack: 20	Social Defense: 24	
Damage:	Physical Armor: 24	
Unarmed (5): 19	Mystic Armor: 10	
Death: 72 Recovery Tests: 7		
Unconsciousness: 65	Knockdown: 23	
Wound Threshold: 21	Movement: 6/5*	

Adventure Award: Warden Tier (1 per 2 PC)

Karma Points: 18 Karma Step: 12

Powers: Aid Summoner (9), Astral SightS (23), Detect True Element (9), Engulf (24), Manifest (9), Manipulate Element (24), Share Knowledge (9), Spear (22), SpellcastingS (23)

Equipment, Loot: None
* The second value is the spirit's Movement Rate when physically manifested.

Kobolds (Example Earth Spirit)

Manifesting as gnome-like humanoids, usually about three feet tall, in old-fashioned laborer's clothing and peaked caps, kobolds are the spirits that make the earth work. First seen in Prussia, their name comes from old Germanic folk-tales, but these are not quite the creatures of legend. While kobolds mine, they do not hoard gems, but rather ease or increase the strain along fault lines, shore up one mountain and hurry the collapse of another, and tend to the motion of the earth. While one kobold could be held off by a summoner of at least moderate ability, and would take most of an afternoon just to knock down an old barn, kobolds never manifest in the singular. Swarms of them roll through their work areas, tapping, knocking, drilling, bringing stone, taking stone away. Tampering with their efforts can bring about a reaction as swift and lethal as an avalanche. Summoning just one works well enough for a tasked spirit, but in the singular, kobolds just aren't terribly individual. They have little personality or memory, just a work ethic that would shame John Calvin. En masse, kobolds lack even a collective personality, remaining as uncaring and relentless as the earth itself.

Once in a great while, you'll run acrost a kobold with tools, finest you'll ever lay eyes to. Beautiful workmanship, never a speck of rust, the sort of tools a working man dreams of. Touch rather the Eye of God Himself than a kobold's tools. Man I knew managed to run off with a pick, ran out of the mine and across the river, then up a tree and hung the pick on a rope from a branch. Kobolds give up and let him be, or so he thought. Next day, his garden shed falls down, kills his pig. Day after that, while he's down t'the mine office puttin' in his papers for a pickman's job at another mine, his house collapses, kills his wife and both his wee ones. Day after *that*, he's walkin' down the road t'the train station, all he's got left in a bindle tied up to the end of that pick, and just in sight of the gate, where the stationmaster could see him comin', he yelps, and drops, suddenly up to his knees in the ground. Another yelp, and he's armpits-deep. Then he and th'pick were gone, just his bindle lyin' there aside the road. Stationmaster's not the type of man to go makin' yarns up like that.

– Cadan Henwood, Cornwall

Force Rating 5 Earth Spirit, "Kobold"

DEX: 11	STR: 10	TOU: 11
PER: 7	WIL: 11	CHA: 3
Initiative: 7	Physical Defense: 10	
Actions: 2	Mystic Defense: 18	
Attack: 12	Social Defense: 14	
Damage:	Physical Armor: 14	
Unarmed (5): 15	Mystic Armor: 7	
Death: 98	Recovery Tests: 5	
Unconsciousness: 85	Knockdown: 15	

Wound Threshold: 16 Movement: 6/5*
Adventure Award: Journeyman Tier (1 per 2 PC)
Karma Points: 10 Karma Step: 8
Powers: Astral SightS (12), Detect True Element (6), Durability (6), Enrage Element (16), Find (12), Manifest (5), Manipulate Element (16), Remove Element (16), Spear (15)
Equipment, Loot: None
* The second value is the spirit's Movement Rate when physically manifested.

Fire Spirits

Fire is the great destroyer, the purifier, an element that clears away the old to make room for new growth. While fire is a vital part of the world's natural order, it remains hazardous, unpredictable and often uncontrollable. All of these traits characterize fire spirits and elementals. Fire spirits have vivid imaginations and are quick to anger. They experience extreme, rapidly changing emotions. Whether a fire spirit is expressing anger, fear, love, hate, disgust, or friendship, it does so loudly and forcefully. When they manifest, fire elementals arise from a fire source and assume a roughly humanoid form. A fire elemental's appearance changes to match its current emotions. Cozy, crackling flames may form the body of a calm elemental, while an angry elemental may become a blazing inferno. Unlike other elementals, fire elementals do not generally care where they manifest, as long as a source of fire is present.

Force Rating 1–4

DEX: 6 STR: 5 TOU: 5
PER: 4 WIL: 6 CHA: 4
Initiative: 7 Physical Defense: 7 + FR
Actions: 1 Mystic Defense: 7 + FR
Attack: 5 + FR Social Defense: 4 + FR
Damage: Physical Armor: 5
Unarmed (5): 10 Mystic Armor: FR
Death: 32 Recovery Tests: 2
Unconsciousness: 24 Knockdown: NA
Wound Threshold: 8 Movement: 6
Adventure Award: Novice Tier
Karma Points: 2 × FR Karma Step: 3 + FR
Powers: Aid Summoner (FR), Astral SightS (PER + FR), Elemental Aura (FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)
Equipment, Loot: None

Force Rating 5–8

DEX: 10 STR: 9 TOU: 9
PER: 8 WIL: 10 CHA: 8
Initiative: 11 Physical Defense: 12 + FR
Actions: 2 Mystic Defense: 12 + FR
Attack: 9 + FR Social Defense: 9 + FR
Damage: Physical Armor: 9
Unarmed (5): 14 Mystic Armor: FR
Death: 48 Recovery Tests: 4
Unconsciousness: 41 Knockdown: NA
Wound Threshold: 14 Movement: 6
Adventure Award: Journeyman Tier (1 per 2 PC)
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Elemental Aura (FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 9–12

DEX: 14 STR: 13 TOU: 13
PER: 12 WIL: 14 CHA: 12
Initiative: 15 Physical Defense: 17 + FR
Actions: 3 Mystic Defense: 18 + FR
Attack: 13 + FR Social Defense: 15 + FR
Damage: Physical Armor: 13
Unarmed (5): 18 Mystic Armor: FR
Death: 64 Recovery Tests: 6
Unconsciousness: 57 Knockdown: NA
Wound Threshold: 19 Movement: 6
Adventure Award: Warden Tier (Group)
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Elemental Aura (FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 13–15

DEX: 18 STR: 17 TOU: 17
PER: 16 WIL: 18 CHA: 16
Initiative: 19 Physical Defense: 22 + FR
Actions: 4 Mystic Defense: 23 + FR
Attack: 17 + FR Social Defense: 20 + FR
Damage: Physical Armor: 17

Unarmed (5): 22 Mystic Armor: FR
Death: 80 Recovery Tests: 8
Unconsciousness: 73 Knockdown: NA
Wound Threshold: 23 Movement: 6
Adventure Award: Master Tier (group)
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Elemental Aura (FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Rules

Add +5 to the Physical Defense of a fire spirit when it is physically manifested. Choose a number of additional powers equal to the fire spirit's Force Rating.

Elemental Aura: Fire. Manifested fire spirits generate a tremendous amount of heat. If the spirit passes within 4 yards (2 hexes) of a target, the target automatically suffers damage equal to the spirit's Force Rating. Physical Armor protects against this damage. Unless somehow fireproofed, non-magical metal and wooden weapons are useless against a manifested fire spirit of Force Rating 9 or higher. Any blow a character lands against the spirit automatically destroys the weapon. Metal swords and daggers melt, wooden shafts burst into flame.

Manifestation Restriction: Fire elementals can only manifest from a source of fire. The size of the source determines the Force Rating of the elemental that manifests. Torches and other small flames may only spawn fire elementals of Force Ratings 1 to 3. Only campfires and larger sources can produce a fire elemental of Force Rating 4 or higher.

Vulnerability to Water: Increase the Damage Test by +2 Steps if the attack was made with a water-based weapon or spell.

Novello (Example Fire Spirit)

First encountered in the Vatican Library, dressed as a monsignor but with a broad-brimmed flat black hat, grey-tinted spectacles, and a cigarette that neither dropped ash nor burned down, Novello seems acutely interested in belief systems, especially those revolving around the Judeo-Christian-Islamic axis. Oddly, the spirit manifests as an almost cartoonish version of whatever faith it is currently studying. In the Vatican, Novello spoke English with a bad Italian accent, failed to recognize all but the most basic church Latin, and claimed to be a journalist doing research for the Vatican newspaper. The spirit has since been met in Toledo, at the Islamic library, and at Cambridge, where it gave a terribly pompous imitation of a senior don. No one has succeeded in summoning the spirit as of yet, giving rise to the opinion that "Novello" is an assumed name, and one of too little significance to be used. Those who have spoken with the spirit report that it seems genuinely interested in religion, but focused heavily on the foibles and apparent gaps or contradictions within the documents of each faith. It also delights in slipping in the occasional pun, such as describing itself as "burning with curiosity", and waiting for a wince from its audience. That Novello is a fire spirit cannot be doubted. It prefers to keep its Elemental Aura shut down, but can light it up as a Free Action, as demonstrated on a few occasions when it was annoyed. After

an attempt to capture it in Ireland resulted in the total loss of a private collection of monastic documents, along with most of the building and several of the would-be captors in an inferno seen three miles away, the international scholarly and religious community has managed to agree on one thing – that Novello is best left alone, or at least approached politely.

Force Rating 8 Fire Spirit, "Novello"

DEX: 12	STR: 9	TOU: 9
PER: 16	WIL: 18	CHA: 18
Initiative: 13	Physical Defense: 20	
Actions: 2	Mystic Defense: 32	
Attack: 17	Social Defense: 32	
Damage:	Physical Armor: 9	
Unarmed (5): 14	Mystic Armor: 8	
Death: 48	Recovery Tests: 4	
Unconsciousness: 41	Knockdown: NA	
Wound Threshold: 14	Movement: 6	
Adventure Award: Journeyman Tier (1 per 2 PC)		
Karma Points: 16	Karma Step: 11	

Powers: Aid Summoner (8), Astral SightS (24), Elemental Aura (8), Detect True Element (8), Disguise Self (26), Engulf (26), Manifest (8), Manipulate Element (26), Share Knowledge (8), Spear (17), SpellcastingS (24)

Equipment, Loot: None

Ifrit (Example Fire Spirit)

Ifrits (the word is Arabic, can be spelled ifrit, efreet, efrite, ifreet, afreet, afrite, and afrit, and can use the English plural -s or the Arabic plural afarit) hail from the Middle East, generally in the Maghreb, although since they can be found anywhere Islam has ever taken root, whether or not the Faith is flourishing there now, that covers a fairly wide region. They prefer old buildings and ruins of cultural significance, but may turn up pretty much anywhere. Generally manifesting only a suggestion of a troll-sized body made of fire, wings, and brilliant, fiery eyes, ifrits prefer to hold back their full manifestation until they need to impress someone. An ifrit manifesting delivers an automatic Fear (WIL+FR) attack against everyone within 50 yards and line of sight. Manifesting usually also results in considerable property damage to anything flammable within the same range. Striking an ifrit with any form of object results in the object taking the ifrit's Elemental Aura Step in damage. Projectile weapons must have an adjusted Damage Step (including extra successes rolled over from the Attack Test) greater than the ifrit's Elemental Aura Step, or the projectile burns up before striking its target.

Egotistical, short tempered, and mercurial, ifrits are also highly status conscious. Treat them as SL4, with an Attitude shift toward their summoner or anyone engaging them based on SL difference. Thus, a Mumper attempting to converse with an ifrit would enrage it just by the fact that a peasant dared to address such a majestic being. Phrasing counts when giving a summoned ifrit its task. The ifreet will do its best to deliver on the word of the request, while distorting the possible meaning to the best advantage of the spirit and the detriment of the summoner. A summoned ifrit may offer to grant a wish in lieu of the service for which it was summoned. Extreme care should

be taken in accepting this offer. As much effort as an ifrit puts into mangling a task, ifrits put even more into delivering a result that makes the summoner regret their wish for the remainder of their existence.

Force Rating 10 Fire Spirit, "Ifrit"

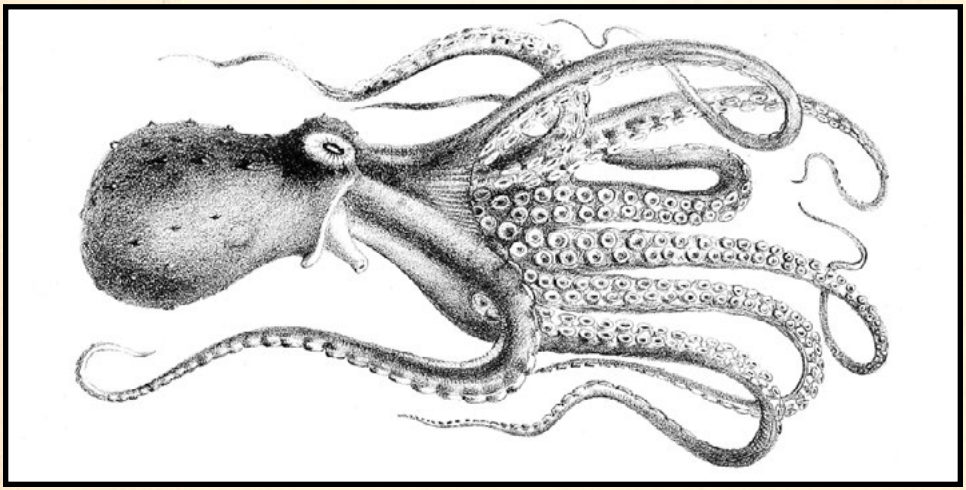
DEX: 15	STR: 14	TOU: 14
PER: 13	WIL: 15	CHA: 13
Initiative: 16	Physical Defense: 27	
Actions: 3	Mystic Defense: 18	
Attack: 23	Social Defense: 25	
Damage:	Physical Armor: 15	
Unarmed (7): 20	Mystic Armor: 9	
Death: 88	Recovery Tests: 6	
Unconsciousness: 74	Knockdown: NA	
Wound Threshold: 20	Movement: 6	
Adventure Award: Warden Tier (Group)		
Karma Points: 20	Karma Step: 13	

Powers: Aid Summoner (10), Astral SightS (23), Elemental Aura (10), Detect True Element (10), Engulf (25), Enrage Element (25), Insubstantial, Manifest (10), Manipulate Element (25), Share Knowledge (10), Spear (24), SpellcastingS (23), Temperature (25)

Equipment, Loot: None

Water Spirits

Water is ever-changing, fluid, perpetually moving. Water spirits exhibit these characteristics as well, quickly moving from experience to experience with a curiosity and excitement shown by no other type of elemental spirit. Many magicians attribute this curiosity to the broad range of incarnations experienced by water spirits, from the patience of ice to the fast-flowing movement of



water to the floating airiness of mist. Often, water elementals change their appearance several times while physically manifested. An elemental may first appear as a large bubble of water floating in midair, then disperse into a fog and finally coalesce into a block of ice. Generally, water elementals do not mind being summoned to the physical plane; they are typically curious beings, as their shifting nature implies.

Force Rating 1–4

DEX: 7 STR: 4 TOU: 4
PER: 5 WIL: 5 CHA: 5
Initiative: 8 Physical Defense: 8 + FR
Actions: 2 Mystic Defense: 9 + FR
Attack: 6 + FR Social Defense: 6 + FR
Damage: Physical Armor: 4
Unarmed: 4 Mystic Armor: FR
Death: 28 Recovery Tests: 2
Unconsciousness: 19 Knockdown: NA
Wound Threshold: 7 Movement: 6/7*
Adventure Award: Novice Tier (1 per 2 PC)
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Force Rating 5–8

DEX: 11 STR: 8 TOU: 8
PER: 9 WIL: 9 CHA: 9
Initiative: 12 Physical Defense: 13 + FR
Actions: 2 Mystic Defense: 14 + FR
Attack: 10 + FR Social Defense: 11 + FR
Damage: Physical Armor: 8
Unarmed: 8 Mystic Armor: FR
Death: 44 Recovery Tests: 4
Unconsciousness: 36 Knockdown: NA
Wound Threshold: 13 Movement: 6/7*
Adventure Award: Journeyman Circle
Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Force Rating 9–12

DEX: 15	STR: 12	TOU: 12
PER: 13	WIL: 13	CHA: 13
Initiative: 16	Physical Defense: 18 + FR	
Actions: 3	Mystic Defense: 19 + FR	
Attack: 14 + FR	Social Defense: 16 + FR	
Damage:	Physical Armor: 12	
Unarmed: 12	Mystic Armor: FR	
Death: 60	Recovery Tests: 6	
Unconsciousness: 53	Knockdown: NA	
Wound Threshold: 17	Movement: 6/7*	

Adventure Award: Warden Tier (Group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Force Rating 13–15

DEX: 19	STR: 16	TOU: 16
PER: 17	WIL: 17	CHA: 17
Initiative: 20	Physical Defense: 23 + FR	
Actions: 4	Mystic Defense: 24 + FR	
Attack: 18 + FR	Social Defense: 21 + FR	
Damage:	Physical Armor: 16	
Unarmed: 16	Mystic Armor: FR	
Death: 76	Recovery Tests: 8	
Unconsciousness: 69	Knockdown: NA	
Wound Threshold: 22	Movement: 6/7*	

Adventure Award: Master Tier (group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Rules

The spirit's Physical Defense is used in astral space as well as when physically manifested. Choose a number of additional powers equal to the water spirit's Force Rating.

Manifestation Restriction: Water elementals can only manifest from a source of water. The size of the water source has no bearing on the Force Rating of the water elemental that may manifest from it. Even a drop of water is sufficient to spawn the mightiest of water spirits.

Vulnerability to Air: Increase the Damage Test by +2 Steps if the attack was made with an air-based weapon or spell.

Ejabbanas (Example Water Spirit)

Encountered all along the Caribbean coastline, Ejabbanas takes the form of a dolphin, of a species local to the area but approximately the same color as the water. Playful, occasionally helpful, the spirit moves from pod to pod and from one human habitation to the next, more or less at random. It appears to prefer the company of dolphins to any other species, although it shows a definite preference in which humans it deals with, preferring those who make their living on or by the water and understand the vast impersonal intractableness of the ocean. Summoning the spirit tends to be a challenge for the shamans of the region, as the spirit's name is pronounced in a more or less West-African manner. Only the Santeria clergy have an advantage, with their liturgical language being descended from Yoruba. Oddly, the spirit denies having any connections to the African continent.

> Fekara is dead. The spirits that were of Fekara have found new homes in a New World.
> – Saint-Germain
> (found in the margin of the printer's galley)

Force Rating 4 Water Spirit, "Ejabbanas"

DEX: 9	STR: 6	TOU: 6
PER: 7	WIL: 7	CHA: 7
Initiative: 10	Physical Defense: 12	
Actions: 2	Mystic Defense: 14	
Attack: 10	Social Defense: 10	
Damage:	Physical Armor: 4	
Unarmed: 4	Mystic Armor: 4	
Death: 39	Recovery Tests: 2	
Unconsciousness: 32	Knockdown: NA	
Wound Threshold: 8	Movement: 6/7*	

Adventure Award: Novice Tier (1 per 2 PC)

Karma Points: 8 Karma Step: 7

Powers: Adaptability (4), Aid Summoner (4), Astral SightS (11), Detect True Element (4), Engulf (11), Manifest (4), Manipulate Element (11), Share Knowledge (4), Spear (10)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Undines (Example Water Spirit)

Spirits of the rivers and streams, freshwater that moves across the earth, undines appear as translucent women made of running water. Quiet and shy, they prefer to not be seen, spending their time in the more secluded areas of their shorelines, and either not manifesting or using their

Invisibility power to escape notice. If deprived of seclusion, they turn angry and bitter, and will readily bring the power of water to bear against anyone who repeatedly disturbs them. Anyone who has ever seen a tranquil mountain stream turn into a roaring cataract in flash-flood conditions will know to respect the undines. Approaching them politely, and getting directly to the point of what is offered and what is expected in return, will generally work out well. Summoning them within their domain is chancy; summoning them elsewhere is foolhardy. The only advantage is that they can be summoned by the name of their stream or river, including any of its former names. Generally, the longer the name has been in use, the greater an advantage it confers in summoning the undine.

Force Rating 6 Water Spirit, "Undine"

DEX: 12	STR: 9	TOU: 9
PER: 10	WIL: 10	CHA: 10
Initiative: 13	Physical Defense: 19	
Actions: 2	Mystic Defense: 20	
Attack: 16	Social Defense: 17	
Damage:	Physical Armor: 8	
Unarmed: 8	Mystic Armor: 6	
Death: 44	Recovery Tests: 4	
Unconsciousness: 36	Knockdown: NA	
Wound Threshold: 13	Movement: 6/7*	

Adventure Award: Journeyman Circle

Karma Points: 12 Karma Step: 9

Powers: Aid Summoner (6), Astral SightS (16), Detect True Element (6), Engulf (16), Enrage Element (16), Insubstantial, Invisibility (18), Manifest (6), Manipulate Element (16), Share Knowledge (6), Spear (15), SpellcastingS (16)

Equipment, Loot: None

* The second value is the spirit's Swimming Movement Rate when physically manifested.

Wood Spirits

Wood spirits serve a special purpose in the grand scheme of things, because the element of wood holds all the other elements together. Wood sends its roots deep into earth. It draws water through itself. It pulls in air through its pores. It provides fuel for fire, which clears the way for new wood to grow and continue the cycle. Without wood, the harmonious balance of the elements could not exist. Many magicians find wood spirits show a high level of self-confidence and wisdom. They attribute these characteristics to wood's ability to store knowledge. They point out that trees collect information through their roots and pores, channel it through their veins and store it in their rings. The wise sayings of wood spirits, though often vague, verge on prophecy.

Wood spirits do not appreciate being forced to manifest. The weakest of the elemental spirits, they prefer to stay in their elemental plane among their own kind, sorting and considering the information they receive from the outside world. They object to being summoned underwater or in any other environment where another element shuts them off from the flow of information, and so wood spirits must be coerced to appear by the summoner making a successful Contest of Wills (see **Summoning** in the *1879 Players' Guide*).

Force Rating 1–4

DEX: 3	STR: 4	TOU: 4
PER: 5	WIL: 5	CHA: 5
Initiative: 6	Physical Defense: 4	
Actions: 1	Mystic Defense: 9 + FR	
Attack: 7 + FR	Social Defense: 6 + FR	
Damage:	Physical Armor: 7	
Unarmed (3): 7	Mystic Armor: FR	
Death: 28	Recovery Tests: 3	
Unconsciousness: 19	Knockdown: 6 + FR	
Wound Threshold: 7	Movement: 6/5*	
Adventure Award: Novice Tier		
Karma Points: 2 × FR	Karma Step: 3 + FR	

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 5–8

DEX: 7	STR: 8	TOU: 8
PER: 9	WIL: 9	CHA: 9
Initiative: 10	Physical Defense: 9	
Actions: 2	Mystic Defense: 14 + FR	
Attack: 11 + FR	Social Defense: 11 + FR	
Damage:	Physical Armor: 11	
Unarmed (3): 11	Mystic Armor: FR	
Death: 44	Recovery Tests: 4	
Unconsciousness: 36	Knockdown: 8 + FR	
Wound Threshold: 13	Movement: 6/5*	
Adventure Award: Journeyman Tier		
Karma Points: 2 × FR	Karma Step: 3 + FR	

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 9–12

DEX: 11	STR: 12	TOU: 12
PER: 13	WIL: 13	CHA: 13
Initiative: 15	Physical Defense: 14	
Actions: 3	Mystic Defense: 19 + FR	

Attack: 15 + FR
Social Defense: 16 + FR
Damage:
Physical Armor: 15
Unarmed (3): 15
Mystic Armor: FR
Death: 60
Recovery Tests: 6
Unconsciousness: 53
Knockdown: 12 + FR
Wound Threshold: 17
Movement: 6/5*
Adventure Award: Warden Tier (Group)
Karma Points: 2 × FR
Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Force Rating 13–15

DEX: 15
STR: 16
TOU: 16
PER: 17
WIL: 17
CHA: 17
Initiative: 18
Physical Defense: 19
Actions: 4
Mystic Defense: 24 + FR
Attack: 19 + FR
Social Defense: 21 + FR
Damage:
Physical Armor: 19
Unarmed (3): 19
Mystic Armor: FR
Death: 76
Recovery Tests: 8
Unconsciousness: 69
Knockdown: 16 + FR
Wound Threshold: 22
Movement: 6/5*
Adventure Award: Master Tier (group)
Karma Points: 2 × FR
Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Detect True Element (FR), Engulf (WIL + FR), Manifest (FR), Manipulate Element (WIL + FR), Share Knowledge (FR), Spear (STR + FR), SpellcastingS (PER + FR)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Rules

Subtract –3 from the Physical Defense of a wood spirit when it is physically manifested. Choose a number of additional powers equal to the wood spirit's Force Rating.

Manifestation Restriction: Wood elementals manifest within trees and plants, usually altering the shape of the tree or plant into a humanoid form with bark skin and leafy appendages. The approximate size of a plant determines the maximum Force Rating of the wood elemental. Force Rating 1–4 elementals can manifest in smaller plants and bushes, or small trees. Force Rating 5–8 elementals take the shape of large bushes or medium-sized trees. Force Rating 9–12 elementals only manifest in large, old trees. Elementals of Force Rating 13 or more need a giant and possibly ancient plant to manifest in.

Vulnerability to Fire: Increase the Damage Test by +2 Steps if the attack was made with a fire-based weapon or spell.

Fox Kane (Example Named Wood Spirit)

Not all spirits are aloof, or hate the physical world, or spend their time in contemplation of ultimate truths. Some just want to accumulate the comforts they deserve, and if other entities get in the way, or claim prior ownership, well, that's just too bad, now, isn't it? The spirit calling itself Fox Kane freely admits that it came to the Earthly plane because it found its home tediously orderly. Besides, who doesn't enjoy a fine glass of wine, a fat cigar, and the best Irish linen sheets that someone else's money can buy? Those attempting to work with Kane should remember the spirit's greed for those comforts that it can enjoy has always overcome any promise it has made or risk it might face. While a few of those who make their living by their wits have gone with Kane on an escapade and survived, with stories to tell that seem straight out of a penny-dreadful, the tales always end in betrayal and abandonment. The only thing that Kane can truly be trusted to do is to steal whatever it takes an interest in.

Fox Kane manifests as a tall, elegant humanoid resembling an elven man, but with skin made of medium-brown tree bark, and "hair" made of leaves. Unclothed, Kane can be seen to have leaves elsewhere, in those few locations where elves grow bodily hair. Kane prefers to clothe itself in the finest of Savile Row, or a bespoke Parisian tailor, or whatever else is the latest fashion for well to do gentlemen. It speaks with a fruity upper-class accent, regardless of what language it uses, and an arrogant, condescending attitude, which turns greasily ingratiating when the spirit realizes that it's outclassed. Summoners must be very careful in the wording of any deal struck or command given, as Kane will put more effort into twisting the meaning of a command it must involuntarily follow than a Great Form ifrit.

Force Rating 12 Wood Spirit, "Fox Kane"

DEX: 14	STR: 15	TOU: 15
PER: 16	WIL: 16	CHA: 16
Initiative: 17	Physical Defense: 18	
Actions: 4	Mystic Defense: 36	
Attack: 29	Social Defense: 31	
Damage:	Physical Armor: 19	
Unarmed (3): 18	Mystic Armor: 12	
Death: 158	Recovery Tests: 8	
Unconsciousness: 134	Knockdown: 26	

Wound Threshold: 21 Movement: 6/5*
Adventure Award: Master Tier (group)
Karma Points: 24 Karma Step: 15
Powers: Aid Summoner (12), Astral SightS (28), Detect True Element (12), Durability (12), Engulf (28), Enrage Element (28), HaggleS (28), Manifest (12), Manipulate Element (28), Share Knowledge (12), Spear (27), SpellcastingS (28)
Equipment, Loot: None
* The second value is the spirit's Movement Rate when physically manifested.

Leshys (Example Wood Spirit)

As if travel in Russia wasn't difficult enough before the Rabbit Hole opened, what with bandits, bureaucrats, and bad (or no) roads, now the woods themselves are actively hostile. The leshy, a wood spirit that sees itself as the protector of the natural order, manifests as a troll-sized humanoid with bark-like skin and hair (and if male, long flowing beard) made of grasses. They can shift their form to accommodate the needs of the moment, effectively becoming walls, excavation engines, or weaponry as the situation demands. Leshys move silently without effort even when manifested. Combined with their ability to instantaneously move from tree to tree, they can suddenly appear far too close to the unwary traveler. People on horseback may receive a challenge, and a demand that they not encamp within the leshy's domain. There will be no man-made fires. Anyone traveling by (or accompanied by) advanced technology may be attacked outright, depending upon whether or not they're causing damage to the forest by their passage or activities. Neighboring leshys will show up within a minute or so of a leshy sending out a distress call. Great Form leshys can call up spirits of other elements and demand assistance from them, although they are understandably reluctant to bring in a fire elemental. Starting a fight in a Russian forest is a quick way to end one's existence as fertilizer. Only a shaman or a priest of a nature religion can summon a leshy without a Contest of Wills, and even then may have some difficult bargaining ahead of them. No leshys of a Force Rating of less than 6 have been documented. If anyone has encountered a leshy of Force Rating 4, they haven't let anyone else know.

Force Rating 6 Wood Spirit, "Leshy"

DEX: 8 STR: 9 TOU: 9
PER: 10 WIL: 10 CHA: 10
Initiative: 12 Physical Defense: 18
Actions: 2 Mystic Defense: 20
Attack: 18 Social Defense: 17
Damage: Physical Armor: 12
Unarmed (3): 13 Mystic Armor: 7
Death: 90 Recovery Tests: 4
Unconsciousness: 76 Knockdown: 14
Wound Threshold: 14 Movement: 6/5*
Adventure Award: Journeyman Tier
Karma Points: 12 Karma Step: 9

Powers: Aid Summoner (6), Astral SightS (16), Detect True Element (6), Durability (6), Engulf (10), Find (16), Manifest (6), Manipulate Element (16), Share Knowledge (6), Spear (15), SpellcastingS (16), WillforceS (16)

Equipment, Loot: None

* The second value is the spirit's Movement Rate when physically manifested.

Ally Spirits

Ally spirits are summoned to provide a variety of services. The example spirits below possess powers common to all ally spirits. Note that these are only possible configurations of ally spirits. The Gamemaster determines the exact powers and spells of each ally spirit to suit the campaign.

Force Rating 1–4

DEX: 5	STR: 5	TOU: 5
PER: 5	WIL: 5	CHA: 5
Initiative: 4+FR	Physical Defense: 7+FR	
Actions: 1	Mystic Defense: 8 + FR	
Attack: 5 + FR	Social Defense: 8 + FR	
Damage:	Physical Armor: 5	
Unarmed: 5	Mystic Armor: 3+FR	
Death: 32	Recovery Tests: 2	
Unconsciousness: NA	Knockdown: 5	
Wound Threshold: 8	Movement: 12	
Adventure Award: Novice Tier		
Karma Points: 2 × FR	Karma Step: 3 + FR	

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Empathic Sense (PER + FR), Lifesight (PER + FR), Manifest (FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 5–8

DEX: 9	STR: 9	TOU: 9
PER: 9	WIL: 9	CHA: 9
Initiative: 4+FR	Physical Defense: 8+FR	
Actions: 2	Mystic Defense: 9 + FR	
Attack: 6 + FR	Social Defense: 9 + FR	
Damage:	Physical Armor: 6	
Unarmed: 9	Mystic Armor: 3+FR	
Death: 54	Recovery Tests: 4	
Unconsciousness: NA	Knockdown: 9	
Wound Threshold: 14	Movement: 12	
Adventure Award: Journeyman Tier (1 per 2 PC)		

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Empathic Sense (PER + FR), Lifesight (PER + FR), Manifest (FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 9–12

DEX: 13	STR: 13	TOU: 13
PER: 13	WIL: 13	CHA: 13
Initiative: 4 + FR	Physical Defense: 11 + FR	
Actions: 3	Mystic Defense: 12 + FR	
Attack: 9 + FR	Social Defense: 12 + FR	
Damage:	Physical Armor: 10	
Unarmed: 13	Mystic Armor: 3 + FR	
Death: 78	Recovery Tests: 6	
Unconsciousness: NA	Knockdown: 13	
Wound Threshold: 19	Movement: 12	

Adventure Award: Warden Tier (Group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Empathic Sense (PER + FR), Lifesight (PER + FR), Manifest (FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Force Rating 13–15

DEX: 17	STR: 17	TOU: 17
PER: 17	WIL: 17	CHA: 17
Initiative: 4 + FR	Physical Defense: 16 + FR	
Actions: 4	Mystic Defense: 17 + FR	
Attack: 17 + FR	Social Defense: 18 + FR	
Damage:	Physical Armor: 17	
Unarmed: 17	Mystic Armor: 3 + FR	
Death: 90	Recovery Tests: 8	
Unconsciousness: NA	Knockdown: 17	
Wound Threshold: 23	Movement: 12	

Adventure Award: Master Tier (group)

Karma Points: 2 × FR Karma Step: 3 + FR

Powers: Aid Summoner (FR), Astral SightS (PER + FR), Empathic Sense (PER + FR), Lifesight (PER + FR), Manifest (FR), SpellcastingS (PER + FR)

Equipment, Loot: None

Rules

Add +5 to the Physical Defense of an ally spirit when physically manifested. Choose a number of additional powers equal to the ally spirit's Force Rating.

Powers: Ally spirits do not gain powers in any specific order or priority. Gamemasters should, however, use the guidelines in the Ally Spirit Powers Table when assigning powers to ally spirits as their Force Ratings increase. Note that these suggestions apply to Ally spirits only.

Ally Spirit Powers Table

Spirit Power	Minimum Force Rating
Confusion, Detect Trap, Detect Weapons, Talents	1
Astral Portal, Find, Possession, Temperature	5
Evil Eye	9

Spirits of Civilization

Those spirits that are not the souls of the ancestors, but are interested in, and perhaps part of, dwelling places, homes, businesses, ships, places that are built or made, comprise the spirits of civilization. These range from hearth spirits that see to the order of a home, to street spirits that take an interest in the block, to pilot spirits that accompany Giffards (although there is some argument that these last may just be a variant of air elementals).

Ashes (Example Hearth Spirit)

"Ashes come with th'buildin'" the spirit says, and as far back as anyone can remember, the children of each generation insisted that Ashes lived in the fireplace. Maybe they saw something forgotten or lost when they grew up. Now the adults can see Ashes too, and have quickly learned that the maid of all work's pantry key wasn't misplaced, Ashes was angry at her for leaving the dishes until morning. The spirit generally doesn't communicate directly with the household inhabitants, and only manifests grudgingly, when it has to affect the physical world. When it does, Ashes appears as a grey-furred creature about a foot tall, rather like an oversized bipedal hedgehog with bad posture and glowing red eyes that look like embers in the dark. Putting out a bowl of cream will sometimes placate the spirit, although it has been known to remain grumpy for days over a newspaper carelessly thrown on a chair instead of folded and put on the table where it belongs.

Ashes' presence in the building adds the spirit's Force Rating to the home's Defenses. Woe betide the would-be burglar, who will find the windowsills splintery, the latch sticky, and the sash making a horrible creak when the window finally opens. If the thief still insists on entering, claws and teeth ensue. On one occasion, something, possibly the spirit, dropped the upstairs cat out a window onto a drunkard who had paused in the alley to relieve himself against the building. Keep things tidy and in proper order and there won't be a problem. Shout at the children when they weren't doing anything wrong, and you won't be able to get your pipe to light for a week.

Force Rating 9 Ally (Hearth) Spirit, "Ashes"

DEX: 14	STR: 13	TOU: 14
PER: 13	WIL: 15	CHA: 13
Initiative: 13	Physical Defense: 20	
Actions: 3	Mystic Defense: 21	

Attack: 18 Social Defense: 21
Damage: Physical Armor: 11
Unarmed: 15 Mystic Armor: 13
Death: 81 Recovery Tests: 6
Unconsciousness: NA Knockdown: 13
Wound Threshold: 19 Movement: 12
Adventure Award: Warden Tier (Group)
Karma Points: 18 Karma Step: 12
Powers: Aid Summoner* (9), Astral SightS (22), Confusion (24), Curse (24), Empathic Sense (22), Lifesight (22), Manifest, SpellcastingS (22)
Equipment, Loot: None
*Ashes will only extend Aid Summoner to a proper resident of the house. Guests don't count.

Dodger (Example City Spirit)

Dodger, a Named city spirit, favors the rookeries of eastern London, especially those with a heavy snark population, for whom it has a particular fondness. Reports have also come from Paris, Berlin, and New York of encounters with the same spirit. It loves to collect things, whether information or small objects, and will respond well to any such offerings.

This city spirit prefers the form of a snark child dressed in the local style, though it doesn't seem to understand the concept of gender very well. Dodger will also adopt the current local lower class customs of whatever city it is currently located, even if it just arrived - it seems to have a perfect knowledge of such things.

Dealing with this spirit is relatively simple, though it refuses to engage in any kind of violence. Even a successful Contest of Wills will only lead to it finding some way to get out of it, making all such attempts useless at best and only earning the enmity of the spirit. It will, however, happily share information and even items from its collection if given something of at least equal value in return.

Force Rating 6 Ally (City) Spirit, "Dodger"

DEX: 10 STR: 8 TOU: 9
PER: 10 WIL: 8 CHA: 9
Initiative: 11 Physical Defense: 16
Actions: 2 Mystic Defense: 16
Attack: 8 Social Defense: 15
Damage: Physical Armor: 6
Unarmed: 12 Mystic Armor: 8
Death: 54 Recovery Tests: 4
Unconsciousness: NA Knockdown: 9
Wound Threshold: 14 Movement: 16
Adventure Award: Journeyman Tier (Group)
Karma Points: 6 Karma Step: 24
Powers: Astral Sight (16), Confusion (14), Find (16), Invisibility (16), Manifest, SpellcastingS (16)
Equipment, Loot: Highly variable

Étienne (Example Pilot Spirit)

A dashing, overly helpful spirit who manifests as a foot-tall human dressed in 18th Century balloonist's togs, and speaks in a dreadful fake French accent, Étienne has a love of airships that knows no bounds. He (the spirit always manifests as male, and has chosen a man's name) shows up aboard whatever latest and fastest airship catches his attention, one moment at the ship's wheel exhorting the pilot to greater effort, the next peering over the bow and exclaiming about the view, the one after clambering about in the rigging and fussing over the condition of the gasbag. If a successful Interaction Test can be made, Étienne's attention can be held long enough to try and convince him to take an action that actually helps, instead of just tossing out spurious advice and making random adjustments.

Force Rating 5 Ally (Pilot) Spirit, "Étienne"

DEX: 11	STR: 9	TOU: 9
PER: 10	WIL: 12	CHA: 11
Initiative: 9	Physical Defense: 13	
Actions: 2	Mystic Defense: 14	
Attack: 11	Social Defense: 14	
Damage:	Physical Armor: 6	
Unarmed: 9	Mystic Armor: 12	
Death: 54	Recovery Tests: 4	
Unconsciousness: NA	Knockdown: 9	
Wound Threshold: 14	Movement: 15	

Adventure Award: Journeyman Tier (Group)

Karma Points: 8 Karma Step: 6

Powers: Astral SightS (17), Confusion (17), Empathic Sense (16), Insubstantial, Lifesight (15), Manifest, Possession (17), SpellcastingS (15)

Equipment, Loot: None

Spirits of Nature

Just as buildings have hearth spirits, farmland can have field spirits, and a woods can have forest spirits. This section details a few of those spirits that come from the natural world, or close to it.

The Gruagach (Example Farm Spirit)

In English, the name Gruagach (pronounced groo-gee, with hard Gs) means "the hairy man". Manifesting as a short, squat humanoid with profuse body hair, the Gruagach vaguely resembles a furry dwarf, although with exaggerated features, a long pointy nose, a jutting chin, and more animalistic ears. Both male and female Gruagachs have been noted, with the females attending diary cattle and the males attending beef cattle. If treated properly, with a portion of the morning's milking left in a hollow of a knocking-stone on the property, and an occasional crust of bread torn from the first loaf out of the oven, the Gruagach will see to the welfare of the cattle, do minor maintenance around the barn, and generally tend to the safety of all living creatures on the farm. The rules are complex, though, and require among other things that the family take no notice of

the Gruagach. Addressing the spirit may result in a day or more of its absence, or a thrashing with the staff it routinely carries. Thanking it directly for its work offends the spirit, usually ending with it leaving the farm entirely, sometimes tearing down the barn before it goes. Leave the Gruagach alone, leave it its offerings, and all will be well.

Force Rating 7 Ally (Farm) Spirit, "The Gruagach"

DEX: 11	STR: 12	TOU: 11
PER: 9	WIL: 9	CHA: 9
Initiative: 11	Physical Defense: 15	
Actions: 2	Mystic Defense: 16	
Attack: 14	Social Defense: 15	
Damage:	Physical Armor: 6	
Unarmed: 11	Mystic Armor: 10	
Death: 54	Recovery Tests: 4	
Unconsciousness: NA	Knockdown: 9	
Wound Threshold: 14	Movement: 12	

Adventure Award: Journeyman Tier (1 per 2 PC)

Karma Points: 14 Karma Step: 10

Powers: Astral SightS (16), Confusion (16), Curse (16), Empathic Sense (16), Invisibility (18), Lifesight (16), Manifest (7), SpellcastingS (16)*

Equipment, Loot: None

* While the Gruagach can cast Heal, it will normally restrict this to the farm's livestock, healing the residents of the farm only under extraordinary circumstances. For example, if a shepherd were injured protecting the sheep from a predator, the Gruagach would heal the shepherd, because blood had been shed in defense of the livestock.

Bucca, Example Woodland Spirit

Found throughout Cornwall, buccas loosely resemble old folk traditions of mischievous fairies or spirits, manifesting as small, gnarled, gnomelike creatures made of wood and fur and other bits of the forest. They inhabit the older woodlands, and defend them from humanity. Anyone going into the forest at night without a fairy braid in their hair, a penny in their left shoe, and a nail in their left pocket risks being drawn off the path by strange echoes and wandering lights, and run into a ditch or a bramble. Those causing a disturbance along the forest border may find the milk souring in the dairy buckets the next day. As with most of the spirits native to the British Isles, there are rules, and if those rules are followed, conflict with the spirits can be avoided. It's certainly possible to summon a bucca, although the Cornish would be confused as to why you'd want to.

Force Rating 6 Ally (Woodland) Spirit, "Buccas"

DEX: 10	STR: 10	TOU: 10
PER: 9	WIL: 10	CHA: 8
Initiative: 10	Physical Defense: 14	
Actions: 2	Mystic Defense: 15	
Attack: 12	Social Defense: 13	
Damage:	Physical Armor: 7	
Unarmed: 10	Mystic Armor: 10	

Death: 54 Recovery Tests: 4
Unconsciousness: NA Knockdown: 9
Wound Threshold: 14 Movement: 13
Adventure Award: Journeyman Tier (1 per 2 PC)
Karma Points: 12 Karma Step: 9
Powers: Aid Summoner (6), Astral SightS (15), Confusion (16), Curse (16), Empathic Sense (15), Lifesight (15), Insubstantial, Invisibility (16), Manifest (6), Possession (16)*, SpellcastingS (15)
Equipment, Loot: None
* Buccas will only take Possession of animals that are native to their domain, never livestock and never people.

Spirits of the Ancestors

There's considerable debate about ancestral spirits in some quarters, whether or not they're actually who they claim to be and all that, while in other regions, the existence of the ancestral spirits has been an accepted part of the culture for many generations. This section describes a few ancestors that appear to have hung about and could be recognized by more people than just their immediate family.

Gran Hargreaves (Example Ancestral Spirit)

Most of the folk passing along Bishopsgate, going to and from Liverpool Street Station in Spitalfields, wouldn't know that the old woman selling apples at the entry to Rose Alley died two years ago, just a day after the Rabbit Hole down in Greenwich opened up and the world got set on its ear. The neighbors wish her good day when they see her. Only the Flynn boy was silly enough to buy an apple from her, defying his own gran and showing off in front of the block. Funny about how he died that afternoon, beaten and clawed to death by a hundred different people and animals, not a one of which left tracks in the mud of the alley where he'd gone to bring that apple back up. They said it was almost like the kicks and punches and careless bruises he'd inflicted on others all came back of a sudden. Once in a while, someone passes the time with Gran Hargreaves, just a quick trade of neighborly gossip, as you do, and sometimes that person learns something, and maybe it's just a little bit of oddness, and maybe it's something you might rest easier not knowing about your neighbors. The Hargreaves clan has always been a bit chancy.

Force Rating 7 Ally (Ancestral) Spirit, "Gran Hargreaves"

DEX: 11 STR: 10 TOU: 11
PER: 10 WIL: 10 CHA: 11
Initiative: 11 Physical Defense: 15
Actions: 2 Mystic Defense: 16
Attack: 13 Social Defense: 17
Damage: Physical Armor: 6
Unarmed: 9 Mystic Armor: 10
Death: 57 Recovery Tests: 4
Unconsciousness: NA Knockdown: 10

Wound Threshold: 14 Movement: 12
Adventure Award: Journeyman Tier (1 per 2 PC)
Karma Points: 14 Karma Step: 10
Powers: Aid Summoner (7), Astral SightS (17), Curse (17), Empathic Sense (17), Evil Eye (17), Find (17), Lifesight (17), Manifest (7)
Equipment, Loot: None

Philalethes (Example Ancestral Spirit)

Eirenaeus Philalethes, the pen name of George Starkey, born George Stark, was a physician, chemist, and alchemist in the 1600s. His work in formalising laboratory procedure set the practice for chemists of the next century. Besides publishing one of the most important alchemical treatises of the century, *Introitus apertus ad occlusum regis palatium*, Philalethes created formulae for a number of medications and perfumes, and held a considerable reputation as a builder of chemical and alchemical furnaces. While his notebooks survive, as well as his published papers, Philalethes took a number of his formulae and engineering secrets to the grave when the London Plague of 1665 overcame the alkahest he had prepared to safeguard his health. As with all alchemists, Philalethes encrypted his formulae and guarded them under symbolic names. The Newtonians have been collecting his personal possessions, trying to find the ones that will not only summon his spirit, but give them the keys to asking for the formulae. Thus far, very little progress has been made. Those summoning Philalethes for instruction in laboratory procedure or construction have achieved considerably more success. Rumor has it that Philalethes has found a host, willing or not, and has his own laboratory once more, working toward the perfect liquor alkahest. Finding that laboratory would grant considerable leverage over the spirit.

Force Rating 11 Ally (Ancestral) Spirit, "Philalethes"

DEX: 15 STR: 14 TOU: 14
PER: 16 WIL: 16 CHA: 13
Initiative: 15 Physical Defense: 22
Actions: 3 Mystic Defense: 24
Attack: 20 Social Defense: 21
Damage: Physical Armor: 12
Unarmed: 16 Mystic Armor: 14
Death: 160 Recovery Tests: 6
Unconsciousness: NA Knockdown: 14
Wound Threshold: 19 Movement: 13
Adventure Award: Warden Tier (Group)
Karma Points: 22 Karma Step: 14
Powers: Aid Summoner (11), AlchemyS (27), Astral Portal (11), Astral SightS (27), Durability (11), Empathic Sense (27), Haggle (24), Lifesight (27), Manifest (11), Possession (27), SpellcastingS (27)
Equipment, Loot: None

Erasmus Sparrowhawke (Example Ancestral Spirit)

Alas, sometimes unresolved dreams provide a reason for a spirit to linger. The young man given the grandiloquent name of Erasmus Sparrowhawke by hopeful parents dreamed of a career in the Royal Navy, a dashing young officer on the deck of a man o'war. The best the pale, scrawny, nearsighted son of a cobbler could manage was a clark's position at the Admiralty. He worked for three years in the plan room, checking in and out drawings and schematics and dockyard plans for the continuing expansion of the fleet, still enjoying considerable momentum from the Industrial Revolution and the advent of steam. With the Royal Navy constantly in sight, but just out of reach, Erasmus resolved to better himself, starting with his pitiful physiognomy. Three days after he started attending a training school, his spotter sneezed at an inopportune moment, and the weight bar fell, crushing Erasmus' throat, resulting in his death from asphyxiation. His ghost haunts the Admiralty, not quite enough of an alien presence to trigger the wards. After all, Erasmus belongs there, in the plan room. Thus far, nobody has realized how easy it would be to coax the spirit into divulging all sorts of detailed Naval intelligence. While spies readily recruit the low-level employees, they have yet to really consider the value of the recently dead.

Force Rating 4 Ally (Ancestral) Spirit, "Erasmus Sparrowhawke"

DEX: 8	STR: 8	TOU: 8
PER: 8	WIL: 8	CHA: 8
Initiative: 9	Physical Defense: 11	
Actions: 1	Mystic Defense: 12	
Attack: 9	Social Defense: 12	
Damage:	Physical Armor: 5	
Unarmed: 5	Mystic Armor: 7	
Death: 34	Recovery Tests: 2	
Unconsciousness: NA	Knockdown: 5	
Wound Threshold: 8	Movement: 12	
Adventure Award: Novice Tier		
Karma Points: 6	Karma Step: 7	

Powers: Astral SightS (12), Empathic Sense (12), Find (12), Insubstantial, Invisibility (12), Lifesight (12), Manifest (4)

Equipment, Loot: None

Appendices

Spells Summary Table

The following table summarizes the Spells available in 1879.

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Astral Sight	Initiate	6	1 round	Self	Rank + 10 minutes	WIL +6	4
Bind	Initiate	TMD	1 round	Rank + 5 feet	Rank + 8 rounds	WIL + 4	2 + target count
Bless	Initiate	TMD	1 round	Touch	Rank + 5 rounds	Special, see text	3
Clairvoyance	Initiate	TMD	1 round	Rank miles	Rank rounds	Rank + WIL	3
Cleanse	Initiate	TMD	1 round	Rank feet	Instant	Rank + WIL	2
Darkness	Initiate	Area's Mystic Defense	1 round	Rank x 5 feet radius from caster	Rank x 5 minutes	Rank + WIL	4
Detect	Initiate	Special (see text)	1 round	Rank x 10 yards	1 round	Rank + WIL	2
Ignite	Initiate	TMD	1 round	2 yards	1 round	Special	2
Illusion (Physical)	Initiate	8	2 rounds	10x Rank yards	3 x Rank rounds	Special	3
Improve Sense	Initiate	TMD	1 round	Touch	Rank minutes	Special	2
Light	Initiate	6	1 round	Self	Rank x 10 minutes	Special	2
Light Area	Initiate	6	1 round	Self	Rank x 10 minutes	Special	2
Lock	Initiate	TMD	1 round	Touch	Rank x 10 hours	WIL + Rank	1 + Rank
Plant Growth	Initiate	8	1 round	2 yard radius from magician	Permanent	Special	3
Read Thoughts	Initiate	TMD	1 round	Rank feet	Rank rounds	WIL + Rank	3
Reduce Sense	Initiate	TMD	1 round	Touch	Rank rounds	Special	2
Remote Operation	Initiate	6	1 round	Rank yards	Rank minutes	WIL + Rank	2

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Resist Temperature	Initiate	TMD	1 round	Touch (up to Rank targets)	Rank x 10 minutes	WIL + Rank	3 + 1 per target after the first
Sanctify	Initiate	Area's MD + Astral condition	5 rounds	Rank x 10 yards	Rank x 10 hours	Special	1 + Casting Difficulty
Send Message	Initiate	TMD	1 round	Rank x 10 miles	Rank hours or until message delivered	Special	2
Set Ward	Initiate	Special (see text)	5 rounds	Rank x 10 square yards	Special (see text)	Rank + WIL	2 + Rank
Shield	Initiate	8	1 round	Self	Rank rounds	Rank + WIL	3
Slow Ship / Vehicle	Initiate	TMD	1 round	Rank x 20 yards, 1 target only	Rank minutes	Special	3
Speed Ship / Vehicle	Initiate	TMD	1 round	Touch	Rank minutes	Special	3
Stun	Initiate	TMD	1 round	Rank x 10 yards	Instant	Rank + WIL	1+ target count
Translate Language	Initiate	TMD	1 round	5 yards	Rank x 3 minutes	Rank + WIL	3
Unlock	Initiate	TMD	2 rounds	Touch	Instant	Rank + WIL	3
Aetheric Containment	Novice	TMD	2 rounds	10 yards	Rank + 3 rounds	WIL + 13	9
Bestow Astral Sight	Novice	TMD	1 round	Touch	Rank + 10 minutes	Target's WIL + 4	4
Bolt	Novice	TMD	1 round	Rank x 2 yards	Instant	WIL + Rank	6
Control Animal	Novice	TMD	1 round	Rank x 10 yards	Rank rounds	Special	7
Control Element	Novice	Special (see text)	1 round	Rank yards	Rank rounds	Special	4
Cut	Novice	TPD	1 round	1 yard	Instant	WIL + Rank	6
Disperse Element	Novice	Special (see text)	1 round	Rank x 10 yards	Instant	Special	5
Entropy	Novice	TMD	1 round	Touch	5 rounds	WIL	5
Explosion	Novice	TMD	1 round	50 yards	Instant	Rank + WIL	5+Rank
Fix	Novice	TMD	1 round	Touch	Rank hours	Rank + WIL	6
Gather Element	Novice	Special (see text)	1 round	Rank yards (including vertically)	Rank rounds	Special	4
Heal	Novice	TMD	1 round	Touch	Instant	WIL + Rank	6

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Hide Object	Novice	TMD	1 round	Touch	Rank x 5 minutes	Rank + WIL	7
Illusion (Mental)	Novice	TMD	2 rounds	Rank x 10 yards, Rank targets	Rank x 2 rounds	WIL + Rank	5 + target count
Improve Attitude	Novice	TMD	1 round	Rank feet	Rank rounds	Special	3 + 1 per Spellcasting Test success
Improve Damage	Novice	TMD+DR	1 round	Touch	Rank rounds	Special	3 + 1 per Spellcasting Test success
Improve Defense Rating	Novice	TMD	1 round	Touch	Rank rounds	Special	3 + 1 per Spellcasting Test success
Improve Movement	Novice	TMD	1 round	5 yards, up to Rank targets	Rank minutes	Special	4 + target count
Improve Skill	Novice	TMD	1 round	5 yards, up to Rank targets	Rank minutes	Special	4 + target count
Invisibility	Novice	TMD	1 round	Touch (maximum Rank targets)	Rank x 5 minutes	Rank + WIL	5 + target count
Invisible Hand	Novice	6	1 round	Rank yards	Rank rounds	Special	2
Levitate	Novice	TMD	2 rounds	Rank x 10 yards	Rank x 10 minutes	Special	3 + Rank
Move Element	Novice	Special (see text)	1 round	Rank x 10 yards	Rank rounds	Special	5
Possess Animal	Novice	TMD	1 round	Touch	Rank hours	Rank + WIL	2 + TMD
Pull	Novice	TMD	1 round	Rank x 2 yards	Instant	Rank + WIL	4
Push	Novice	TMD	1 round	Rank x 2 yards	Instant	Rank + WIL	4
Read Memories	Novice	TMD	1 minute	Touch	1 minute	Rank WIL	3 + TMD
Read Object	Novice	TMD	1 round	Touch	Rank rounds	WIL + Rank	6
Read Person	Novice	TMD	1 round	Rank feet	Rank rounds	WIL + Rank	3 + TMD
Reduce Attitude	Novice	TMD	1 round	Rank feet	Rank rounds	Special	3 + 1 per Spellcasting Test success

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Reduce Damage	Novice	TMD+DR	1 round	Rank yards, 1 weapon only	Rank rounds	Special	3 + 1 per Spellcasting Test success
Reduce Defense Rating	Novice	TMD	1 round	Rank yards, 1 target only	Rank rounds	Special	3 + 1 per Spellcasting Test success
Reduce Movement	Novice	TMD	1 round	10 yards, up to Rank targets	Rank minutes	Special	4 + target count
Reduce Skill	Novice	TMD	1 round	5 yards, up to Rank targets	Rank minutes	Special	4 + target count
Replicate Food	Novice	6	1 round	24 yards	Rank + 1 hours	Rank + WIL	3 + Rank
Replicate Item	Novice	TMD	1 round	Touch	Rank hours	Special	2 + Rank
Reveal Object	Novice	Effect Test result of Hide Object	1 round	50 yards	Instant	Special	7
Seal	Novice	TMD	2 rounds	Touch	Rank x 10 hours	Rank + WIL	2 + TMD
See the Future	Novice	11	1 round	Self	Rank minutes	Rank + WIL	5
See the Past	Novice	Location's Mystic Defense	1 round	Self	Rank minutes	Rank + WIL	5
Sleep	Novice	TMD	3 rounds	Rank x 2 yards	Rank hours	Rank + WIL	3 + target count
Spirit Hold	Novice	TMD	1 round	20 yards	Rank rounds	Rank + WIL	5 + Force Rating of spirit
Spirit Talk	Novice	TMD	1 round	Rank yards	Rank minutes	Special	3
Steno Spirit	Novice	9	1 round	Self	See text	Rank + WIL	4
Summon Spirit	Novice	TMD	30 minutes	Special	Rank hours	Special	4 + Force Rating of Spirit
Switch Objects	Novice	TMD (see text)	1 round	Rank yards	Instant	Rank + WIL	6
Thought Link	Novice	TMD	1 round	Rank x 50 yards	Rank minutes	Special	4
Unseal	Novice	TMD	2 rounds	Touch	Instant	Rank + WIL	5
Burn Area	Journeyman	TMD	1 round	Rank yards	Instant	Rank + WIL	10

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Control Person	Journeyman	TMD	1 round	Rank yards	Rank minutes	WIL + Rank	4 + TMD
Deny Defense Rating	Journeyman	TMD	1 round	10 yards, 1 target only	Rank rounds	Special	9
Deny Karma	Journeyman	TMD	1 round	Rank yards	Rank rounds	Special	7
Deny Movement	Journeyman	TMD	1 round	10 yards	Rank rounds	WIL + Rank	9 + target count
Deny Skill	Journeyman	TMD	1 round	10 yards	Rank rounds	WIL + Rank	9 + target count
Destabilize Ship / Vehicle	Journeyman	TMD + Maneuverability bonuses	2 rounds	Rank x 50 yards, 1 target only	Rank minutes	Special	4 + 1 per Spellcasting Test success
Extract Element	Journeyman	Special (see text)	3 rounds	Rank yards	1 round	Special	4 + 2 per Spellcasting Test success
Fly	Journeyman	TMD	1 round	Touch (up to Rank targets)	Rank + 15 minutes	Special	9 + 1 per target
Freeze Area	Journeyman	TMD	1 round	Rank yards	Instant	Rank + WIL	10
Geas	Journeyman	TMD	5 rounds	Touch	Rank weeks	Rank + WIL	10 + TMD
Grant Skill	Journeyman	TMD	1 round	10 yards	Rank rounds	Special	9 + target count
Improve Attribute	Journeyman	TMD	1 round	Touch	Rank rounds	Special	5 + 1 per Spellcasting success
Improve Karma	Journeyman	TMD	1 round	Touch	Rank rounds	Special	5 + 1 per Spellcasting success
Pass Through Barrier	Journeyman	TMD + Barrier Rating	2 rounds	Touch	Rank x 2 rounds	Special	4 + Barrier Rating
Pass Through Shadows	Journeyman	TMD + 6	2 rounds	Rank x 10 yards	Rank x 2 rounds	Special	4 + Rank
Possess Person	Journeyman	TMD	2 rounds	Rank yards, line of sight	Rank hours	Rank + WIL	4 + TMD
Reduce Attribute	Journeyman	TMD	1 round	Rank yards	Rank rounds	Special	5 + 1 per success
Reduce Karma	Journeyman	TMD	1 round	Rank yards	Rank rounds	Special	5 + 1 per success
Shockwave	Journeyman	TMD (see text)	1 round	Rank yards, 15 degree arc	Instant	Rank + WIL + 4	10

Spell Name	Tier	Casting Difficulty	Casting Time	Range	Duration	Effect	Strain
Stabilize Ship / Vehicle	Journeyman	TMD + Maneuverability bonuses	2 rounds	Touch	Rank minutes	Special	4 + 1 per Spellcasting Test success
Transform Object	Journeyman	TMD	3 rounds	Touch	Permanent	Special	5 + 5 per success
Transform Other	Journeyman	TMD	2 rounds	Touch (1 target only)	Rank hours	Special	5 + TMD
Transform Self	Journeyman	TMD	2 rounds	Self	Rank hours	Special	6

Creatures Summary Table

Name	DEX	STR	TOU	PER	WIL	CHA	Init	Phys Def	Myst Def	Soc Def	Phys Armor	Myst Armor	Actions	Atk	Atk Step	Damage	Death	Uncon	Wound	Rec	Knock	Move
Alligator	5	6	6	4	4	3	5 (7)	7	6	4	5	0	1	3	8	Bite (5): 11	38	30	10	3	7	6/8
Bear	5	7	6	3	4	5	5	7	4	7	5	0	1	2	7	Bite (5): 12	38	30	10	3	8	8
Cheetah	8	5	4	5	3	3	9	10	7	4	0	0	1	3	11	Bite (5): 10; 2	30	7	21	1	6	9
Dog, Guard	4	5	3	5	3	4	4	6	6	5	0	0	1	2	6	Bite (5): 10	26	17	6	1	6	7
Dog, Hunting	5	5	3	5	3	3	5	7	6	4	0	0	1	2	7	Bite (5): 10	26	17	6	1	6	7
Dog, War	5	6	4	4	4	4	5	7	5	5	0	0	1	3	8	Bite (5): 11	30	21	7	2	7	7
Eagle	5	5	4	6	4	5	5	7	8	7	0	0	1	3	8	Bite (4): 9	30	21	7	2	5	2/9
Elephant	4	12	9	4	4	4	3	4	6	6	6	0	1	3	7	Charge (8): 2	50	43	14	4	13	8
Falcon	8	3	4	7	5	6	8	12	9	8	0	1	2	3	11	Beak (5): 8; 2	40	29	7	2	6	2/9
Goat	4	6	6	4	4	4	4	5	5	8	3	0	1	1	5	Gore (2): 8	35	27	9	2	7	8
Horse, Draft	5	8	8	3	5	3	4	6	4	4	0	1	1	1	6	Trample (2): 1	43	35	12	3	9	8
Horse, Pony	6	6	9	5	5	6	6	7	6	7	0	1	1	1	6	Trample (2): 8	40	32	11	3	7	8
Horse, Riding	6	7	8	4	4	5	7	8	6	7	0	0	1	1	7	Trample (2): 9	44	36	13	4	8	10
Horse, War	7	9	9	5	7	6	7	9	6	8	0	2	1	2	9	Trample (4): 1	48	41	14	4	10	8
Leopard	6	5	4	4	5	3	6	8	4	4	2	1	1	3	9	Bite (5): 10, 2	30	21	7	2	6	8
Lion	4	7	5	4	3	3	4	6	4	4	3	0	1	3	7	Bite (5): 12	34	26	9	2	8	8
Lizard	4	3	4	4	3	4	4	7	6	6	0	0	1	1	5	Claws (1): 6	20	16	6	1	4	7
Monkey	7	5	4	5	3	3	7	11	7	4	0	0	1	1	8	Bite (5): 10	30	21	7	2	5	6/7
Pack Mule	4	7	7	3	6	3	4	6	4	7	0	2	1	1	5	Trample (2): 9	42	34	12	3	8	8
Rat	4	2	3	4	5	2	5	6	6	6	0	0	1	1	5	Bite (1): 3	25	20	None	2	None	6
Rhinoceros	5	10	10	3	6	5	5	7	4	7	6	2	1	3	8	Charge (8): 1	52	45	15	4	11	8
Snake	6	5	4	3	4	4	6	9	4	6	0	0	1	2	8	Bite (3): 8 (po	28	19	7	2	None	5
Wild Boar	5	6	7	4	4	4	6	7	6	6	3	0	1	3	8	Charge (11):	40	32	11	3	7	8
Wolf	6	5	4	5	4	3	7	8	7	4	2	0	1	2	8	Bite (5): 10	39	28	6	1	6	8
Buff	6	7	8	4	5	5	7	8	5	7	3	4	1	1	7	Trample (2): 9	48	40	12	4	8	13
Cheshire	7	6	7	5	6	3	7	10	7	4	4	1	1	3	11	Bite (6): 12; 2	41	34	11	3	7	9
Crawling Wig	2	2	2	2	2	2	2	2	2	2	0	0	1	1	9	Sting (3): 5	6	4	3	1	2	3
Dormouse	5	3	4	4	3	4	5	7	5	5	2	0	1	1	9	Tail Whip (5):	20	16	6	2	3	7
Exploder Pod	NA	NA	8	NA	NA	NA	NA	2	4	2	2	0	1	1	17	Seed Burst (2	15	NA	NA	NA	NA	0
Flatback	4	4	8	4	3	4	4	5	5	5	9	0	1	1	6	Bite (3): 7	48	40	12	4	9	5
Galvanant	4	3	3	3	5	2	4	5	4	2	4	2	1	1	6	Bite (3): 6	13	10	5	1	6	4
Garnickey	5	12	13	2	8	2	5	7	2	2	14	6	1	1	15	Trample (6): 1	83	70	20	6	20	8
Geealong	5	10	11	4	7	3	5	7	5	4	12	4	1	1	13	Bite (4): 14; T	69	58	17	5	18	7
Gengit	7	11	12	4	7	5	7	10	5	7	11	5	1	2	12	Claw (5): 16	76	64	18	6	17	5
Giant Flea	9	8	10	5	6	3	9	13	7	4	9	4	1	1	18	Bite (7): 15	62	52	15	5	17	9
Golden Sloth	6	10	10	4	6	5	6	8	5	7	6	3	1	2	10	Claw (3): 13	62	52	15	5	15	5
Gremlin	9	13	15	7	7	5	9	13	10	7	15	11	2	2	14	Bite (5): 18;	97	82	23	7	24	11

Name	DEX	STR	TOU	PER	WIL	CHA	Init	Phys Def	Myst Def	Soc Def	Phys Armor	Myst Armor	Actions	Atk	Atk Step	Damage	Death	Uncon	Wound	Rec	Knock	Move
Grenadier Bird	8	4	5	7	5	5	8	11	10	7	0	1	2	3	11	Beak (6): 10;	27	22	8	2	8	3/10
Grinning Monkey Orchid	7	3	4	3	5	3	7	10	4	4	0	2	1	Spe-cial	8	Bite (6): 9	20	16	6	2	6	NA
Harpy	9	7	8	4	7	6	9	13	5	8	3	4	1	1	8	Trample (2): 9	48	40	12	4	11	15
Hunchbeak	8	9	9	4	8	7	8	11	5	10	8	5	1	1	14	Claw (5): 14;	55	46	14	4	13	10
Jabberwock	10	12	13	5	8	8	10	14	7	11	9	6	1	2	16	Bite (5): 17; 2	83	70	20	6	21	11
Jeanne-Jean	6	3	5	3	3	3	6	8	4	4	2	3	0	0	0	Thorns 7	27	NA	8	2	NA	NA
Josisaur	7	5	6	4	3	3	7	10	5	4	2	1	1	1	7	Peck (3):8; Cl	34	28	9	3	8	7
Mordslanger	12	15	16	7	9	9	12	17	10	13	15	7	2	2	18	Bite ((6): 21;	104	88	24	8	26	9
Nallshpritzer Soldier	6	7	6	4	5	4	6	8	5	5	6	1	1	1	9	Bite (5): 12	34	28	9	3	10	7
Nallshpritzer Worker	5	6	5	4	5	4	5	7	5	5	5	1	1	1	7	Bite (4): 10	27	22	8	2	9	7
Purpose	9	8	8	6	7	5	9	13	8	7	4	3	1	1	12	Bite (7): 15;	66	55	12	4	13	5/12
Pythonipede	12	7	7	4	5	3	12	17	5	4	5	2	1	1	14	Bite (7): 14	41	34	11	3	13	12
Rail Runner	7	4	5	4	3	3	7	10	5	4	0	0	1	1	8	Peck (3):7	27	22	8	2	7	13
Reef Dragon	8	10	11	4	5	3	8	11	5	4	5	4	1	2	12	2 x Claw (7):	69	58	17	5	18	8/9
Ripping Creeper	8	9	7	4	8	4	8	11	5	5	6	3	2	3	12	Thorn Whip (	59	49	11	3	NA	NA
Rocky Anteater	6	10	11	5	7	4	6	8	7	5	9	5	1	1	11	2 x Claw (9):	69	58	17	5	17	7
Sabertooth	7	8	6	5	5	3	7	10	7	4	3	2	1	3	8	Bite (9): 17; 2	34	28	9	3	9	7
Salamander	8	7	9	4	8	7	8	11	5	10	7	4	1	2	11	Bite (5): 12; 2	55	46	14	4	15	9
Scorpiodied	9	7	8	3	6	4	9	13	4	5	5	2	1	2	9	Bite (4): 11; 2	48	40	12	4	13	8
Shardraqx	6	7	5	4	4	3	6	8	5	4	4	2	1	3	9	Bite (5): 12; 2	27	22	8	2	9	9
Sihrstuulah	8	9	9	5	7	6	8	11	7	8	0	0	1	1	11	Peck (4): 13;	55	46	14	4	13	5/14
Sisnapishtu	7	10	10	5	7	6	7	10	7	8	3	3	1	2	10	Bite (4): 14; T	62	52	15	5	15	10
Sissetbandura	8	11	10	5	7	6	8	11	7	8	7	4	1	3	11	Charge (12):	92	77	15	5	17	9
Sparker	6	3	4	4	3	4	6	8	5	5	2	2	1	1	4	Bite (2): 5	20	16	6	2	6	4
Spikejawed Sandhog	6	11	11	3	7	5	6	8	4	7	12	7	1	3	11	Bite (6): 17;	69	58	17	5	18	7
Splithee	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Springvine	9	10	9	4	8	4	9	13	5	5	5	2	1	1	16	Vine Whip (7)	55	46	14	4	NA	NA
Sticksand	6	7	5	4	5	3	6	8	5	4	7	2	1	3	13	Bite (8): 15	27	22	8	2	8	4
Storkasaur	8	8	8	4	7	6	8	11	5	8	0	0	1	1	11	Peck (4): 12;	48	40	12	4	11	4/12
Storsventok	6	8	7	4	5	6	6	8	5	8	5	4	1	2	8	Bite (6): 14; 2	65	54	11	3	12	7
Tar Beetle	4	3	3	3	3	3	4	5	4	4	0	0	1	1	4	Bite (1): 4	13	10	5	1	5	4/6
Thorny Molecrab	8	12	12	4	8	7	8	11	5	10	15	8	2	2	17	2 x Claw (9):	106	89	18	6	20	7
Trihorn	7	14	13	4	6	6	7	10	5	8	9	3	1	1	15	Gore (8): 22;	83	70	20	6	22	9
Tusk'r	11	8	10	4	5	6	11	16	5	8	13	2	2	2	14	Bite (7): 15	62	52	15	5	16	8
Whipping Willow	9	9	8	3	5	3	9	13	4	4	4	2	1	1	12	Whip (5): 14	48	40	12	4	NA	NA

Appendix II

Taxonomy of Grosvenor World Flora and Fauna

From the report of Paula Nancy Millstone, Lady Jennings, FRS:

The taxonomic structure I have devised is as follows. I have attempted to hold with the classical Linnaean form (Kingdom Phylum Class Order Family Genus Species) where possible, but recent complications in taxa have required insertion of super and sub categories. Where applicable, the principles of Priority, Coordination, and the First Reviser have been considered. First publisher and date are provided where available. Not all generally accepted taxa are properly documented.

- Kingdom: *Animalia* (Linnaeus 1758)
  - Phylum: *Arthropoda* (Latreille 1829)
    - Class: *Concamerata* (Jennings 1879) – from the Latin, "vaulted", referring to the internal support structures
      - Order: *Hymenoptera* (Linnaeus 1758)
        - Family: *Formicidae* (Latreille 1809)
          - *Ipsisacrificus Virogluten (Jennings 1879), Nallshpritzer*
      - Order: *Myriapoda* (Latreille 1802)
        - Family: *Scolopendromorpha*
          - *Sputaciduus Marleyii (Jennings 1879), Pythonipede*
      - Order: *Nefarispinum* (Jennings 1879) - "atrocious spines"
        - Family: *Valenvenatorus* (Jennings 1879) - "strong hunter"
          - *Parvamatus Achmedii (Jennings 1879), Shardraqx*
          - *Ferrospinum Ingendens (Jennings 1879), Tusk'r*
        - Family: *Perfodies* (Jennings 1879) - "burrowing"
          - *Eremiticus Imperviens (Jennings 1879), Thorny Molecrab*
      - Order: *Magninsilies* (Jennings 1879) - "great leap"
        - Family: *Sanguisugens* (Jennings 1879) - "blood suckers"
          - *Introvector Wiganii (Jennings 1879), Giant Flea*
    - Class: *Insecta* (Linnaeus 1758)
      - Order: *Coleoptera* (Linnaeus 1758)
        - Family: *Carabidae* (Latreille 1802)
          - Subfamily: *Concameratae* (Jennings 1879)
            - *Megalogaster Luciferens* (Jennings 1859), Sparker
        - Suborder: *Polyphaga*
          - Family: *Scarabaeoidea* (Latreille 1802)
            - *Pyrimachidae Bitumenophagus* (Jennings 1879), tar beetle
      - Order: *Lepidoptera* (Linnaeus 1758)
        - Family: *Megalopygidae* (JE Smith 1797)
          - *Megalopyge Cancellatus (Jennings 1879), Crawling Wig*
      - Order: *Hymenoptera* (Linnaeus 1758)

- Suborder: *Apocrita*
  - Superfamily: *Vespoidea*
    - Family: *Formicidae* (Letreille 1809)
      - Subfamily: *Galvanae* (Jennings 1879)
        - *Coacervopotentius Fulmens (Jennings 1879), Galvanant*

- Phylum: *Chordata* (Haeckel 1874)
  - Class: *Mammalia* (Linnaeus 1758)
    - Order: *Carnivora* (Bowditch 1821)
      - Suborder: *Caniforma*
        - Superfamily: *Musteloidea* (Fischer 1817)
          - Family: *Mustelidae* (G. Fischer de Waldheim 1817)
            - *Meles Gigantens* (Jennings 1879), Storsventok
      - Suborder: *Feliformia*
        - Family: *Nimravidae* (Cope 1878)
          - *Plagisilium Edwardii* (Jennings 1879), Sabertooth
    - Superorder: *Xenarthra* (Cope 1878)
      - Order: *Pilosa* (Flower 1879)
        - Family: *Megalonychidae* (Gervais 1855)
          - *Megalonyx Chrysogounus* (Jennings 1879), Golden Sloth
          - *Megalonyx Squamatii* (Jennings 1879), Gingit
        - Family: *Vermilingus* (Illiger 1811, revised Jennings 1879)
          - *Myrmecophaga Terrestarmatus* (Jennings 1879), Rocky Anteater
  - Class: *Reptilia* (Laurenti 1768)
    - Order: *Ornithischia* (Seeley 1868)
      - Family: *Ankylosauridae*
        - *Talarurus Maladventura* (Jennings 1879), Talarurus
      - Family: *Ceratopsidae* (Marsh proposed)
        - *Agathaumas Grosveniensis* (Jennings 1879), Trihorn
      - Suborder: *Eurypoda*
        - Superfamily: *Ankylosauria*
          - Family: *Armaspinae* (Jennings 1879)
            - *Invitus Brutomaximus* (Jennings 1879), Garnickey
    - Order: *Saurischia* (Seeley 1868)
      - Suborder: *Deinonychosauria*
        - Superfamily: *Dromaeosauridae*
          - Family: *Ornithodesmus* (Seeley 1877, revised Jennings 1879)
            - *Pandospinus Nidorovehemens* (Jennings 1879), Hunchbeak
            - *Velocicursus Desmedii* (Jennings 1879), Buff
            - *Megaraptor Carrolliensis* (Jennings 1879), Jabberwock
      - Family: *Flexilocaudae* (Jennings 1879)
        - Subfamily: *Terrenosauria* (Jennings 1879)

            - *Velocirapax Millidenta* (Jennings 1879), Cheshire
        - Family: *Maniraptora*
            - *Formiraptosauris Posterodentus* (Jennings 1879), Josisaur
        - Family: *Ornithomimidae* (Marsh 1877)
            - *Tramosaurus Cucurriens* (Jennings 1879), Rail Runner
    - Order: *Squamata* (Oppel 1811)
        - Superfamily: *Cordylidae* (Fitzinger 1826)
            - Family: *Cordylinae* (Fitzinger 1826)
                - *Platysaurus Grosvenii* (Jennings 1879), Flatback
        - Family: *Telidae* (Wagler 1830)
            - *Cnemidophorus Novaculacaudii* (Jennings 1879), Dormouse
        - Family: *Varanidae* (Merrem 1820)
            - *Varanus Phlogistens* (Jennings 1879), Salamander
- Class: *Sauropsida* (Huxley 1863)
    - Order: *Plesiosauria* (de Blainville 1835)
        - Family: *Pilosauridae*
            - *Pteryglodankana Parasavroeidius* (Jennings 1879), Purpose
    - Order: *Pterosauria* (Kaup 1834)
        - Suborder: *Pterodactyloidea*
            - Family: *Azhdarchidae*
                - *Akkadiopterus Vehemens* (Jennings 1879), Storkasaur
                - *Simurghopterus Sihrstuulah* (Jennings 1879), Sihrstuulah
    - Order: *Squamata* (Oppel 1811)
        - Family: *Iguanidae*
            - *Thalassosayrus Pseudopteroisis* (Jennings 1879), Reef Dragon
- Class: *Aves* (Linnaeus 1758)
    - Order: *Passeriformes* (Linnaeus 1758)
        - Family: *Corvidae* (Vigors 1825)
            - *Corvus Excidosus* (Jennings 1879), Grenadier Bird
- Phylum: *Cnidaria* (Hatschek 1858)
    - Class: *Anthozoa* (Ehrenberg 1834)
        - Subclass: *Octocorallia* (Haeckel 1866)
            - Order: *Alcyonacea* (Lamouroux 1812)
                - Suborder: *Alcyoniina*
                - Family: *Xeniidae* (Ehrenberg 1828)
                - *Raptipedes Ossogluto* (Jennings 1879), Sticksand
- Kingdom: *Plantae* (Linnaeus 1758)
    - Phylum: *Angiospermae*
        - Class: *Caryophyliales* (Perleb undated)
            - Order: *Cactaceae* (Juss undated)
                - Family: *Cactoideae*
                - *Echinocactus Fulmenatus* (Jennings 1879), Exploder Pods
        - Class: *Monocots*
            - Order: *Asparagales* (Link undated)
                - Family: *Orchidaceae* (Jussieu undated)

        - *Veloxigerminus Simiictii* (Jennings 1879), Grinning Monkey Orchid
    - Family: *Xanthorrhoeaceae* (Dumortier undated)
        - Subfamily: *Asphodeloideae* (Burnett undated)
            - *Pseudaloe Splithens* (Jennings 1879), Splithee
- Class: *Eudicots*
    - Order: *Caryophyliales* (Perleb undated)
        - Family: *Droseraceae* (Salisb undated)
            - *Ancistrocladaceae Laceratio* (Jennings 1879), Ripping Creeper
    - Order: *Fabales* (Bromhead undated)
        - Family: *Fabaceae* (Lindl undated)
            - *Amyntankathis Jeannebaret* (Jennings 1879), Jeanne-Jean
    - Order: *Rosales* (Berchtold & Presl undated)
        - Family: *Rosaceae* (de Jussieu undated)
            - *Rubus Flagrospinae* (Jennings 1879), Springvine / Whipthorn
    - Subclass: *Rosids*
        - Order: *Malphigiales* (Martius undated)
            - Family: *Salicaceae* (Mirb undated)
                - *Salix Satoflagellus* (Jennings 1879), Whipping Willow

Index

A

Accountant and Clerk: Ajanta Kuram 80
Achieving the Adventure Goal 168
Acid Spray 346
Adaptability 448
Adjusting Target Numbers 161
Adventure Award Table 166
Adventure Hook: A Bolt of Inspiration 75
Adventure Hook: A Frenchman of Peculiar Origin 27
Adventure Hook: A Growing Problem 69
Adventure Hook: Ants In Pints 65
Adventure Hook: A Rumor of Beetles 47
Adventure Hook: A Train Wreck Looking For A Place To Happen 75
Adventure Hook: A Wild Unorthodox Wrong'un 65
Adventure Hook: Bug Bitten 57
Adventure Hook: Cave-In At The Bolthole 42
Adventure Hook: Collapsing New Building 78
Adventure Hook: Collapsing Potential Buildings 44
Adventure Hook: Conduct Unbecoming a Gentleman and an Officer 37
Adventure Hook: Deep Voices 79
Adventure Hook: Footprints in the Night 69
Adventure Hook: Gang Micro-Warfare 72
Adventure Hook: Gremlins Gremlins Everywhere 21
Adventure Hook: Hooked on a Seedling 58
Adventure Hook: How Sweet It Isn't 32
Adventure Hook: In Bad Odor With The Law 35
Adventure Hook: Old Bones 71
Adventure Hook: Putting on Weight 25
Adventure Hook: Raining on His Parade 63
Adventure Hook: Rotten Apples 52
Adventure Hook: Seventeen Angry Chinese Men 60
Adventure Hook: The Midnight Skulker 81
Adventure Hook: The Missing Table 40
Adventure Hook: The Sleeping Map 52
Adventure Hook: The Spring of Dreams 49
Adventure Hook: The Swede and the Belgian 30
Adventure Hook: To Boom or Not to Boom 22
Adventure Hook: Unfriendly Spirits 31
Adventure Hook: We Are Such Tunes As Dreams Are Made Of 82
Adventure Hook: We'd Like A Word With Him Down At The Station Please 48
Adventure Ideas 193
Adventurers in Astral Space 436
Adventures 193
Adventures & Campaigns 185
Aid Summoner 448
Airfield Master Engineer: Radhburghis Nykvist 26
Airship Pilot: Catreen Sprackling 66
Airship Random Movement Table 298
Air Spirits 455
Air Travel 296
Alice and Gruv "Dreadnaught" Class Locomotive 272
Alice and Gruv Railroad 37
Alligator 353
All Saints Labor Settlement 68
Ally Spirit Powers Table 479
Ally Spirits 444, 477
Ally Spirits and Names 445
American "Leviathan" Class Locomotive 272
Americas 138
Ancient Ruins / Camp Burlington 27
An Extensive Tour of the Gruv 17
Anglican Chaplain: Father Jared Bracewell, Rector of New Islington Parish 32
Animal Training 222
Antidotes, Antivenin, and Poultices 241
Antipodes 147
Appendices 487
Appendix II 496
Arm Prostheses 252
Artillery Commander: Wilfred Ellery Pendergast, Colonel 24
Ashes (Example Hearth Spirit) 479
Asia 130
Assigning Adventure Awards 166
Astral Attributes, Abilities and Possessions 436
Astral Damage Table 436
Astral Locations 438
Astral Portal 448

Astral Projection 435
Astral Space and Its Perilous Nature 433
Atmosphere and Mood 189
A Treatise Regarding the Astral Plane 433
Australia 147
Austro-Hungarian Empire 127
Authority of the Gamemaster 152
Avoiding Attention 210
Awarding Adventure Points 165
Awestruck 174

B

Babylon 119
Babylonian Portal 14
Bad Food or Water 233
"Barbican" Class Heavy Deployment Supply Carrier 282
Bargaining and Reputation 447
Barrier Rating Table 204
Barriers and Structures 203
Barrister: Isidore Peppercorn, Esquire 66
Barrow and Quentin's, restaurant chain 316
Basic Rules and Why You Should Break Them 151
Bear 354
Becoming Cursed 228
Beercrombie 81
Bestiary 333
Better and Worse Attitudes 176
Big Ships: Crossing the Oceans 289
Bite and Hold 342
Bite and Shake 342
Bite Attacks 342
Blacksmith: Shripati Cherukuri 80
Blade Trap 206
Blood Magic in Astral Space 437
Blood Veins 347
Boatyard Construction Supervisor: Heda Townsend 83
Bolthole Tunnel Project 41
Borsippa 121
Bourne's Hill / Maksuddum-matam 103
Brake Van 276
Brickyard Foreman: Malachi Trenchard 46
Bringing In a Shill 158
British "GNR Stirling" Class Locomotive 271
British Portal 15
Bucca, Example Woodland Spirit 482
Buff 367
Build to Fit the Need, Don't Make the Need Fit the Build 243
Bureaucracy at the Border, or Death by Tedium 223
Burning Aura 347
Burns 238

C

Camouflage 347
Camp Administrator: Professor Isaiah Vernon Pauncefoot, FRS, DSc. Oxon. 28
Camp Security Administrator: Captain Kieran Redway, 43rd Monmouthshire Light Infantry (detached) 29
Canada 138
Captain of the Guard: Harding Kenway 70
Cargo Giffard 300
Casemate Ironclad 291
Catholic Chaplain: Father Crescentino Manucci, S.J. 109
Cavalry, OBV Mage: Lt. Valda Dowsett 110
Cave-Ins and Collapses 216
Cave-In Trap 217
Chairman of the Board: Sir Reginald Pembroke III, KCB 39
Chancellor of Research: Milbourne Ignacius Larbalestier, DSc, FRS, CB 25
Chaplain: Fr. Oswald Breakspear 88
Characters as Named Spirits 444
Charge 348
Charging Attacks 343
Cheetah 354
Cheshire 368
Chief Administrator: Katherine Orpett 44
Chief Administrator: Simon Peppercorn, Seventh Lord of Chepstam 36
Chief Administrator: The Right Honourable Hugo Withnall, JP 32
Chief Civil Engineer: Bronwen Brunel Pelloutier, DdE, Ir 39
Chief Constable: Silvan Hambley 84
Chief Mechanical Engineer: Tobias Coulthard, BS, MS, PhD 39
Chief Nurse: Anissa Fowkes 110
Chief Operating Officer: Wilfred Percival Dewdney 53
Chief Rat-breeder and Fish Tester: Araminty Freshwater 83
Chief Warden: Solomon Kelham 86
Childrens' Welfare Worker: Naomi Sisson 67
China 133
Cholera 234
City-States and Their Environs 119
Claw Attacks 343
Clay Bed Foreman: Basil Jaggard 46
Climbing 226
Climbing Gear 226
Climbing Target Table 227
Climb Rate and Stalling 298

Clockwork Hand 252
Colds / Minor Illness 233
Combat in the Astral Plane 437
Commander, New Capetown Artillery Battery: Captain Auriel Fairbrass 102
Commander, New Capetown Combined Arms Defensive Battalion: Colonel Archibald Wolnoth 101
Commander of Defense, New Wigan Observation Post: Lachlan Darroch MacFarlane, Captain 91
Common Ground 243
Completing Session Goals 167
Conditions Inside The Portal 10
Conflicts 167
Conflicts and Challenges 190
Confusion 449
Construction Foreman: Sceafa Myhill 73
Control 244
Converting from Other Systems 186
"Conway" Class Command Carrier 283
Crackling Armor 348
Crawling Wig 369
Creating GMCs 174
Creating Target Numbers 159
Creature Attacks 341
Creature Combat 341
Creature Descriptions 338
Creature Encounters 340
Creatures and Climbing 226
Creatures and Combat Options 345
Creatures of Earth 353
Creatures of the Gruv 367
Creatures Summary Table 494
Creature Treasure 165
Credits 2
Crime and the Underworld 196
Crisis Management 194
Curse 449
Curse Effects 229
Curses 228
Cuthah 120

D

Damage 240
Darkness 221
Dart Trap 206
Death 240
Debilitation 240
Deceit 178
Decide an Ending 199
Dedications 2
Dehydration 218
Derangement 337
Detecting Secret Doors 204
Detection Difficulty Table 204
Detect Trap 449
Detect True Element 449
Detect Weapon 450
Dhamara 111
Dhankar 59
Dice vs. No Dice 153
Diplomacy 194
Discovery 115
Disease 348
Diseases 343
Disease Treatments 233
Disguise Self 450
Dodger (Example City Spirit) 480
Dog 355
Dormouse 370
Draft Horse 359
"Duncarraig" Class Assault Carrier 281
Durability 348, 450
Dyer: Kukula 63

E

Eagle 356
East: The Boreal Forest 55
Ejabbanas (Example Water Spirit) 471
Elemental Aura 450
Elemental Planes 439
Elemental Spirits and Elementals 445
Elemental Spirits and Names 445
Elephant 357
Empathic Sense 450
Encountering Wild Animals and Creatures 222
Encounters Along the Road 210
Enemies 173
Enemy 176
Engulf 450
Enhanced Senses 349
Enrage Element 451
Entering Astral Space 435
Entering via Magical Means 435
Entering via Natural Ability 435
Enter the Player Characters 201
Erasmus Sparrowhawke (Example Ancestral Spirit) 485
Eridu 120
Eshnunna 119
Espionage 194, 197
Étienne (Example Pilot Spirit) 481
Europe 123
Evil Eye 451
Exploder Pod 371
Exploration 193, 196

Exploring Astral Space 434
Explosive Gas 216
Explosive Gas Trap 216
Exposure and Frostbite 217

F

Failing a Climbing Test 226
Falcon 357
Falling Damage 227
Falling Damage Table 227
Far South: The Coast and Scrublands 77
Fatigue 231
Favors 181
Favor Success Table 183
Fever 233
Field Manager: Radhe Jai 80
Fighting Wild Beasts 222
Filling the World With Characters 199
Find 451
Finding the Target Number 160
Fire 225
Fire Damage Table 225
Fire Spirits 464
Fisher: Anusheh Kazemi 114
Fishing Captain: Neil Gambrill 83
Flatback 373
Flatbed Cars 275
Force Rating 1–4 464
Force Rating 5–8 460
Former Mayor, Peltingsford: Barnard Clemas 66
Fort Alice 20
Fort Alice and Its Environs 20
Fort Commander: Colonel Malcolm Orrick 109
Fort Commander: Rab Birti Abum Nitocris 105
Fort Commander: Sir Ainsley Roke, KCB, Brigadier 23
Fort Wellington 107
Foundry Supervisor: Jakob Horst Hergenrother 76
Foundry Supervisor: Somerville Brunger 54
Fox Kane (Example Named Wood Spirit) 475
France 128
Freight Coach 269
Friendly 175
From Adventure to Campaign: Extending the Story 195
Fuel Requirements 250
Fultingham 64
Furniture Trader: Josiah Brenneman 98
Future of Fuel Sources 264

G

Galvanant 374
Gamemaster Character Attitudes 174
Gamemastering 1879 151
Gamesmaster Characters 171
Game Terms 448
Ganjshakar 71
Garnickey 376
Gateways to the Netherworlds 439
Gathering Treasure 167
Geealong 377
General Manager: Matthew Hawkins Wicken 41
General Store Shopkeeper: Zedekiah Lambright 98
Gengit 378
Geologist: Grainne Rankeillor, MSc, DSc, FRS 55
Getting Lost 221
Giant Flea 380
Giant Insectoids 335
Giffard Design and a Quick Lesson in Chemistry 297
Giffard Operation 298
Giffard Travel 214
Goat 358
Golden Sloth 382
Goods Wagons 275
"Gordon" Class Light Tank 277
Gorran Wood 47
Governance 117
Governor of the Colony: Lt. Gen. Kenneth William Halding 86
Grab and Bite 343
Gran Hargreaves (Example Ancestral Spirit) 483
Great Form Spirits 443
Gremlin 383
Grenadier Bird 385
Grinning Monkey Orchid 386
Gruagach (Example Farm Spirit) 481
Guard Dog 355

H

Haggle 452
"Harbinger" Class Breaching Carrier 280
Harper: Tadgh MacMhuirich 58
Harpy 388
"Havelock" Class Medium Tank 278
Headmistress, Bethnal Workhouse Society: Penelope Madgett 33
Head of Research, New Wigan Observation Post: Hippolyta Bratcher, DSc, FRS

91
Heat Exposure 218
Herbalist: Umm Jaida Bahija bint Rabiah Kasuriyya 73
Herdsman: Lachlan Chalmers 58
High Altitudes 218
High Street Chemist: Bertram Radnage 102
History of Steam 256
Hornblower's Hill 84
Horse 359
Horses Are Not Vegetative Bicycles 211
Hostile 176
Howling Challenge 349
How Many Creatures Should I Use? 340
How to Run The Game 151
How to Use This Book 6
Hunchbeak 389
Hunger 337
Hunting Dog 355

I

If It's Not Fun, Why Are You Doing It? 153
Ifrit (Example Fire Spirit) 467
Illness 232
Imam: Abu Fawzi Nagib bin Nadeed Chishtiyyun 72
Imam: Kourosh Javadi 113
Increasing Spirit Force Ratings 443
Increasing the Likelihood of Favors 183
India 130
Individual Deeds 168
Infantry Commander: Garyth Hewit, Colonel 24
Initiative 341
Injurious Incidents 224
Injury 238
Inside Cover 1
Insight 179
Insubstantial 452
Interaction Success Table 178
Interaction Tests 177
Intimidation 180
Introduction 5
Introductory Notes to a Profile of the Grosvenor Land, Its Habitats, Fauna and Flora 333
Introductory Remarks 17
Investigation 193
Invisibility 452
Isin 120
Italy 129

J

Jabberwock 390
Jeanne-Jean 391
Josisaur 393

K

Kapitan der Polizei: Maria Diederike Bernhoffer 76
Karma 349, 452
Karma Use 341
Kaushaldesa 77
Keeping Secrets 155
Kickstarter Backers 511
King Edward 51
Knights of the Grail 305
Kobolds (Example Earth Spirit) 463

L

Lagash 120
Lama: Norgay Tempa 62
Land Bridges: Realms of War 100
Land Vehicles 267
Larsa 121
Laying Pipe, or Let The Players Decide 156
Lead Chemist: Tamsyn Pengilly 51
Leg Prostheses 251
Leopard 361
Leshys (Example Wood Spirit) 476
Leveller Organizer: Lowrey Yonwin 33
Lightning 349
Light Source Table 221
Linking Adventures into Campaigns 198
Lion 362
Lizard 362
Locate Target 350
Lockjaw 235
Locomotive Superintendent: Virgil Catling 41
London Omnibus 269
Loot 164
Loot Worth Money 164
Loyal 175
Lumber Mill Foreman: William "Bill" Roper 94
Luxury Steam Coach 268

M

Magical Attacks 344
Magical Treasure 165
Magic Use Table 350
Maintenance 250
Major Curses 229
Making Alliances 446

Making an Impression 180
Making Favor Tests 182
Malaria 235
Manifest 452
Manipulate Element 452
Mantrap 207
Mayor and Company Chief Representative: Reginald Pinking 94
Methods of Exposure 232
Mexihco (Los Estados Unidos de Mexihco, the EUM) 139
Micro Steam 263
Midwife and Herbalist: Ciannait Rhoney 57
Milestones 200
Military Vehicles 277
Military Vessels 290
Mine Head Supervisor: Endellion Curnow 50
Mining Engineer: Hedayat ibn Saeed 54
Minor Curses 228
Modifiers vs. Target Numbers 161
Monkey 362
Mordslanger 394
Motivation 187
Motivations, Attitudes and Personality 446
Movement Underground 214
Mutual Storytelling 193

N

Nallshpritzer 396
Named Spirit Powers and Force Ratings 444
Named Spirits 443
Narrow Boat 286
Nature of Spirits 441
Nature Spirits (Elementals) 455
Netherworlds 438
Neutral 175
New Capetown 100
New Islington 30
New Strathspey 56
New Wigan 89
New Wigan Mayor: Clairmonte Burgess 90
New Zealand 148
Nippur 119
Niter Yard Supervisor: Benjamin Resnick 37
North: The Gladstone Mountains 43
Novello (Example Fire Spirit) 466
Number of Actions 341
Nurse: Judith Horovitz 45

O

Objectives 187
One-offs and Spear Carriers 172
On the Geography and Resulting Habitats of the Gruv 334
Opening Secret Doors 204
Opposition 188
Other Astral Denizens 446
Other Designs 303
Ottoman Empire 132
Overland Travel 209
Overseer of Eridu: Ditanu 107
Overseer of Lagash: Jotape 106

P

Pack Mule 363
Pack or Swarm Attacks 344
Paralysis 240
Passenger Giffard 302
Patrol Chief: Nechtan Littlejohn 50
Patrons 173
Perception Modifiers Table - Sight 163
Perception Modifiers Table - Smell 164
Perception Modifiers Table - Sound 163
Perception Modifiers Table - Taste 164
Perception Modifiers Table - Touch 164
Perception Target Table 163
Perception Test Modifiers 163
Perception Test Result Levels 162
Perception Tests 162
Personal Steam Coach 268
Philalethes (Example Ancestral Spirit) 484
Physician: Sarvenaz Razmara, BAMS, MD 114
Pinking Swinbourne 92
Piracy and Banditry 223
Pit Trap 207
Plane of Air 440
Plane of Earth 441
Plane of Fire 441
Plane of Wood 441
Plot 186
Poison 239, 350
Poison Duration 240
Poison Effect 239
Poison Gas 216
Poison Onset Time 240
Poisonous Attacks 344
Poison Resistance Tests 241
Poisons Methods of Exposure 241
Poison Table 241
Police Captain: Bigby Strasthborough Ross 36
Politics 196
Pony 359
Portal Ill Effects Table 12
Portal Navigation 11
Portal Resistance Table 11
Portals 9
Possession 453

Pouncing Attacks 344
Power 244
Preacher: Hiram Schlappach 98
Priest and Vedic Scholar: Devasarasa Sangem 79
Priest: Burnaburiash 105
Priest: Father Josiah Gribble 45
Props, Maps, and Atmosphere 157
Prostheses 242
Prostheses Game Statistics 249
Protection of Young 338
Prussian Empire 126
Publican, Mule and Orchids: Corydon "Cory Gee" Gammell 34
Publican: Parthenope Tsirimokos 102
Purpose 397
Pyramids Club 316
Pythonipede 399

Q

Qawwal: Abu Zaim Dabir bin Khalil Kasuriyyun 73
Quartermaster: Color Sergeant Indrabhattarika Sankaranarayanan 29
Quartermaster: Cyneburh Tillison, Major 24

R

Rabbit Patrol Environment Suit: 13
Rail Runner 400
Rail Superintendent: Thomas MacIan, Colonel (Retired) 25
Railway Travel 213
Rare Items 165
Rat 364
Recovering From Fatigue 232
Recovering From Injuries 239
Recurring Characters 172
Reef Dragon 401
Remove Element 453
Resident Block Representative: Cynvelyn Shone 70
Reward 191
Rewarding the Players 158
Rhinoceros 364
Riding Horse 360
Ripping Creeper 403
Riverboat 288
Riverboats: the Sidewheeler and the Sternwheeler 285
Rivers and Oceans 285
River Travel 213
"Roberts" Class Heavy Tank 279
Rocky Anteater 404
Roleplaying 168, 177
Roleplaying a Cast of Thousands 155
Rules 457
Russian Empire 124

S

Sabertooth 406
Safe Areas 209
Saints of Westminster 34
Salamander 407
Samsut 189
Samsut Culture 116
Samsut Lands 114
Samsut Point of View 118
Sandbox Campaign 195
Saurid Continent 121
Saurid Portal 15
Saurids 188
Scholar: Fazlullah Sorush Radji 112
Scorpiodied 408
Scout Giffard 299
Secret Doors 204
Secret Societies 189, 305
Senior Physician: Jailekha Rajagopalan, MBBS, MD 69
Sense Danger 350
Sense Magic 350
Severe Blisters 238
Severing Limbs 345
Shardraqx 410
Share Knowledge 453
Shepherdess and Animal Healer: Pema Dolkar 63
Shillington Labor Settlement 43
Ship Terminology 285
Ship Terminology Table 285
Shuruppak 119
Sihrstuulah 411
"Singer" Class Manual Crank Submarine 293
Sippar 120
Sisnapishtu 412
Sissetbandura 413
Skills 351, 454
Smoulder (Example Air Spirit) 458
Snake 365
Social Interaction 211
Social Interactions 177
Sons of Thoth 312
Soothe 454
South: The Darlington Mountains 67
Sparker 415
Spear 454
Special Abilities of Creatures 346
Special Abilities of Spirits 447

Specific Diseases 234
Spellcasting 351, 455
Spell List 330
Spells 351, 455
Spells Summary Table 487
Spikejawed Sandhog 416
Spike Trap 207
Spirit Force Ratings 442
Spirit Powers 448
Spirits of Civilization 479
Spirits of Nature 481
Spirits of the Ancestors 483
Splithee 417
Spook Cause Table 211
Spook Table 211
Spook Test Adjustment Table 212
Spook Type Table 212
Sprained Ankle 238
Springvine 419
Staff Physician: Laurence Grunsell, MD 87
St. Aldhelm's College of Philosophy and Architecture, Oxford 315
Standard Format 338
Stationary Engines 260
Stationmaster: Horace Milborrow (Captain, retired) 26
Stationmaster: Mirabel Pritchett 94
Statistics 338
Steam at Sea 259
Steam at War 260
Steam Coaches 268
Steam Locomotives 257
Steam on the Farm 260
Steam on the Road 258
Steam Packet 289
Steam Powered Arm 253
Steam Powered Hand 252
Sticking It to Them 243
Sticksand 420
Sticky Body 351
Sticky Spit 352
Storkasaur 421
Storsventok 422
Story Origins 185
Storytelling and the Triangle of Drama 154
Strained Arm or Wrist Muscle 238
Stube Keeper, Der Lachende Adler: Kaspar Reinmund Grumel 75
Submarine (Steam/Electrical) 295
Subplots, or How to Tell an Interesting Diversion From an Annoying Digression 192
Success Levels 161
Suffocation 218
Sunburn 239
Surprise Attack 352
Survival 219
Swimming and Drowning 227
Switchyard Supervisor: Rioghnach MacPherson 36
Swooping Attacks 345
Sylphs (Example Air Spirit) 458

T

Table of contents 3
Tagtsher, Khral-pa Dpon Po 62
Tar Beetle 423
Target Number Table 160
Task Difficulty 160
Tasked Spirits 445
Tasmania 148
Taxonomy of Grosvenor World Flora and Fauna 496
Temperature 455
Territory 336
Themes 190
The Perils of Adventuring 203
Thorny Molecrab 425
Thuggee 320
Tire Others 352
Torgau Freistadt 74
Total Adventure Awards 169
Town Physician: Nuallan Colcroft, MD 95
Trains 270
Trap Descriptions 206
Traps 205
Trap Ward 206
Travel Hazards 217
Travel in Astral Space 438
Traveling 208
Travel Rate Table 209
Travel Time 208
Treasure 165
Trihorn 426
Tuberculosis 236
Turreted Ironclad 292
Tusk'r 428
Types of Campaigns 195
Types of Engines 260
Types of GMCs 171
Typhoid 237

U

UK, including Wales, Ireland, and Scotland 123
Uluru Zone 149
Unbreathable Air 215
Underground Travel 214
Undines (Example Water Spirit) 471
Unfriendly 175

Union Organizer: Trevenna Couch 54
United States of America (the "Union") / The Confederate States of America (the "Confederacy") 141
Ur 121
Uruk 120
Using Astral Space in Adventures and Campaigns 433
Using Pre-Written Adventures 185
Using the Plot 198

V

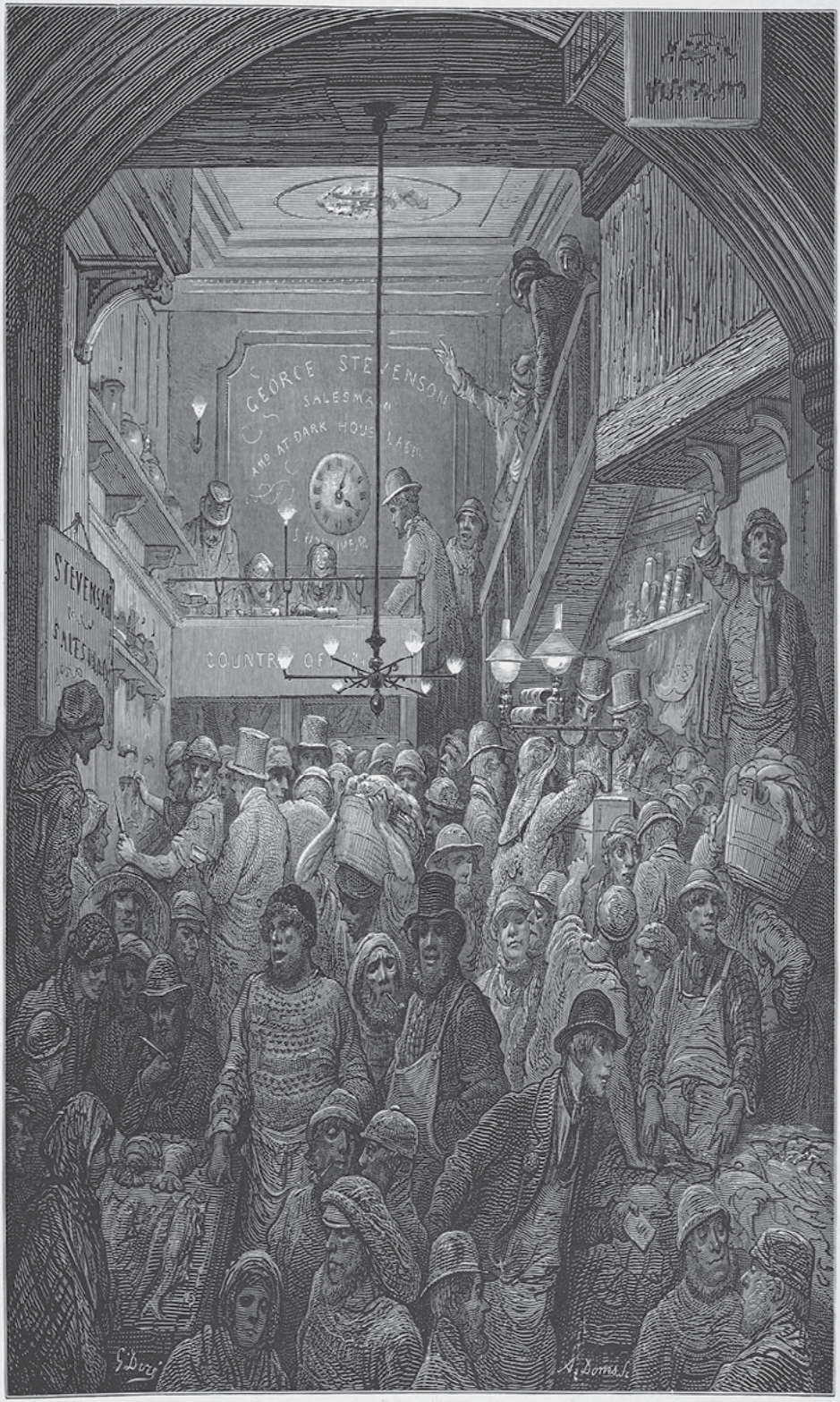
Vehicle Speed Step Table 267
Vehicle Statistics 265
Venom 352
Village Councilman: Columb Trethewey 49
Village Doctor: Terrance Aylwin, DSc, MD 91
Villupaatu (Example Earth Spirit) 462
Visibility 219
Visibility Table 220

W

Wagon-Lit (Pullman) 274
Wagon-lits 274
Wagon-Lit (Standard) 274
War 194, 196
War Dog 356
War Horse 360
Water Spirits 468
Weather 219
Weaver: Eadaoin Auchnie 59
Weaver: Peninnah Guengerich 99
West: The Temperate Forest 89
When to Make Perception Tests 162
Where's the Cut? 246
Which Creatures Should I Use? 340
Whipping Willow 430
Who Can Do It? 159
Why Are There Portals? 9
Why Is It Attacking? 336
Why Steam? 256
Wild Animals and Creatures 221
Wild Boar 365
Wilderness 210
Wolf 366
Wood Spirits 472
Workhouse District Nurse: Oriella Fielding 70
Writing Your Own Story 186

Z

Zeitnehmer: Maria Siegfrieda Zoepfl 76
Zion 95


GEORGE STEVENSON
SALESMAN
AND AT DARK HOUSE LANE
STEVENSON
COUNTRY OF

FAS52102

Welcome to 1879!

The British Empire, suddenly finding itself with an interdimensional portal due to a Weird Science experiment gone awry, has discovered a new world, the Gruv, chock-full of resources and land to be exploited. In the process, though, they've run headlong into the Samsut, descendants of ancient Babylonians who've been living there for over three thousand years. Now the might of the Empire clashes with the weird science of the Samsut. The Saurids, a reptilian race native to the new world, contest with both empires to retain their ancestral lands. Who will control the Gruv?

Meanwhile, first in London and then around the world, magic has returned. In some cases, humans have changed, becoming elves, dwarves, snarks, and trolls. In others, mages, priests, and shamans have gained awe-inspiring powers. Weird Scientists build unexplainable devices. Technological leaps forward have given us British microsteam engines, Confederate Giffard airships, and Prussian lightning guns, with new world-changing inventions appearing every day. Dodgers skulk in the shadows, doing what reputable firms need to be able to deny.

The British hold title to the Rabbit Hole and its access to the Gruv, but other nations have brought pressure to bear, and will not be denied their chance at the riches of the new world. Intrigue! Exploration! Giant insects! Battery-powered zombies! War in the New World and the threat of it in the Old! Where will this all end? That's for you to decide!

From secrets of Her Majesty's government, to descriptions of secret societies, to details of the inventions of the age, the 1879 Gamemaster's Guide delivers a wealth of knowledge and information for the gamemaster to incorporate into their 1879 campaign. Contained herein are grand tours of the Grosvenor World and Earth of the late alt-Victorian age, the game mechanics for traps and poisons, Engine hacking, airships, horses and other mounts, and gamemaster characters. Delve more deeply into the alternate history, challenge your players with complex, ongoing plotlines, and let slip clues of nefarious doings that will require true heroes to oppose and bring the scoundrels to justice!

ISBN 978-1-938869-35-8 MSRP $44.99

9 781938 869358

1879.FASAGAMES.COM

1879

1879 is a trademark of FASA Corporation. Copyright © 2017 FASA Corporation. 1879 and all associated trademarks and copyrights are used under license from FASA Corporation.

FASA