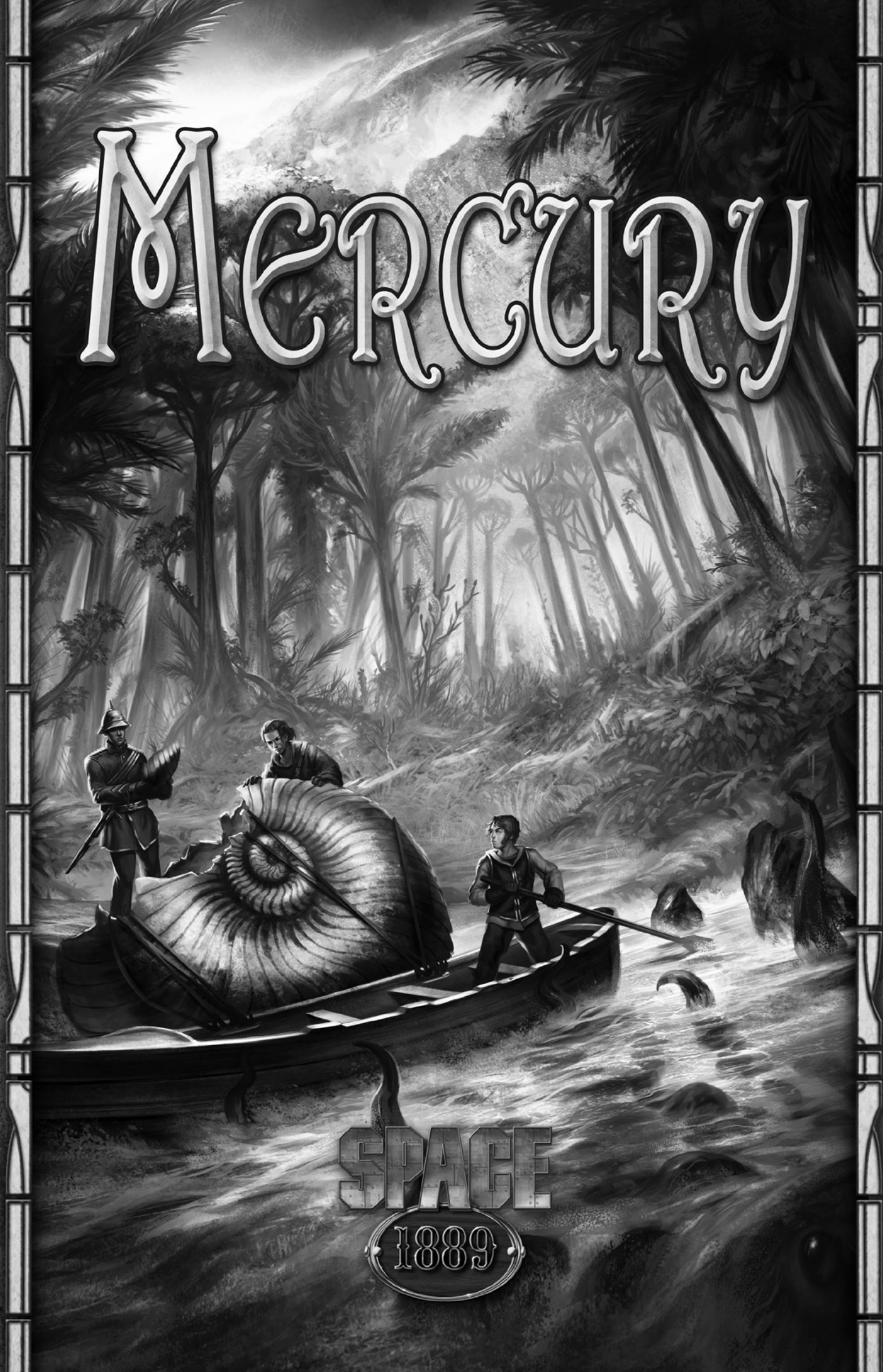


MERCURY



SPACE
1889

MERCURY



SPACE

1889

Credits

Based on the original concept of Frank Chadwick

Editor in Chief

Stefan Küppers

Editors

Dominic Hladek, Uli Lindner

Editor of the English Translation

Nicole Heinrichs

Written by

Bjorn Beckert, Dominic Hladek, Martin John, Tobias Rafael Junge,
Stefan Küppers, Uli Lindner, and Dennis Maciuszek

English Translation by

Bettina Ain, Jan Enseling, Nicole Heinrichs, Sven Heyroth, Helge Stuckenberg, Inna Tsvik

Ubiquity Rules designed by

Jeff Combos with Jadon Carl, Chris Goe, and Tyler Running Deer

Cover Artwork by

Christian Schob

Logo Design by

Arndt Drechsler, based on the original logo of the Space: 1889 Core Rulebook by GDW

Interior Artwork by

Steffen Brand, Markus Holzum, Holger Kirste, Eric Lofgren, Rich Longmore

Proofreading by

Daniel U. Thibault

Index by

Nicole Heinrichs

Layout by

Daniel Bruxmeier

Graphic Design by

Ralf Berszuck

Acknowledgments:

Thanks to Arne Jonny Bakkevoll, Niklas Forreiter, Jonathan Friebe, and Steve Osmanski

Space: 1889 is © 2017 Frank Chadwick. All rights reserved.

This edition is © 2017 Clockwork Publishing, under license of Frank Chadwick.

The Ubiquity Roleplaying System and logos are trademark of Exile Game Studio, LLC. All rights reserved.

Reproduction without the written permission of the publisher is expressly forbidden, except for the purposes of reviews, and for blank character sheets, which may be reproduced for personal use only.

The mention of or reference to any company or product in these pages is not a challenge to the trademark or copyright concerned.

This product is a work of fiction. Any similarity to actual people, organizations, places, or events is purely coincidental.

This book contains mature content. Reader discretion is advised.

Printed in the EU

Distributed by:



www.clockwork-publishing.com

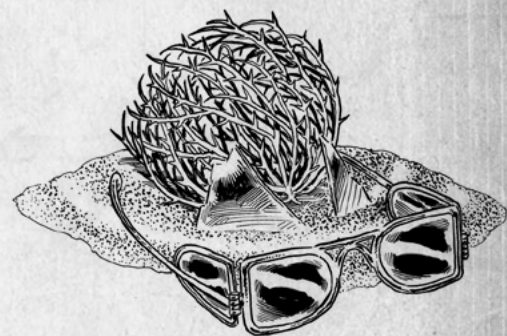


www.modiphius.com



Table of Contents

Preface	4	Journey on the World River	70
Mercury ~ <i>Ry</i> Overview	5	Introduction	70
Traveling to and on Mercury	7	Starting the Adventure	71
The Exploration of Mercury	12	At the Princess Christiana Station	76
Powers and Interests on Mercury	14	Racing Rules	79
		The Race	83
		Coda	99
		Appendix: Map	100
The Twilight Zone	17	Appendices	101
The World River	17	Sample Characters	102
The Heatwards River Banks	20	Artifacts and Equipment	112
The Coldwards River Banks	22	Mercurian Mysteries	115
Treasures of the Twilight Zone	23	Scenario Ideas	118
Flora and Fauna of the Twilight Zone	25		
Points of Interest in the Twilight Zone	30		
Princess Christiana Station	35	Index	122
The Dark Side	39		
The Ice Sheath	39		
The Dry Ice Zone	41		
Kelvin's Land	42		
Treasures of the Dark Side	43		
Flora and Fauna of the Dark Side	45		
Ice Dwellers	48		
Points of Interest on the Dark Side	51		
The Hot Side	55		
The Forbidding Desert	55		
The Boiling Wasteland	57		
The Tin Zone	59		
The Lead Zone	59		
Treasures of the Hot Side	59		
Flora and Fauna of the Hot Side	62		
Points of Interest on the Hot Side	66		



Preface

Welcome to Mercury!

The public on Earth pays only little attention to the planet closest to the Sun—in our time just as in the world of *Space: 1889*. Mercury seems too uninhabitable with its one side perpetually facing the scorching Sun and the other lying in eternal darkness and cold. But while the Mercury of our world is a lifeless desert, its *Space: 1889* version is far from being so!

The first ether pioneers discovered that there is a small strip of land stretching around the entire planet between its Hot and Dark Sides, hosting in its eternal twilight a life-giving river that spans all of Mercury's circumference—the World River. In this Twilight Zone, a disturbingly alien landscape has formed, resembling what scientists expect the Earth to have looked like in the long-ago era of the Carboniferous Age. Fern woods and skyscraping trees form the background for giant insects and arthropods creeping through the undergrowth, while the River itself is the habitat of trilobites and ammonites—which can reach sizes that make them dangerous even to humans.

The Hot and Dark Sides aren't as lifeless as the first explorers thought. While on the Hot Side alien silicon creatures are looking for prey underneath the everlasting sun, the Dark Side is inhabited in part by ammonia-based creatures, of which the mysterious Ice Dwellers have even developed a certain degree of intelligence and culture. However, little is known about the wildlife of both extreme sides of the planet, and explorers might discover a thing or two that has never been seen by anyone before. But aside from all scientific discoveries, unfortunately the planet abounds with many unknown dangers: not only is the environment inhospitable, but predators await anyone venturing carelessly too far astray.

Although the exploration of Mercury with its hostile nature has by far not progressed as much as that of Mars or Venus or even the Moon, an increasing number of nations, companies, and individuals has recently become interested in the planet. The planet's various (real or potential) resources in particular have lured quite a few adventurers to Mercury, hoping to make

a fortune by exploiting the liquid metal lakes, ammonia snow-drifts and other treasures. Venturous explorers might stumble upon the withered or frozen remains of these soldiers of fortune on the Hot and Dark Sides—like a warning to proceed with the utmost caution.

While no one yet has actually attained wealth on Mercury, many free spirits are still drawn to the planet of extremes, for the various nations' governments have little power here as there are hardly any settlements, let alone colonies on the planet. The only exception being the Princess Christiana Station, a British research station that proudly planted the Union Jack on the shores of the World River—and yet has only a limited influence on the planet as a whole. Those who venture through the wild to seek their fortunes are truly on their own.

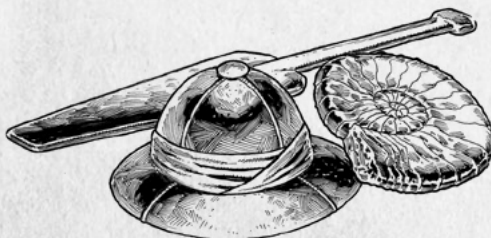
This sourcebook provides you with a comprehensive overview of Mercury, whether you and your players navigate the World River, travel the Hot Side underneath the scorching sun, or explore the mysteries of the Dark Side. A large section of the book focuses on the exploration of the planet as well as its various lucrative resources, which attract all sorts of adventurers. But there is also many a secret and mystery to uncover on Mercury—many of which are described in detail in a separate chapter at the end of the book specially designed for the Gamemaster. While reading this book you will encounter page references marked with a special symbol (➡), that indicate further information in the Gamemaster section in the Appendix.

Adding to further background information, creature stats, and new Sample Characters, the last chapter of this book comprises an adventure scenario that will send your players' characters around the planet following the World River—thrilling events and threads included, of course!

We hope you will have lots of fun with this book and that it will help you and your players to bring the planet of extremes to life!

Uli Lindner, Cologne, March 2015

Dominic Hladek, Frankfurt, March 2015



Mercury - An Overview

Mercury - Planet Facts

Diameter: 3,032 miles or 4,880 km
Circumference: 9,525 miles, or 15,330 km
Length of year: 88 Earth days
Length of day: - (no light/dark phases)
Gravity: 40 % of Earth's gravity

Geography

Hardly 40 % larger than Luna, Mercury is the smallest of the inner planets. Likewise, it is the planet closest to the Sun, which makes it a world divided into two hemispheres with extreme environmental conditions: the **Hot Side**, which sees constant daylight (see p. 55 et seq.), and the **Dark Side**, frozen in everlasting night (see p. 39 et seq.). The cold side—turned towards space—is frequently

hit by meteorites, with the impact sites being rapidly buried under snow and ice, however. Between these two landscapes lies the **Twilight Zone** (p. 17), a blooming paradise teeming with primeval and exotic plant and animal life that resembles the flora and fauna found during Earth's Palaeozoic Age. Down the center of this region flows the **World River**, which offers audacious explorers the opportunity to travel around the entire planet. Apart from this massive stream and its sometimes lake-like branches, there are no bodies of water on Mercury—though the Dark Side features a few ammonia lakes and lakes made of semi-solid carbon dioxide.

Because of Mercury's peculiar relation between its rotation and orbital revolution, it has not just two poles like Earth, but six. There are the usual North and South poles, but there are also those points directly under the Sun and its opposite: the Hot Pole (also called the Solar Pole) and the Cold Pole (also called the Antisolar Pole). Finally, there two poles perpendicular to the remaining four: the Leading and Trailing Poles, those points on the planet that face in its direction of orbital motion and away from it.

Mercury has a magnetic field, and its magnetic poles coincide with the rotational (North and South) poles. However, compasses are considered unreliable both because of the weakness of Mer-

Overview

Climate Zones of Mercury

Mercury's climate zones were defined by the trailblazer Sir Basil Throckmorton and have been recognized by scientists everywhere on Earth.

The Hot Side

Area	Temperature (Celsius)	(Fahrenheit)	Size
The Lead Zone	328° to 500°	670° to 900°	900 miles or 1,500 km radius
The Tin Zone	232° to 328°	450° to 670°	600 miles or 1,000 km deep
The Boiling Wasteland	100° to 232°	212° to 450°	600 miles or 1,000 deep
The Forbidding Desert	40° to 100°	100° to 212°	250 miles, or 400 km deep

The Twilight Zone

Area	Temperature (Celsius)	(Fahrenheit)	Size
The Left Bank	10° to 40°	50° to 100°	150 miles, or 240 km wide
The World River	10°	50°	between 0.2 and 1 mile, or 0.4 and 1.5 km wide
The Right Bank	0° to 10°	32° to 50°	150 miles, or 240 km wide

The Dark Side

Area	Temperature (Celsius)	(Fahrenheit)	Size
The Ice Sheath	-74° to 0°	-100° to 32°	400 miles, or 700 km deep
The Dry Ice Zone	-130° to -74°	-200° to -100°	500 miles, or 800 km deep
Kelvin's Land	-185° to -130°	-300° to -200°	1,400 miles, or 2,200 km radius

cury's magnetic field (it is about 100 times weaker than Earth's) and its frequent perturbations induced by solar activity.

The World River

The World River gets its water mainly through rainfall, but it also gets it from the glaciers of the Dark Side. Likewise, water evaporates above the river and moves towards the Ice Sheath, where it precipitates in the form of icy rain or snow. In places, the stream flows close to the Dark Side and undercuts a glacier, causing it to calve icebergs which crash into the waters.

The World River flows in one direction only. The fact that it flows at all is thought to be due to the planet's Coriolis force, i.e. its rotation around its own axis. Whoever stands in the middle of the river and looks downstream has the slowly cooling area, which will finally become the **Ice Sheath**, on his right side, while the primeval forest that further on merges into the **Forbidding Desert** is on his left. For the purposes of navigation, the terms 'downstream', 'upstream', 'coldwards' and 'heatwards' have come into use. Where the World River gets close to the Dark Side, navigating by the stars is also possible.

The nature of the World River varies along its length. At some points, it expands to a width of about a mile, sometimes even forming huge lakes several miles in diameter. In other places, it becomes a torrential stream, cutting through deep canyons and forming waterfalls and cataracts before feeding vast swamps a dozen miles further on. A mathematician on the first German expedition to the planet calculated that the river averages 2.5 knots, needing 133 days for a complete circuit of Mercury—something which would later be confirmed during Throckmorton's second expedition.

The Ever-Lasting Storm

The extreme differences in temperature cause permanent strong wind circulation between the two sides of the planet. Even though the entire planet is plagued by storms at times, outside of the hot side these weather phenomena only rage in the atmosphere's upper layers. It is for that reason that only the most experienced space travelers successfully manage to land on Mercury—yet, once they have entered the atmosphere, they will find that the flight conditions, at least above the Twilight Zone, are similar to those on Earth.

While on the Dark Side air stands almost still at ground level, the Hot Side is ravaged by a perpetual cyclone of titanic dimensions, whose intensity cannot be measured on earthly scales. In addition, dust and ash blown into the atmosphere cause the sky on the Sun-facing side to be of a swirling crimson color.

Special Astronomical Features

Solar Storms

Given Mercury's fixed orientation towards the Sun, the planet does not have any conventional seasons. As its orbit around the Sun is elliptical, though, it is alternately closer to and further away from the Sun. The astronomical term for the point in a planet's orbit where it is furthest away from the Sun is *aphelion*,

while its opposite (the nearest point) is referred to as *perihelion*. Anytime Mercury approaches *perihelion*, the storms of the Sun-facing side sweep over to the habitable Twilight Zone. During that time, sudden and forceful tornadoes ravage the primeval forests along the World River. Some areas of the Twilight Zone are protected against these solar storms by mountain ranges. The British **Princess Christiana Station** (p. 35) was built in such a calm area, only experiencing the solar storms as a gentle breeze.

Another consequence of Mercury's elliptical orbit is that the Sun's march across the Mercurian sky alternately speeds up (as Mercury approaches perihelion) and slows down (as it approaches

Mercury Fever

There is no doubt that—except for Luna—Mercury is arguably the strangest planet humankind has ever set foot on. This is not only down to the planet's peculiar and primitive creatures but also due to the absence of a true day/night cycle. While the impact this phenomenon might have on the human mind was totally underestimated by Victorian space travelers at first, the conglomeration of mental problems it can potentially cause has recently become known as 'Mercury fever'. The first symptom of this illness is sleep deprivation as the perpetual twilight causes many humans to suffer from severe sleep disorders and their usual consequences. Anyone who has not yet grown accustomed to the constant sunlight rapidly starts to get nervous and shows lapses of concentration, while in severe cases even memory gaps and hallucinations have been observed. Some people use pharmaceuticals to cure this problem—the consumption of Laudanum at Princess Christiana Station is alarmingly high. The second consequence resulting from never-ending daylight is the tendency to quickly lose track of time, which might result in disorientation. Therefore, experienced Mercury travelers always carry several watches with them. The third consequence of an extended stay on Mercury is more difficult to define. It can be described as a vague feeling of being a tiny, foreign particle on the planet. The combination of a bizarre primeval world and unearthly, "timeless" lighting conditions is likely to cause a profound feeling of alienation.

As a result of all three factors combined, many humans staying on Mercury for a longer period of time either get nervous ticks and become aggressive or develop a peace of mind that would befit even a Buddhist sloth. It is for this reason that Earthly newspapers occasionally post headlines stating that whoever stays on Mercury too long will inevitably become insane. In truth, things might not be that extreme, but the mental consequences of an extended stay on Mercury continue to be the subject of scientific debate.

aphelion). If Mercury's rotation rate were truly fixed, this variation is solar motion would result in a year-long "day cycle", most pronounced at Mercury's equator. As Mercury would approach perihelion, the equator's trailing side would drift heatwards while its leading side would drift coldwards, the reverse occurring at aphelion. The equatorial parts of the Twilight Zone would thus have a hot season and a cool season, and during the latter, the Sun would actually set and stay below the horizon for a few days before rising again. However, because of tidal effects, such is not the case (see **The Nodding of Mercury** below).

The Nodding of Mercury

Even though it is true that the planet is in an almost rigid orientation relative to the Sun, it is, as mentioned earlier, subject to some minor gyroscopic rotation because the planet is moving particularly fast when near the Sun (at perihelion) and is moving more slowly when far away from it (at aphelion). This alternating gain and loss of rotation over revolution is known to astronomers as *libration*. Mercury's libration should be considerable—about 23° of longitude!—but is in fact nearly negligible. This is thought to be due mostly to the Sun's tidal and magnetic influences, which act to speed up and slow down the planet's rotation to keep it nearly synchronous with its rate of revolution. The details of the rotation change mechanism—or mechanisms—are the subject of intense scientific debate.

Additionally, Mercury is influenced by the orbits of other planets such as Venus, Earth, and Mars, and even by the impact of an occasional asteroid. The resulting swaying or rocking motion of the planet's tilt toward the Sun—scientists refer to this phenomenon as *nutation* or *nodding*—is very hard to calculate. Over time, any person (hypothetically) looking towards Mercury from the Sun would not always see the same mere 50 % of the planet's surface, but a total of 54 % instead.

The swaying motion of Mercury's rotation pole is thus rather negligible and is hardly discerned from the surface. There are exceptions, however: the World River, for instance, which in the absence of a moon (see **The Planet Without a Moon?**) technically does not have any tides, "sloshes" in its bed because of the nutation, its water level sometimes fluctuating greatly as a result. Particularly dramatic effects of this phenomenon can be observed in the *spring tide lowlands* (p. 33). In addition, there are places like *Mount Edison* (p. 53), where the change in insolation affects the sensitive balance between the Dark and Hot Sides and the Twilight Zone, potentially causing sudden ice melting and an unusual incidence of light on the one side and briefly blooming meadows or desiccating desert borderlands on the other. The level of tin and lead lakes on the Hot Side may also be subject to fluctuations.

There are plants that have aligned their life cycle, their blossoming or the release of spores with the planet's nutation. They include the *Mercury Titan Arum* (p. 24), a particularly valuable plant that has not been discovered yet.

The Planet Without a Moon?

Mercury is not orbited by any moon. There are, however, various theses concerning this topic, many of them fiercely debated among scientists. One hypothesis holds that Mercury itself once was a moon orbiting the planet Venus before the Sun pulled it

away from Venus's gravitational field and flung it in its current orbit around the Sun.

In contrast, other scientists assume that the *Moon Mountain* (p. 67), a massive, almost semi-circular mountain structure on the Hot Side, might have been the moon of Mercury before it crashed on the planet.

Traveling to and on Mercury

Both journeys to and on Mercury are always individual endeavors: British supply ships headed to Princess Christiana Station are the only ether flyers traveling to Mercury with some regularity. Other freighters, expedition vessels, or even passenger ships also occasionally land on Mercury but there can be no talk of any regular traffic. Voyages from Earth to Mercury are long and arduous, with travelers having to spend up to nine weeks in zero gravity conditions. It is for this reason that flights are mainly conducted at times when the distance between Earth and Mercury is as short as possible.

Traveling on the planet itself is also rather unorganized: there are neither railway lines nor shipping lanes, neither cabs nor other public means of transport. Princess Christiana Station has some boats, steam launches, and kites but apart from that each traveler depends on himself, his own abilities, and what he brought to the planet.

Arriving on the Planet

"Stop the ether screws and set the Haenlein nozzles to full steam! Our passenger Lord Brickton would like to view the Forbidding Desert from above during our approach. So I need your full concentration now!"

— Captain Jonathan Perk addressing his crew

Approaching the Twilight Zone

Travelers to Mercury usually arrive at the landing site of Princess Christiana Station, the starting point of most British and private expeditions. To this day, arrivals continue to be special events eagerly awaited by the crew of the research station as they bring with them new supplies, information, and newspapers as well as new staff and visitors who promise some relief from the solitary everyday routine in the twilight.

Time and again, ether ships flying under the flag of other nations also approach other locations in the Twilight Zone from where to start their explorations. Since following the course of the World River is simply the safest way to approach Mercury, however, approaches via the Dark or the Hot Side are rather uncommon.

Landing in other Locations

Some specific expeditionary teams might also land in the *Forbidding Desert* or the *Ice Sheath*. Any ether flyer landings in terrain beyond these regions, i.e. closer to the Hot or the Cold Pole need to be well justified, though, as both extreme cold and scorching storms pose serious hazards during such an endeavor, preventing passengers from leaving the ship without any special protection. In case a ship is required to fly a rescue mission, approach a

specific location, or enter the atmosphere as secretly as possible, some experienced ether pilots, however, might indeed be able to perform this audacious maneuver.

Secret Approaches?

Ether flyers entering the atmosphere can only be detected visually or—if they arrive in close vicinity to Princess Christiana Station—by means of different instruments. Even though British soldiers occasionally perform airship patrols, primarily in the Twilight Zone, it is still possible to approach the planet without anyone taking notice. The further a ship is headed towards the Hot or Cold Poles, the lower is the risk of being detected.

Traveling on Land

Moving over land is limited by the hostile climate on the Hot and Dark Sides. Inventors have been testing various methods to overcome this hurdle.

Traveling by foot

On Mercury, traveling by foot is possible both in the Twilight Zone and within those regions of the Dark and Hot Sides which do not pose a threat to human life and limb.

In the Twilight Zone

Foot marches in the Twilight Zone are usually accompanied by boat trips that take travelers near their area of destination. Starting on the shores of the River, any expedition to be undertaken by foot can provide highly different challenges depending on where you are headed.

Heatwards, travelers fight their way through dense jungle or mangroves, making the expedition resemble a hike through the Amazon Delta. The wildlife is dangerous and there are no defined paths unless the way has already been cleared by a previous expedition. Sharp cutting weapons, heat-resistant clothes and an elephant gun should be carried along at all times.

Coldwards journeys resemble trips through Canadian forests or the Russian tundra. Practical, warm clothing is a must.

Travelers **following the World River** will be exposed to fiercer climate changes than anywhere on Earth. Therefore, they should be well prepared for both extremes. The routes defined by the World River include hikes over mountains, through dense underbrush and into muddy swamps. Maps showing the course of the World River—such as those prepared by the von Asseburg expedition—should be used for planning.

Through the Desert of the Hot Side

A desert expedition requires careful preparation. Initially, you might still be able to just go straight ahead (heatwards) but pretty soon it will be vital to know where to find the next oasis. Good maps, previous desert experience, and the ability to estimate the distance to the next mountain in view often mark the difference between life and death. By now, the explorers deployed at Princess Christiana Station have mapped several parts of the **Forbidding Desert** from the air. They have even travelled some regions by foot and defined appropriate caravan routes. However, it is always possible that dunes marked on a map may have shifted or that the geographical conditions have been dramatically changed by sandstorms. Trips within the Forbidding Desert involve considerable physical effort. With some creatures posing a threat to desert travelers, these should never forget that they are not on Earth but on a largely unexplored planet. While in areas short of the **Boiling Wasteland**, an extremely heat-repellent paste like the *silicon sun cream* (p. 114) might offer a certain degree of protection, in the lands beyond, traveling by foot would only be possible in a *thermo suit*. The London-based company *Siebe-Gorman* recently developed a prototype (p. 114) but no one has been crazy enough to test it. Apart from that, travelers should wear the same clothes as in the deserts on Earth—light-colored garments that cover the entire body and provide protection against wind and sand. Furthermore, it is recommended to wear tinted glasses to protect one's eyes against the Sun and to carry along as much water as possible.

There have already been first attempts to employ camels and other **pack animals** suited to life in the desert.

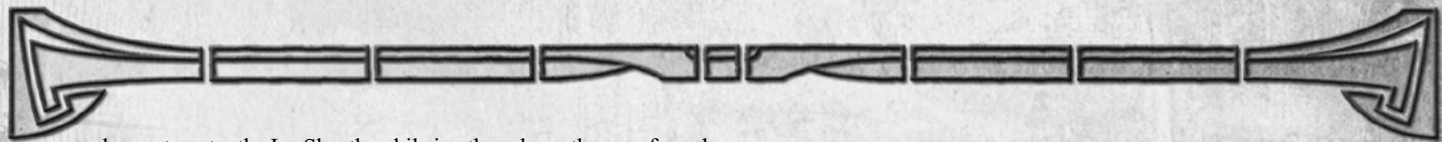
Across the Ice Sheath of the Dark Side

Explorers who know the Arctic will find the conditions prevailing in the Ice Sheath to be similar to those present at the two poles of Earth...in *winter*. Once they have found a walkable path from the right bank of the World River, they may follow its course, either wearing boots, snow shoes, or cross-country skis. In some places, they may use sleighs—either pushed by personnel or drawn by

Travel Time to Mercury

Place of departure	Average distance (million miles (km) / duration in days*)	Longest distance (million miles (km) / duration in days*)	Shortest distance (million miles (km) / duration in days*)	Minimum Price (freighter / double cabin / luxury)	Maximum Price (freighter / double cabin / luxury)
Venus	67 (108) / 27-33	103 (166) / 42-50	31 (50) / 13-15	£10 / 20 / 40	£25 / 50 / 150
Earth	93 (150) / 38-45	129 (208) / 52-63	57 (92) / 23-28	£15 / 25 / 50	£30 / 55 / 160
Mars	141 (227) / 57-69	177 (285) / 71-86	105 (169) / 42-51	£25 / 35 / 70	£75 / 115 / 230

* The distance travelled per day ranges from 2 million miles, or 3.3 million km, (slow freighters) to 2.5 million miles, 4 million km (fast passenger liners). The interplanetary distance to Mercury varies in a predictable cycle (from shortest to longest and back) that lasts 145 days for Venus, 116 days for Earth, and 101 days for Mars.



dogs—to enter the Ice Sheath, while in other places they are forced to apply their climbing skills to scramble up some high-altitude glacier—something which can be deemed a quite risky endeavor.

Once on the Ice Sheath, travelers are particularly hard-pressed by constant darkness and the gradually worsening cold. Supplies are indispensable as edible game species or plants are rare—with dangerous animals like Jotun worms being quite common instead. Under normal conditions, even the most formidable polar explorers traveling on the surface are not likely to get any further than the **Dry Ice Zone**. Any journey beyond that region either requires them to come up with a brilliant invention, make extensive use of Jotun worm fat (p. 115) or hike along subterranean lava channels (see **Through the Ice of the Dark Side**).

Land Vehicles

Despite numerous tests, the one vehicle capable of reaching the Hot or Cold Pole has not been designed yet.

Civilian Vehicles

There are no **coaches** and horses on Mercury but competitive ambition has occasionally prompted *gentleman drivers* to test experimental (predominantly steam-driven) **automobiles** on the planet. In the Twilight Zone, these vehicles could only be used sporadically as the environment soon got too rough in one way or another: morass, underbrush, or even the very World River prevented them from moving further onwards. In the rock and sand deserts of the Hot Side, they have proved slightly more successful, though issues such as sand in the gears or axle fractures have always stopped them prematurely so far. Furthermore, heavy steam-powered cars have found it hard to move forward on gravel and smooth surfaces despite Mercury's lower gravity. On the Dark Side, **steam-powered sleighs** have been the main vehicles employed by now. They have displayed some promising qualities, encouraging designers to further develop them in the future.

Military Vehicles and Tanks

The British military has already tested modified **track vehicles**, which—cooled by dry ice—might be able to make it from the Dark Side to the Boiling Wastelands. Trials have showed a **walking tripod** to overcome almost any terrain, including rock deserts, and even cross the World River where it is 20 feet, or 6 meters deep. Thus far, **land juggernauts** have not been tested, though—especially as transporting them to the planet would be a very difficult project in itself. That said, the *tin juggernaut* (p. 113), planned to be employed as a mining vehicle, has allowed the British to advance into the Tin Zone and exploit its resources. The *steam sled* designed by Sir Charles Plunkett Drax Morton (p. 113) is another unique, enclosed vehicle, which during its first test runs has already reached the Dry Ice Zone.

Subterranean Movement

"Wherever he saw a hole, he always wanted to know the depth of it. To him, this was important."

— Jules Verne, *Journey to the Center of the Earth*

While the Twilight Zone does not feature any subterranean structures, things look entirely different both on the Hot and Dark Sides.

Through the Ice of the Dark Side

The eternal ice of the Dark Side is riddled with tunnels caused by seismic activity and lava flows. Some of them run below the ice for several miles before abruptly ending in front of the finally solidified lava (in only the rarest cases, there is another exit to the surface). With temperatures being higher here than on the ground, at a first glance these passages appear to be walk-in options for expeditions into the ice. Yet, orientation is difficult in the ever-winding tunnels, and many of them are in danger of collapsing. Some significantly smaller tunnels have been burrowed by Jotun ice-worms. In most cases, they are much more narrow (forcing travelers to crawl) and pose an even greater hazard as an ice-worm might still lurk behind a hidden corner.

Through the Tunnels of the Hot Side

On the Hot Side, there are streams that branch from the World River and subsequently flow heatwards in winding turns below the surface. Though they have remained largely unexplored so far, the steam geysers of the Boiling Wasteland are an impressive testimony of how far they can stretch in some places. Unfortunately, they also prove that the temperatures of at least some of these streams rise too high even below the surface, causing water to exit the ground in the form of vapor. Still, explorers set their hopes on even deeper passages that might lead them to the *Tin* or even the *Lead Zone* without exposing them to the murderous heat above.

In places with no natural passages, there have already been plans to develop and use a **mole drill** (see **Core Rules**, p. 235) to quite literally make a breakthrough. A straight passage, running at a sufficiently deep level, would probably allow for the systematic exploitation of tin and lead lakes.

Traveling by Water

"The World River is everything on Mercury. It circles the whole planet. Its breath is tender and warm, yet refreshing and cold. It is a violent force, where a man is never alone, where he can feel, how the life of everyone and everything is quivering in it. The river is merely a container for all these alien and mysterious things which thrive in it; it is not only motion, it is the living snake Ouroboros."

— Jules Verne

Since in the Twilight Zone the planet is circled by the World River, ships and boats are highly suitable means of transportation.





Ships on the World River

It is not possible to transport large **sailing vessels**, let alone **steamships**, to Mercury nor are there any docks or workshops where to build or maintain them. In addition, the course of the World River is so heterogeneous that deep-draft vessels would not be able to actually travel on it. After some miles at best, they would run aground a sand bar, get bogged down in the swamps or would just prove too wide—even with their draft being at least slightly reduced by Mercury's low gravity.

The largest usable type of ship has the size of a **fishing cutter** and should be powered by steam. It should have a good mechanic aboard as repair work has to be done on one's own on Mercury. The climatic conditions such a ship could be exposed to have to be taken into account: coldwards, it might have to forge its way through ice floes near glacier tongues while on the next day it might have to travel through mangroves. A ship perfectly adjusted to the World River—with a small draft but the robust hull of an icebreaker—has still not been conceived yet.

Boats on the World River

Boats of various types are more common than ships. **Skiffs** or small steam-driven **gun boats** are able to pass through most sections of the river, including narrow and shallow areas. In addition, they are quickly built from local wood and do not need any extensive maintenance. Princess Christiana Station has several boats, and almost every private treasure-seeker, prospector, or explorer can at least call a **canoe** his own.

It must not be overlooked, though, that a robust albeit small ship provides much better protection against the creatures of the

World River than a mere boat. Many beasts are powerful enough to capsize a boat, or use their teeth and claws to first destroy the vessel and afterwards tear into its occupants.

Exotic Submersibles and Water Vehicles

There have been attempts to convert islands made of seaweed into boats, to explore the deepest points of the World River in an experimental **submersible**, and to test out **amphibious vehicles**. Likewise, many explorers wonder what would be required for a water vehicle to travel on the ammonia lakes of the Dry Ice Zone.

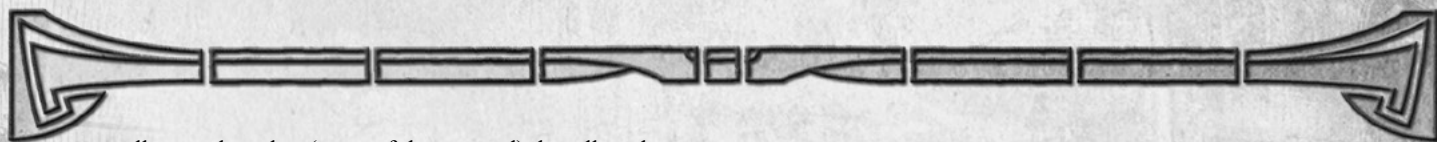
Altogether, many plans have already been drawn up, and the occasional semi-finished prototype is only waiting to be completed. Yet, by now none of these contraptions have been able to travel along the World River for more than a few hundred miles before finally running down somehow.

Traveling by Air

*If someone climbs laboriously
Into the branches of a tree
And thinks himself a bird to be:
Wrong is he.*

— Wilhelm Busch, translated by Dave Fogg

Traveling by air permits both voyages across the Twilight Zone and—to a certain extent—on the Hot and Dark Sides. Though the planet's low gravity facilitates the take-off of many aircraft, flying on Mercury is not without risk. Princess Christiana Station plus a few private individuals operating on the planet are equipped with



small steam launches (some of them armed) that allow them to fly in the planet's atmosphere.

Above the Twilight Zone

Flying in this region constitutes a relatively safe way to travel—but if the airship ascends too high into the atmosphere it may yet sail into a storm and crash. Inexperienced airship captains often underestimate the fierce winds, do not take gravity into account when performing a flight maneuver, or are not prepared for obstacles like mountains or trees much higher than those found on Earth.

Above the Hot Side

As temperature decreases with altitude, airships may advance further heatwards than anyone traveling on the ground—facing both the danger of getting caught by a Mercury storm and of the temperature rising aboard, however. While in the *Forbidding Desert*, airships may approach most locations without facing any major risks, the *Boiling Wastelands* or—even further heatwards—the *Tin Zone* present significantly greater hazards. The outer territories of the *Lead Zone* eventually constitute the final frontier ever reached by an airship inside the planet's atmosphere—a feat that was only achieved by the relevant vehicle traveling at a very high altitude, being specifically protected from the environment, and having special equipment and a very experienced crew on board.

Above the Dark Side

Flying over the planet's cold regions is a no less risky an endeavor. While the icy temperatures at higher altitudes are compensated for by speedier progress, no airship has advanced any further than the Dry Ice Zone yet. Explorers must always bear in mind that the Dark Side's perpetual gloom prevents solar mirrors from working and thus requires alternative propulsion systems to be used.

Another danger is posed by the heat and light generated by all airships for propulsion, crew supply, and orientation. The sensitive balance of ammonia glaciers, which have never been struck by a ray of light before, is disrupted so quickly by the searchlights of a German zeppelin or the steam jet expelled by a British Haenlein nozzle that entire mountain flanks may come crashing down on the airship.

Alternative Aerial Vehicles

At least above the Twilight Zone, it is also possible to use more exotic vehicles such as **balloons** or inventions like **personal conveyors** and **rocketpacks** (both of them described in the **Core Rules**, p. 236). The associated risks match those faced by airships. However, adventurers should absolutely avoid flying with these bizarre contraptions on the Hot or the Dark Side.

Traveling Through the Ether

"Ah, this devil ether on the Hot Pole. Makes my ship behave like the village drunkard in an Irish novel."

— Captain Jonathan Perk

Mercury's Hot and Cold Poles, in particular, can be overflowed almost only by ether flyers—the only vehicles able to travel outside the extremely cold or hot atmosphere. Usually, these vehicles carry telescopes, binoculars, and measuring instruments on board as many flights are conducted to explore the planet or search for its resources. Most of this knowledge of these territories was acquired during these expeditions.

Towards the Hot Pole

Flights over the Hot Pole harbor the risk of exposing the aircraft to the Sun—something which at these latitudes is even quite dangerous in ether space if the vehicle is not sufficiently protected. In addition, ether turbulences are relatively frequent here.

Things only start to get really serious, though, once the explorers or prospectors on board require the airship or zeppelin to descend ever further since their instruments and optical devices do not allow them to make out the desired details on the planet's surface. Descending too far into the atmosphere may cause the ether flyer to be caught in a large heat wave or fire storm. Then, hydrogen explosions or burning liftwood may result in the vehicle descending even further, causing extremely hazardous flying conditions. Therefore, each new expedition intends to better protect its ether flyer from heat and to carry ever more precise instruments aboard to obtain any desired results even when using them from a long distance.

Towards the Cold Pole

Airships flying over the Cold Pole have to cope with the lack of sun light in the planet's shadow. Even though it takes a while for the steam in the ship's boilers to cool down, the ship will finally lose its propulsion. While this issue may be temporarily compensated by using other energy sources, it still places a time limit on each expedition towards the Cold Pole. Any propulsion system failure may cause the vessel to helplessly drift into the ether. And if no help is on the way, the crew will sooner or later freeze to death—even with the ship protected against the cold as best as possible.

Low temperatures pose the second big hazard in this region. Alternative fuels and mechanical systems may freeze and crew members may perish by cold—and there is also the risk of the airship crashing on the ground, inevitably causing the death of everyone on board.



The Exploration of Mercury

"I did not write half of what I saw, for I knew I would not be believed"

— Marco Polo

The exploration of Mercury, the closest planet to the Sun, began only very late. The ancient civilization of Mars and the steaming jungles of Venus looked far more promising to early space travelers. Although the voyage from Earth to Mercury is barely more difficult than to the other planets, its exploration is still in its infancy. Yet, first expeditions have already revealed that Mercury—particularly its rougher, more extreme sides—harbors large amounts of natural resources. Consequently, it is considered kind of an insiders' tip by adventurous trailblazers, who often operate on their own initiative, trying to exploit the riches offered by the planet.

Throckmorton's First Expedition

Initially, the reasons for exploring Mercury were of a more strategic nature, however: in 1876, the British Royal Society decided to support an expedition to the planet that was to be undertaken by the renowned explorer *Sir Basil Throckmorton*. The goal of the team of researchers that set out aboard the ether flyer *HMS Achilles* was to explore Mercury, map it as thoroughly as possible and—above all—seize it in the name of the British crown. After a journey of a few months, Throckmorton's expedition reached the planet, discovering not only the World River but also the Hot and Dark Sides. Still, a lack of suitable equipment forced the exploration to be limited to the World River, with Throckmorton becoming the first human to ever travel on it. Eventually, he raised the Union Jack not far away from the current location of Princess Christiana Station, thus officially claiming the planet on behalf of the British Crown.

Even today, scientists still consider Throckmorton's logbook the ultimate source for exploring the Twilight Zone, despite the fact

that many of the explorer's conclusions and presumed discoveries have proved outdated by now. This does not apply to the items that he brought home to Earth, though, as these exhibits—including taxidermically prepared plants and animals as well as the first two glow crystals to have reached our planet—continue to enjoy great popularity among numerous visitors of the British Museum. Throckmorton also determined that Mercury's flora and fauna resembled life forms that, according to natural history experts, had died out on Earth many aeons ago. Still, even after Throckmorton's expedition, only a handful of scientists evinced some interest in Mercury, with Mars and Venus appearing to hold far greater riches back then.

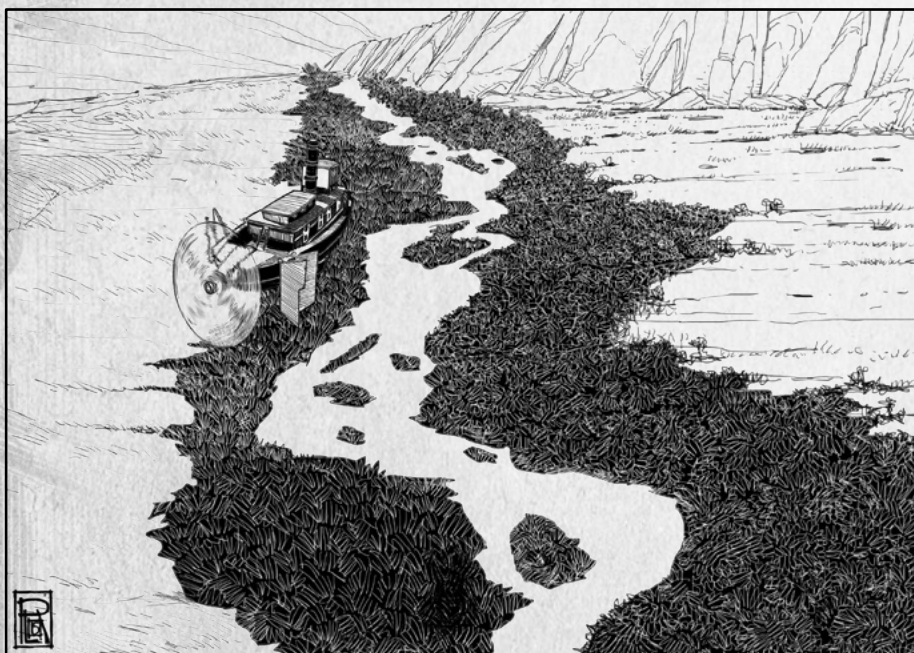
Throckmorton's Second Expedition

Throckmorton, having his heart won over by the primeval nature of Mercury, returned aboard the *HMS Achilles* only one year later—his new expedition additionally funded by private financiers whose interest in the planet's resources, especially those found on the Hot Side, had been piqued by the explorer's first expeditionary report. For that very reason, Throckmorton also brought along a specially insulated airship, which allowed him to undertake the first short flights into the Forbidding Desert. Even today, some parts of the terrain overflowed by the vehicle are still claimed by the British crown—not least because of the area's lakes of liquid metal that Throckmorton described for the first time in history.

The discovery of these lakes caused lively debates among interested parties on Earth, who fiercely discussed how to exploit them. Polish scientist *Dr. Ignatius Wisniewski*, for example, conjectured how metal could be directly extracted from the lakes using large technical machinery. Soon, however, the opinion prevailed that the effort and expense required for this project were too high so that an economic exploitation of Mercury did not seem profitable at first. This view also prompted Throckmorton's financiers to back out and forced him to abandon his plan of starting a new expedition only one year later.

The von Asseburg Expedition

Thus, another explorer entered the stage on Mercury: German airship captain *Kapitänleutnant Friedrich von Asseburg* travelled to Mercury by direct order of his government—Chancellor Bismarck was rumored to suspect that Mercury had been intentionally described as uninviting. So—just to be on the safe side—he apparently wanted to make sure that there were no immense treasures waiting to be unearthed on the planet. For six months, Captain von Asseburg sailed along sections of the World River aboard his zeppelin *SMS Odin*, mapping the stream and its direct surroundings with the typical German efficiency. Even



today, von Asseburg's charts are still considered the best maps of the terrain along the World River.

Eventually though, the explorer and his team also came to the insight that although Mercury had many resources to offer, great financial and technological efforts would be required to exploit them. This verdict was enough for the German government to turn its back on Mercury—for Venus appeared to be much better suited to being colonized and exploited. Fascinated by the World River's flora and fauna, Kapitänleutnant von Asseburg reportedly deplored this decision yet his Prussian sense of duty eventually forced him to accept it.

Throckmorton's Third and Last Expedition

It was not least because of the German expedition that in 1879 Throckmorton once again managed to convince the British government and the British Royal Society to provide him with the means for another mission to Mercury. Once again traveling aboard his tried and trusted HMS *Achilles*, he and his crew became the first explorers to circumnavigate the entire World River—and the first to venture into the eternal gloom of the Dark Side, where they did not only find snowdrifts of frozen ammonia but also discovered

Current Research Interests

Yet, of what use is reveling in history to the explorers of today—no matter whether they are enthusiastic amateurs or experienced prospectors? Today, anyone about to venture on an expedition has to know what things there are left to discover on Mercury—and who might be ready to pay for them.

- In contrast to the World River, the Hot and Dark Sides—especially those areas where simple protective clothes are no longer sufficient—have hardly been explored at all. Consequently, inventors are constantly required to design new equipment that will help explorers defy the adverse weather conditions and gain new insights into the Hot and Dark Sides alike.

Potential Areas of Research

- It is true that the World River—particularly the territory around Princess Christiana Station—has already been mapped quite extensively. On the other side of the planet, though, there are regions that humans have only seen from the air by now. The first person to map this part of the planet with the same level of accuracy as displayed by von Asseburg might not only gain eternal fame—but also make a profit selling the charts to prospectors and companies interested in the planet's resources.
- Naturally, many 'players' from Earth are particularly attracted by the planet's raw materials. Consequently, they are always on the lookout for adventurers who are then hired to search for new deposits—or even tasked with finding entirely unknown resources. Often, their missions also see them attempt to extract new materials from plant or animal matter or to examine the matter's suitability for further processing.
- From an anthropological point of view, it makes sense to take a closer look at the Ice Dwellers living on the Dark Side (p. 48), for these animals appear to be the only intelligent life forms on the planet. In addition to the adverse weather conditions, developing some kind of communication seems to be the main problem here—a problem that will certainly require a sustained effort of several weeks or even months to be solved.
- Historians are primarily interested in the (supposed) remains of structures built by the Phaetonians or other peoples, and are eager to compare them to any cultural legacies found on the other planets. Mount Edison (p. 53) and the mysterious Needles (p. 32) are the most prominent examples in this context.

Financiers

- The colonial powers show little interest in Mercury as they have their hands full exploiting Mars and Venus (not to mention Earth). Thus, governments are rather uncommon sponsors of expeditions to the planet. One exception might be those countries that believe to have fallen behind in the great race for colonies—and that might want to lay the foundation for their own empire on Mercury.
- Maintaining Princess Christiana Station, the British Royal Society is a more typical financier of Mercury expeditions. Most missions undertaken on behalf of the BRS are of a scientific nature and primarily conducted for the noble motive of gaining knowledge for the sake of knowledge. In particular, the BRS is constantly looking out for brave adventurers willing to travel to the planet's south as this region is usually hard to reach for the station's permanent staff.
- Private financiers from Earth are likewise exhibiting an increasing interest in Mercury. Large chemical companies are mainly interested in the Dark Side and the ammonia resources and other chemicals to be found there. This group of concerns includes Bayer, BASF and AGFA from Germany, Nobel Enterprises from Sweden and the British company Brunner Mond. In contrast, steel producers cast greedy glances towards the lakes of molten metal on the Hot Side. They include the newly founded Illinois Steel Company from the US, the German Krupp, and the Japanese enterprise Mitsubishi, which has only recently become involved in mining.

a mysterious mountain covered by a thick crust of ice that was believed to have artificial structures on top of it. Even today, Throckmorton continues to be mesmerized by this peak that became known by the name of *Mount Edison* (p. 53).

During the expedition, Throckmorton also made many observations of the planet's plant and animal life and, among other things, established the boundaries of the Hot and Dark Sides that are still internationally recognized today. Moreover, it is thanks to this third expedition—or more precisely thanks to what Throckmorton found out about the edibility of Mercury's plants and animals—that present explorers are no longer forced to take all of their provisions with them.

Princess Christiana Station

With Throckmorton's third journey, though, the era of the great Mercury expeditions came to an end after just a few years. Unlike the discoveries made on Mars and Venus, the appeal of Mercury abated quickly, with hardly a sponsor willing to fund expensive expeditions any longer. Only the British Royal Society—also thanks to Throckmorton's continuous efforts—maintained some interest in Mercury. In 1880, it established Princess Christiana Station in a particularly quiet region of the World River. The intention was—without the costs required for permanent expeditions—not only to explore the planet itself but also observe the Sun nearby. Occasionally, small exploratory trips were undertaken on the World River and both sides of the planet, but a distance of 930 miles, or 1,500 km, from the safe base was rarely exceeded. Still, the station has been and continues to be important in that it proves that human life is possible on Mercury—and, of course, by acting as the starting point for adventurers and explorers from all over the world.

The Late 1880s

After Princess Christiana Station had been established, life on Mercury remained relatively quiet for a while—though at least adventurers now had a base from which to start their explorations. Things only changed in the late 1880s when an increasing number of reports about the planet's resources—as well as the absence of any worldly masters—started to spread on Earth. And indeed, with colonial powers still largely absent from Mercury, the planet has become an ever more popular alternative among freedom-desiring and independence-loving explorers, prospectors, and good-for-nothings in the past two to three years.

Thus, a few secret and less secret bases have been established in the recent past. Still, most hard-boiled men and women keep using Princess Christiana Station as their base camp from where they repeatedly set out into the wilderness of the World River to search for glow crystals or extract other resources available on the planet. With the total number of humans living on Mercury being quite small, there can be no talk of a real boom. Yet, the times when humans were a species rarely encountered in the wilderness around the World River are over by now. The presence of adventurers, of course, also allows for ever more information about the planet to be obtained and ever more natural wonders to be discovered. However, a vast amount of that knowledge remains a secret kept by the explorers, for, despite the station staff's ef-

forts, facts are only rarely collected in a central knowledge base or made known to the general public.

The Briton *Sir Charles Plunkett Drax Morton*, who tests his self-built sleighs on the Dark Side of Mercury, is one example of a free-lance explorer. It was around the year 1889 that on one of his journeys, originally undertaken to rescue the crashed ether flyer *HMS Hermes*, he and his team discovered the *Ice Dwellers* (p. 48)—a highly interesting find that is still largely unknown to most humans on Earth, though.

Powers and Interests on Mercury

Colonial Powers

The British Empire

The British are drawn to far-away Mercury for prestige alone—by establishing *Princess Christiana Station* they have made sure that the Sun will never set over the Empire. Thus, Great Britain is the only nation to have a permanent colony on *all* planets ever reached by humankind. From the station, the British analyze the properties of the Sun, study the planet's plant and animal life, and search for means that will give them access to Mercury's vast wealth of resources.

Yet, the soldiers deployed on the planet also secure their country's political hegemony, making it unmistakably clear that the Empire claims the planet as its own. With critics pointing out that the actual research work conducted is not very fruitful and that the station is a mere excuse for military presence, the Empire stresses that research is in fact given top priority and that, after a few years only, its presence on the planet cannot yet be expected to pay off either in scientific nor in economic terms. Internally, though, the Prime Minister has already demanded 'somewhat more sensational results' from the team of the research station—something that puts their leaders under a lot of pressure. Moreover, the tin crisis (p. 120), triggered by constructor *Dr. Ignatius Wisniewski*, is also likely to further increase the British government's impatience as it allows an individual person to mine tin on Mercury as he or she pleases and then sell it at a huge profit—totally bypassing the British in the process.

The German Empire

Officially, Emperor Wilhelm II does not lay any claim to territories on Mercury. The planet—rich in resources but not yielding much profit by now—would only be another prestigious yet financially burdening colony. Multiple expeditions aboard continuously upgraded German zeppelins have resulted in both the hitherto best maps of Mercury and the discovery of many new locations on the planet. In addition to being a costly endeavor, however, a permanent research post would also provoke the British—something the Empire cannot afford at the moment. This is why, after

a brief half-hearted attempt (p. 33), Mercury has not been the target of any German settlement plans thus far.

Still, the German Emperor is bothered by the thought that the British Empire might soon take possession of the planet's treasures without facing any genuine competition—and with Germany merely adopting a bystander role. Therefore, he secretly supports various projects that might see him gain a foothold on Mercury:

The Mercury projects of the *Siemens Corporation* (see **The Electric Triumvirate**, p. 16) are supported by providing Siemens with low-interest loans and tax incentives. Some of the mercenaries employed by the company are agents of the Empire. Moreover, individual German spies are operating on Mercury to sabotage the British and obtain important information.

A splinter group that had not been authorized by the Emperor recently made an overconfident and unsuccessful attempt to establish a permanent station on Mercury and see the British confronted with a *fait accompli*. A diplomatic crisis was barely averted as it was not possible to prove that the crew members—all of whom died when their ether zeppelin crashed on the Dark Side—had been on an officially sanctioned mission.

The Russian Empire

Arguably, a miniaturized version of the 'Great Game' between the world powers of Russia and Great Britain would also take place on Mercury had Russia not simply missed joining it.

It was only in 1889 that the scientist and critic of the Russian bureaucracy *Dimitri Mendeleev* was sent on a punitive expedition to Mercury. In addition to researching glow crystals in the Twilight Zone, he was also active on the Hot Side, where he installed a variation of his *etherometer*—an instrument with which he wanted to prove the existence of *Coronium*, a material he had been searching for. In a letter sent by the Russian government, though, he was eventually ordered to pave the way for establishing a permanent Russian presence on Mercury—whereupon he disappeared into the Boiling Wastelands, leaving behind a written statement with the word '*Nyet!*' below it. The note fell into the hands of the British, who assumed that he had refused the order because the Russians intended to establish a presence on the Dark Side—while Mendeleev's scientific ambitions, the search for *Coronium*, drew him towards the Sun-facing side instead.

Even though its means may be limited, the Russian Empire has several irons in the fire, however. Instead of military power, they are now counting on the deployment of a small number of elite soldiers and Okhrana agents trained in Siberia, who are delivered supplies in secret and at irregular intervals. They represent a vanguard that, even without Mendeleev's aid, is intended to establish a base on Mercury's Dark Side—somewhere the arm of the British military does not reach. To that end, they are building subterranean camps and tunnels, mapping the area and trying to find food sources—all of this with the goal of setting up a bridgehead for any future endeavors. As the note left behind by Mendeleev is the only evidence of these activities, the British consider it highly unlikely that a permanent Russian presence will be established on Mercury within the next few years.

Other Powers

The U.S. operates only indirectly on the planet (through *Edison Electric*, see **The Electric Triumvirate** on p. 16). That said, after

the gold rushes in Colorado and the Black Hills of the Dakota in the 1870s, many American prospectors are now seeking their fortunes on Mercury, with glow crystals and other treasures beckoning them. At irregular intervals, *Holland America Line* organizes ether flyer voyages that take these adventurers to the planet.

The **Japanese** are represented by some noblemen following *Dr. Takeru Kakuta* (see **The Cosmosophers** below). Most of them have religious motivations for staying on the planet.

Though King Leopold II of **Belgium** is fascinated by Mercury and smells good business on the planet, his plans of founding a colony are still in their infancy—and unrealistic to boot. He intends to transport large numbers of slaves from his Congo colony to Mercury to subsequently have them build a new colony for Belgian settlers there. He has already set his eyes on a region where the Twilight Zone gives way to the Hot Side and which 'is confusingly similar to the landscape found in Congo'.

While **Austria-Hungary** supports the German plans in general, it is particularly interested in *Coronium* (p. 115).

The Cosmosophers (p. 115)

Mixing science and esoteric humbug may occasionally yield strange results. For a few months now, one of these results can be found 19 miles, or 30 kilometers, away from Princess Christiana Station, in the borderlands between the Twilight Zone and the desert. It is here that the obscure sect called the 'Cosmosophers', a group of 25 vegan naturists, has established a permanent camp, working towards their great goal with ant-like industry.

Piece by piece, they have been building a peculiar structure on a scorching plain of gravel. The British soldiers visiting the community every few weeks to deliver supplies have not yet agreed upon whether the construct should be christened 'the tin primrose' or 'the salad bowl'—the Cosmosophers themselves call it the 'Sun Eye'. The object is a bowl, 33 ft., or 10 m, in diameter, made from a space ship boiler's solar collector, which is mounted on a rack composed of steel girders and precisely directed towards the Sun. Thick cables connect the construction with electrical appliances in the sectarians' cave. The Cosmosophers under their founder and seeress *Ra-Agathe* (born *Agathe Heringskötter* in the Northern German town of Büsum) believe stars to be physical manifestations of intangible cosmic intelligences. They want to use the structure to contact the "Stellar Intelligence Amon-Sol"—our Sun. From their point of view, any previous sun cults were the product of visions sent out by these intelligences. Initially, the Cosmosophers had formed part of *Madame Helena Blavatsky's* Theosophical Society. In 1885, issues concerning the theosophical notion of race led to a rift between Blavatsky and Heringskötter, causing the Cosmosophers to break away from the organization. Since then, they have been following a path vastly different from that of the Theosophical Society. Drumming up support for her bizarre doctrine, within three years the charismatic Heringskötter managed to collect vast sums of money to eventually take on her great Mercury project in 1888.

In contrast to similar occult groups, the Cosmosophers are highly technophile—instead of the usual incantations and séances, they rely on state-of-the-art technology. Thus, it is no surprise that the brilliant but utterly bankrupt physicist *Dr. Takeru Kakuta* has been permitted to test his ideas about a receiver of electromagnetic waves (*Hertz waves*) on Mercury using the Cosmosophers' Sun Eye.

The 'Electric Triumvirate' - Edison Electric, Westinghouse Electric Corporation, and Siemens

When the peculiar properties of the Mercurian energy crystals were discovered in 1885, many electric companies abruptly displayed an increased interest in the planet. Yet, only the three companies *Edison Electric*, *Westinghouse* and *Siemens* have been able to afford a handful of Mercury expeditions by now. Whereas Edison and Siemens each have given specific prospectors a permanent contract, Westinghouse currently prefers several months of extensive exploration instead. It is safe to assume that sooner or later all of the three corporations will establish their own bases on Mercury. Newspapers have already come to call the three companies the 'Electric Triumvirate' when referring

to their activities on Mercury. The economic exploitation of the planet appears to be extremely ill-fated, however. Frequent acts of sabotage and experts being lured away by the competition have prompted the companies to hire well-armed 'security personnel'. It was in the late fall of 1888 that personnel of Edison and Westinghouse happened to meet each other in the region known as 'Crystal Creek'. The exact circumstances surrounding the encounter are not known to the public—what is known, however, is that it quickly turned into a fierce gunfight that left as many as 19 people dead. The ongoing trials are complicated by the issue that the battle is difficult to reconstruct as the statements of the parties involved are highly contradictory. Following the shoot-out, both companies were quick to express their regret and sack some of their staff while internally deciding to get even more and better weapons for their employees—the latter leaking thanks to the investigatory work of a reporter from the New York *Herald*. It is to be feared that the future will bring violence and bloodshed to hitherto quiet Mercury.



The Twilight Zone

The World River

"The shimmering girdle of the World River is the first thing that strikes a traveler's attention while still in the ether. Equal to a precious circlet, the star visibly presents its jewelry. On the one side, the fire of the Sun, burning the land. On the other side, night, bluish, black, and cold. In-between them, glittering waves. A small strip of life between two hellish worlds."

— Contribution for the 'Tombola of Jolly Amateur Poetry' on an ether flyer to Mercury

*"A river, flowing in circles.
That makes absolutely no sense."*

— Marginal note in a textbook on astronomy,
written by a student

Mercury is traversed by the World River, which encompasses the planet completely. Its course is more or less congruent with the boundary between the Dark Side and the Hot Side, although the river does not run straightforwardly under any circumstances, but sprouts out here and there, or meanders in branches, joining again later on. In addition to these meanders, there are an incredible number of other distinctive segments of the river course. The River has no significant tributaries: any water flowing perpendicularly to its course can only do so over a short distance, bringing melt water from the Dark Side's glaciers, for instance. For those who are used to terrestrial conditions, it is quite common to have trouble realizing that the river has no beginning and no end. Neither does its origin lie with a single, definable source, nor does it run into any sea. Due to its salinity, the river's water is predominantly undrinkable; however, there are areas, like lakes and branches, which do carry sweet water.

The river is fed by different kinds of inflows. The natural limit of the carried water is caused by constant evaporation. The World River plays a major role in the planet's water cycle: Found at the changing point of the temperatures, it forms a natural border, limiting the expansion of the ice from the Dark Side, which, in the end, flows into the river in the form of meltwater rivulets, seldom forming larger inflows. At its entry point, the cold water sinks to the bottom of the river and interacts with warmer masses of water, thus causing the World River's underground currents, which can be extremely powerful, depending on the expanse of water and the type of inflow. The closer the course of the river gets to the Hot Side, the stronger the evaporation gets; as a consequence, the more saline the surface layers become. Due to the differences in temperature, the air currents on Mercury are subject to cycles, too, since the evaporated water rises up at first, cools down on the Dark Side, falls down to the ground again in the form of snow, and eventually starts the journey anew. Rainfall over the river area is not uncommon. It is responsible for occasionally moistening the Hot Side near the river with water, so it can grow some unique vegetation.

Traveling on the World River

Basically, the World River can be traversed by ships or boats. The current velocity may be subject to strong fluctuations.

Departure and Heatwards - The Geography of the World River

Looking in the direction of the flow, beyond the bank to the right stretches the Dark Side of the planet, whereas beyond the bank to the left lies the Hot Side. The terms 'downstream', 'upstream', 'heatwards', and 'coldwards' have been established for orientation. However, to clearly define the location on the river a traveler currently finds himself in is much harder to do. The intuitive attempt is to use Princess Christiana Station as a fixed point of reference, thus measuring the growing distance from the station or, after having circumnavigated half of the planet, the increasing proximity to it as a means of orientation. This is why the four quarters of the river are commonly called 'Departure', 'Afar', 'Turn', and 'Return', naturally referring to the route of a single traveler and his distance to the planet's main settlement while circumnavigating the planet. More scientific approaches take various paths. One promising idea divides the World River into twelve sections, so the position can be determined more accurately by information similar to time designation. Underneath the impressive night sky of Mercury, it is not uncommon to navigate by the constellations which stand out even more against the sky of the Dark Side growing darker in the distance.

Distances on the World River

From the ether, the circumference of Mercury can easily be determined, but it is quite risky to deduce from it the length of the river and the duration of a journey on it. Any travelers on the river risk underestimating the number of the meanders and the distance to be traveled. A journey on the World River means considerable stress for ships and crews, because the different sections of the World River are very different in character from each other. Even the quality of the water is subject to fluctuations. In some places, muddy river areas, in which the currents frequently stir up the sand of the river floor, make the water murky and unfit for consumption. Furthermore, extensive algae fields, shallow banks, or strong currents repeatedly put a crew's seamanship and a ship's engine power to the test. Loading wood for fueling the steam boilers is not always a given, especially in the Turn area where there are barren runs with lengths of up to several hundred miles.

Icebergs and Geysers

Although the water temperatures are subject to minor fluctuations over long distances, there are exceptions to this rule. A long section of the river in the *Departure* quarter, traversing the edge of the Dark Side for the most part, is quite notorious. Periodically, icebergs calve there and idly float down the World River. A lone iceberg can be recognized and outmaneuvered easily. However, there are treacherous sections of the river which are shallow enough to have a massive chunk of ice run aground. Although its peak melts above the water level, the rest of its sharp edges can still lurk right under the surface for a while. The river's strong undercurrents continuously cause strong movements of the water surface, which can push an iceberg in a totally unexpected direction. Smaller slabs and chunks of ice are less threatening due to their weight, but because they are easily seized by the currents they can reach considerable speed.

Underground magma flows are the reason for the existence of river sections in which geysers spit hot steam into the air. Usually, a careful captain might be able to circumvent these fountains keeping some required distance, but it is always possible for a gust of wind to cut the hot clouds and spread boiling splashes over the whole deck and the crew. Around these active areas, prospectors assume that there is a high chance of detecting precious metals on the river floor, which have been pushed up by the forces of the deep. Still, there is no safe method of salvaging yet, although there are plans to experiment with super-heavy diving suits which are supposed to shield the diver from the heat.

Great Lakes

In some places, the World River broadens into some kind of lakescape. The largest of these formations is named the **Moltke Lake District** and consists of numerous great lakes lying so close together that they can hardly be delineated from each other. At their broadest points, both banks of the lakescape lie several miles away from each other. These lakes are a playground for highly diverse creatures making full use of the given space and fighting for feeding grounds. By now, Princess Christiana Station has received reports about sightings of underwater creatures in the area of the great lakes, which have remained unconfirmed so far. It is highly probable that a report about a boat-like, sealed diving device, which supposedly traverses the lakes from an undersea base, is nothing else than mere speculation. Only very rarely an accessible island can be found in one of the lakes. These places make for particularly good way stations or supply bases, which is why the remains of other travelers can be found here too.

Waterfalls

It may seem improbable due to the closed-loop nature of the river, but there is a number of waterfalls on Mercury. Since the World River does not have its source in any mountain, such natural phenomena can only occur in places where bodies of water are dammed up. This is especially the case at the outlets of the lakes where the masses of water at last overcome a natural obstacle after a sufficient period of time and discharge into the depth. Those waterfalls present a massive obstacle for seafaring, since it is particularly inconvenient to circumvent them. Other places

in which one of the rare waterfalls can be found are those where the river passes into narrow ravines, of which there are many along the World River.

Ravines

"And there we were, floating along, only walls of rock above the dark waters, casting a veil of oppressive silence over the ship. The Sun no longer above us. But to the left and to the right, on both sides, there were hollow passageways, caves, caverns, sunken chambers, underground coves, and fathomless halls, whose contours the light of our lamps could only touch slightly. Thus, we floated on the river and moved through a world devoid of humanity, through a silent labyrinth, through a dark Venice."

— From the travel book of Girolamo Benedetti

Particularly in some sections of *Return*, the World River flows through areas in which very hard stone defies the massive bodies of water. As a result, the river has to make its way through tight spaces, creating shady ravines whose steep walls shoot up to the sky and occasionally merge again above one's head. Travelers tell of an enchanting twilight world in which dim-glowing, multi-colored moss, which has spread in every corner of the wet rock walls, serves as a breeding ground for a bizarre microcosm of small animals and insects. A thorough analysis is yet to be done, since the rocky cliffs are naturally very hard to examine. Elsewhere, the River irresistibly washed away fine debris and sand from rock debris lying athwart its path, and now foams across a gauntlet of boulders. In yet other places, the River sinks underground through multiple openings to split into uncountable underground meanders, resurfacing considerable distances farther along its eternal path.

The Depths

Seen from the ether, the World River looks like a placid waterway which, in essence, makes its way around the planet in a straight line. The river, however, holds secrets that can neither be seen from orbit nor from the railings of a river boat. One of those secrets is that in some places during the course of decades and centuries, the combination of currents and undercurrents has caused substantial erosion of the river bed. Depending on the prevalent ground texture, the erosion might be severe enough to create considerable depth beneath the surface. Even experienced travelers on the World River are constantly surprised to find areas in an otherwise unremarkable part of the river where its depth is nearly impossible to fathom. One can only speculate what could be found at the bottom of such places. It is especially dangerous when the strong currents, combined with the massive bodies of water with which the deep cavities are filled, form perilous maelstroms. A captain who has no knowledge whatsoever about the depth under the keel will be even more surprised to suddenly find his ship going in circles and starting to sink.

Swamps

Along the edge of the Dark Side, icebergs and ice sheets threaten ships on the World River, but there are also dangers along the Hot Side. Usually, the river carries enough cold water so that normal

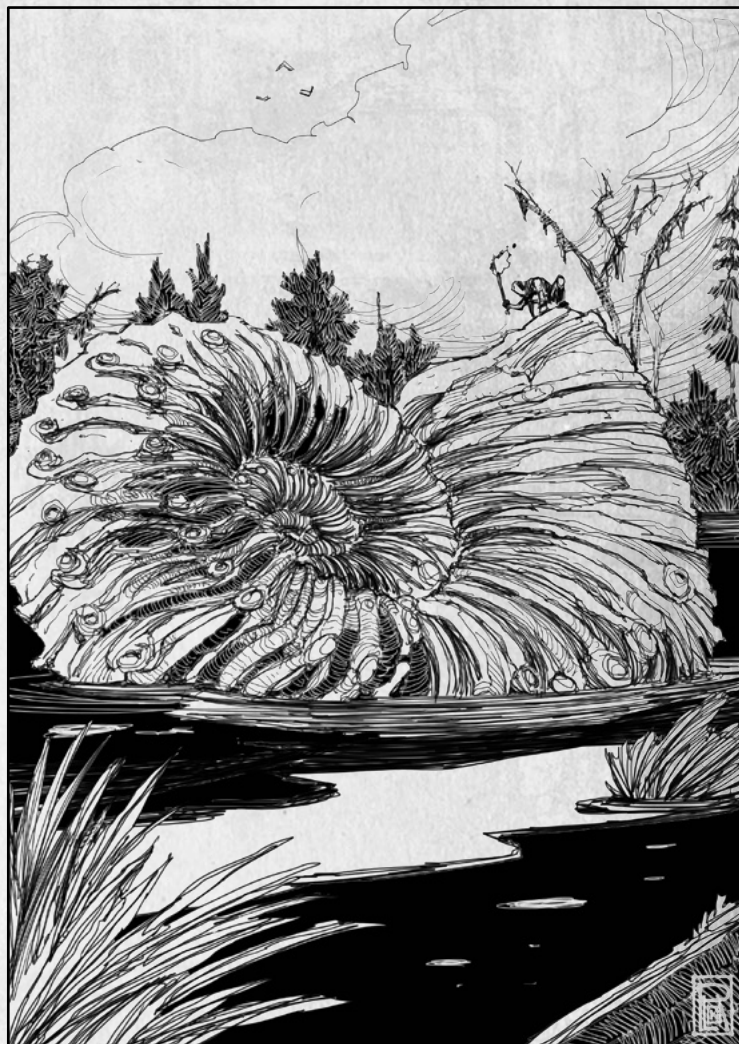
vegetation can grow on its banks. The exceptions are shallow and wide river sections in which the water flows so slowly that hardly any current is visible. Here, the heat from the Sun burns mercilessly and turns the river flow into a doughy bog in which algae thrive, disseminating excessively and spreading a nasty stench while they rot. River boats driven by paddlewheels better stop their engines to avoid being seriously damaged by creeping plants. In some places, it suffices to trust the currents to continue slowly but surely, in spite of the inconvenient growths. Elsewhere it might be necessary to rely on other power sources. In the worst case, the crew cannot help but painstakingly cut down the algae in front of the prow to have the ship move forward inch by inch. Especially difficult in these areas is movement against the current, since it is virtually impossible to go against the resistance without the power of turbines or paddlewheels. British engineers have already developed plans to equip ships going upriver with metal blades in order to cut a swath. Less refined and distinctly more delicate improvisations based on the same principle are already common with all river boats facing the aforementioned risks of the *Turn* quarter.

Shallow Banks and Reefs

"You could get used to being far away from home; but no, you're even far away from your whole damn home planet. And even in the place where you are, you're also a thousand miles away from the next human settlement. In short, you're far away from everything. It's impossible to be further away, doesn't matter from where. And even if nobody wants to say it aloud, everybody knows—when the bloody tub runs aground, you're screwed."

— Chat between engine drivers,
Princess Christiana Station

Even without the inconvenient plant growth, the shallow patches of the river present a serious problem. This is mainly because the World River is traversed very irregularly and has hardly been accessed in full. Only in the surroundings of Princess Christiana Station, the sandbanks and shallows are more or less known. As a ship's captain, the more you travel onward, the more you have to rely on your sight, constantly observing the currents and the whirls, and, last but not least, trusting your experience and intuition. When a dull impact and a horrible crunch announce that the ship has run aground, there is usually very little time during which you can try and avoid the worst by skillfully counter-steering. If this does not work, or if the sandbank is formed unfavorably, you have to live with the consequences. And these are quite often bitter: Without the help of a towboat, engine power, or without the skillful use of levers and rollers, you are forced to give up the ship. Far away from Princess Christiana Station, you are subject to an unknown fate whether or not you make the hard choice of leaving the ship. If you do, you have to take on a journey into the unknown, leading through possibly rough terrain along the river bank for a long time. If you don't, you push your luck and wait for the arrival of another ship with a hopefully favorable crew, while at the same time you risk dying miserably on a stranded vessel.



Many shallows change their shape or their position through the influence of the currents and even after a short time cannot be found again in the expected place. Reefs made of rocks are more durable, yet even more dangerous, since it is not uncommon that their toughness enables them to utilize a debouching ship's speed to cut open its hull at length. To save space, hardly any river boat carries the tools and building materials necessary to make the complex repairs.

Inland Deltas

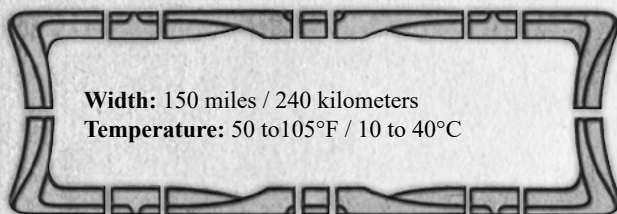
It is rare that a large inland delta is formed. In these deltas, the river branches out into several streams, running parallel to or crossing each other. Although this principle is the same in all instances, they do differ vastly from each other. The settlers call one of these deltas the **Mercury Marshes**, which, coming from Princess Christiana Station, lies 1,500 miles, or 2,500 kilometers, downriver. The river branches in this area traverse a vast grassy landscape covered in variations of tall ferns, their leaves blocking the view and making orientation difficult. The Marshes form a far-reaching wetland. Specific routes promising safe passage are commonly known. There is, however, a far more dangerous delta that reaches quite far into the Hot Side of the planet and does not have a name. The river branches there are sandy and shallow and flow again and again into shallow lakes without any

outflow, evaporating in place. A third known delta can be found in the *Return* quarter and sets itself distinctly apart from the other two. Here, the waters of the World River have cut through hard, grayish-black slabs of stone. The result is a vast field of narrow, but very deep river branches, whose sharp-edged banks can easily damage a ship's hull. Traveling the Mercury Marshes bears the risk of getting lost, and while one has to be prepared to run aground in the second delta, in the third delta it might happen that a ship simply gets wedged in one of the narrow river branches. This can turn into a deadly trap since it is very hard to free a ship by pushing against the current.

Former River Courses

Seen from an adequate distance, the World River follows an imagined line until it forms a ring around the planet. Yet, even the course of the water changed by erosion through the eons. What is left are the remains of the former river courses. On the Hot Side, they are filled with sand over time; on the Dark Side, the masses of ice keep slowly sliding forward and either flow into the river courses or fill them with debris they push ahead. Again and again, however, there are areas in which the old river beds are shielded by nearby mountain ranges or a strange natural occurrence one way or another, so their ultimate fate is prolonged for a very long time. In this case, the old river courses present excellent means of travel, unless they are completely overgrown. In addition, vast amounts of fossils can be found on their beds. More profane treasures, like gold nuggets, can be collected there as well, provided they can be discovered.

The Heatwards River Bank



Width: 150 miles / 240 kilometers

Temperature: 50 to 105°F / 10 to 40°C

The Heatwards Sections

"You do not wish to swim in the swamp. Come now, come, and let us bathe in the open sea!"

— Friedrich Hölderlin

Although the banks of the World River often present easy occasions for landing boats and, over a gentle slope, transit from the waters into meadows full of ferns or into forests, there are numerous parts offering less ideal conditions.

Mangrove Swamps

Parts of the heatwards area of the World River are overgrown by dense mangrove forests. The local river banks are expansive, and the water is usually brackish, muddy, and swampy, but in rare cases it is unnaturally clear thanks to the metabolism of

certain mangroves, so any astounded boatman may behold a fantastic-looking landscape of delicate roots on the river bed. Between the islands grown with mangrove-like trees, full-fledged labyrinths are formed by the branches of the World River. The roots which protrude from the ground are oftentimes tall and vaulted, so that bizarre archways and small tunnels lie beneath them. Most of the time, the dense tree crowns block off the already weak gloaming, causing a mysterious atmosphere of perpetual twilight. This ambience is intensified by the dugout canoes and rudder boats, fireplaces and gear left behind by prospectors and researchers in the thick root system, and by the suspicious bubbling of the Mercurian water creatures. There, land and water animals often encounter each other, hunting and fishing, eating or getting eaten.

Meadows and Lake Shores

In some places, the World River is as wide as a lake. The water level along the sections of the river banks is often shallow and, over several square miles, presents vegetation characterized by reeds. This does not make it necessarily easy for boats to navigate, since in some parts the water level is too shallow or the growth is too dense to travel on, whereby the horsetails block all sight. In other places, vast meadows are formed and are quickly flooded, depending on the weather. For lack of seasons, the rainfalls causing this can hardly be foreseen, only the nutation of the planet remains an influential factor—if one hard to predict. The amphibious predators of the Twilight Zone lurk particularly often among the reeds of the wet meadows.

The Jungles of Mercury

"Now this is the Law of the Jungle—as old and as true as the sky; And the Wolf that shall keep it may prosper, but the Wolf that shall break it must die."

— Rudyard Kipling, 'The Second Jungle Book'

The flora of the heatwards primeval forests of Mercury bears similarities to those on Earth during the Carboniferous age. A traveler must cut his way through ferns spreading fan-shaped before him in the undergrowth. Colorful mosses grow on rocks and tree trunks, and horsetails and fungi sprout nearly everywhere. Due to the low gravity, Mercurian plants often grow much taller than similar species on Earth. Between head-high fungi, stalks reaching for the sky, slim and high poplars, sigillaria trees and a 13 feet, or 4 meter, high thicket of ferns, travelers in this place might feel as if they were shrunk and would explore a land created for lifeforms three times the size of a human being. Due to the lack of seasons, most plants are evergreens, but on the whole they seem to be more 'unfinished' and less developed in contrast to similar plants on Earth.

The fauna also resembles the Carboniferous with its numerous amphibians and primeval water creatures. It seems that the lifeforms have only recently left the water and thereby adapted themselves to their surroundings in some quite bizarre ways: trilobite-like myriapods, large insects, land-crawling crustaceans, cephalopods finding their way along the banks of the World River with their tentacles and antennae, or less developed flying creatures which evolved to glide using their former webbings. Many species seem to be in some kind of 'experimental stage' of evolution; some appear to be fully developed, others are bizarre and their chances

of survival are not very promising in the long run. You can find more information on individual creatures on page 25.

Similar to Earth, the Mercurian rain forests' ecological strata are characteristic and even more distinct:

The Low Layers of the Jungle

The *soil layer* of the Mercurian jungle is composed of root systems and a cover of humus. The roots are extended flatly into the soil rather than deeply, since the gravity and the stable climate make an entrenchment of the trees unnecessary. Accordingly, the large roots present both obstacles and cover for travelers.

The *herb layer* consists of mosses, ferns, and stalks, and even two layers with only a few meters between them can vary greatly from each other. Due to the never-changing position of the Sun, the lack of daily or even seasonal courses, and the perpetual twilight, there are some spots located in permanent and passable light where ferns sprout. Still, spots in which the little twilight is further limited by the shadows of wide and high trees or hills occur more often. Because of this, the sparse ground plants have adapted to a minimum of light.

The low gravity has allowed for a further survival strategy during the floral evolution: In the *shrub layer*, reaching up to 33 feet, or 10 meters, (instead of 16 feet, or 5 meters, like on Earth), giant ferns, tall horsetails, gigantic bromeliads, and young trees are growing. They reach out of the surrounding shadows and into the light, oftentimes twisting and turning around stems or forming bizarre shapes which would be utterly impossible under Earth's gravity.

The High Layers of the Jungle

The shrub layer passes into the *low tree layer* which only trees and very few stalks can actually reach. Likewise, climbing plants from the higher jungle layers reach down into this layer. 14-year-old *Edgar Rice Burroughs* has recently discovered this combination of strong lianas and low gravity. The son of American manufacturer *George Tyler Burroughs*, who was on a business trip to Mercury in order to examine the use of different resources, had fun brachiating from one liana to the next. Unfortunately, Edgar broke his leg in doing so, and, arousing his father's wrath, he is to be sent to a strict military academy after his return to Earth. Until then he stayed in the infirmary of Princess Christiana Station and wrote page after page of notes for stories—obviously the jungle and the opportunities presented by the low gravity had inspired him to become an author.

The *canopy layer* is about 160 to 330 feet, or 80 to 100 meters, high, double the height of similar layers on Earth. Up here, a dense, evergreen leaf canopy can be found, presenting nearly ideal conditions for growth.

Lastly, individual 'giant trees' (*holdovers*) can reach immense heights. Some definitely grow higher than modern multi-story buildings, reaching up to more than 320 feet, or 100 meters. With the help of models, scientists even calculated that Mercury could harbor trees growing up to 820 feet, or 250 meters. No such giants have been documented so far.

Dry Forests and Savannas

The deep-set areas off the World River with little rainfall often harbor expansive *dry forests* which have less dense vegetation

than the jungles. The nearer the Hot Side, the more the jungles slowly but surely change into dry forests. Water-storing cacti (*succulents*), acacia-like trees, and numerous thorny plants characterize these areas. The trees' roots extend quite deeply into the ground.

Vast areas of the heatwards side of the Twilight Zone do not exhibit any more tree growth and stretch out as warm *savannas* with hills and mountain ranges. Such savannas lying at the borderline of the Hot Side often pass into the *Savannas of Eternal Dawn* or into the *Fog Deserts*, while the dry forests often merge with the *Mercury Thornwoods* (see p. 55).

The Cloud Forests of the High Plateau

On rises of several hundred miles, the Mercurian jungle, depending on the micro-climate, passes partially into a dense cloud forest. The local flora and fauna is very lush and appears primeval, especially on these heights on the side facing the World River. The environment is considerably colder and the undergrowth is thicker and less accessible. In addition, the forests stand in a dense mist created by the condensation of the World River's water. It is usually so thick that it creates an eerie atmosphere—visibility can be limited to only a few feet and any sounds made become muffled, while the cries of the primeval Mercurian wildlife sometimes break the silence with horrible fierceness.

Mercurian Endemites

Most travelers avoid the cloud forests not only because of the eerie atmosphere, but also because nobody really knows what species of undiscovered and possibly dangerous animals inhabit them. Back on Earth it is well known that mountainous cloud forests form a habitat for many plant and animal species which live exclusively in these places—so-called *endemites*. On Mercury, with its oftentimes diverse micro-climates, the formation of endemites is even more distinctive. One may encounter subspecies of known animals in the mountain forests, or new kinds which have evolved independently from all other species on the planet. Some prospectors hunting for "the big score" dare to enter the misty forests in the hope of finding a probably delicious (and precious) tea or coffee plant, a tree bark or a curative fungus to be used in medicine, or an animal with a nacreous shell or precious secretions, or that can be brought back to Earth as a profitable attraction. In the flora and fauna of Mercury, virtually any thinkable and unthinkable ecological niche has its place, and travelers might encounter some plants or animals with the most exceptional features, living only in a small, local population.

The Coldwards River Banks

Width: 150 miles / 240 kilometers
Temperatures: 30° to 50°F / 0 to 10°C

The Coldwards Side of the River Banks

"Oh, 'tis eerie o'er the moor to fare,
Whene'er it's billowing with haze,
With phantom mists prancing here and there,
And bines all through the bushes graze."

— Annette von Droste-Hülshoff, 'The Lad on the Moor'

The coldwards river banks, too, have sections which can easily be used as landings for boats—stony beaches and meadows directly adjacent to the river offer virtually ideal conditions. In many places, however, landing is made far more difficult.

Moors, Fen and Alluvial Forests

Vast sections of the coldwards river banks consist of so-called *fen forests*, permanently wet, partially flooded or swampy woodlands. The soil there is peaty and hard to traverse on foot.

Some *alluvial forests* are virtually always knee-deep and deeper under water, so that the dry river banks can only be reached by traversing through the trees in dugout canoes.

Here and there, vast moors are formed which can be full of hazards. In addition to the animals of the Twilight Zone lurking there, wanderers are always at risk of bogging down.

Glacier Tongues

Especially in places where the World River meanders coldwards, it is fed by inflows from glaciers protruding from the Dark Side into the Twilight Zone. It is, without question, a regal sight to watch the ice of the Dark Side transforming into water. In many places, such inflows and their parts of the river banks even allow easy access to the Dark Side, but first and foremost they present dangers: While the weight of the freezing rainfall pushes the glaciers deeper into the Twilight Zone, it is inevitable that the glaciers' outer tongues melt due to the higher temperatures there. Not only is the crystal clear water freezing cold, but again and again huge boulders and walls of ice get loose by the melting and fall crashing into the water. Boats in the vicinity of a glacier can be hit by them, but even at some distance, they can fall victim to unpredictable flood waves. In some branches of the World River there have been sightings of waves which were dozens of meters high, caused by the breaking of the glacier ice walls releasing an onrush of water.

Cold Forests

"Forests are the greatest ornaments of any land."

— Gottlob König

The Mercurian Taiga

The area going coldwards consists initially of broadleaf forests which change into *mixed woodlands* and into *conifer forests* shortly afterwards. This *taiga* is dominated by evergreen conifers which grow especially tall and slim on Mercury. The undergrowth is dense, the permafrost soil full of twigs and berry hedges. The forest floor and treetops are often covered by a layer of snow.

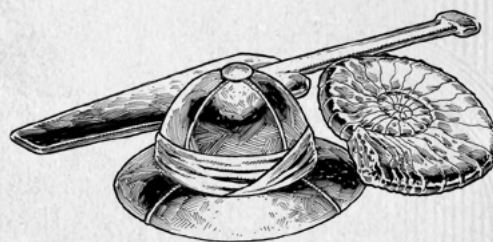
Further coldwards, the forest becomes more open. Here, travelers can perceive the gargantuan glacier walls of the Dark Side of Mercury between the trees. Finally, the trees fade out completely and change into the tundra-like area of the *Heath Fringe* (see page 39).

In the coldwards Twilight Zone, the fauna is less distinct than on the heatwards side, since the living conditions are harder. Still, these areas are inhabited by some unusual animal species like the Mercurian velvet worm and the grass crab (see pages 25 and 26).

Mountains of Twilight

The coldwards part of the Twilight Zone is characterized by numerous mountain ranges, most of which reach the magnitude and heights of European mountain ranges, some even close to the Alps. The mountains on Mercury bear some distinctive features: The sides facing the Dark Side naturally lie deeper in the Sun's shadow and thus in colder reaches. Avalanches and blizzards, bone-chilling cold, and the danger of freezing to death are ever-present threats. Even experienced alpinists have trouble climbing up some of the slopes. Most of these mountains feature an incessant downslope wind (katabatic wind) accompanied by snowfall, fed by the warm, moist air rising from the heatwards side (anabatic wind). As a katabatic wind reaches the bottom of a mountain, it can warm up considerably, converting the energy of its fall into warmth. This can scour an area at the foot of the mountain clear of ice and snow, and could even maintain an odd oasis of life.

The sides facing the Hot Side, on the other hand, are exposed to the Sun and thus, despite their height, are oftentimes warmer than the lower regions. They feature quite a dense growth of mixed woodland. The appearance of *endemites* (see page 21) is also true for this area. It is exhilarating and astounding for mountaineers painstakingly working their way up the bitter-cold mountain side and rising above the peaks in the end where, on the heatwards side, they are greeted by an eternal sunrise and a pleasant heat. The stream of adventurers seeking this experience has increased since a report about it was published in the *London Times*.



Treasures of the Twilight Zone

"For the richest forest's good the people load themselves with wood."

— Proverb

"First, people write thick volumes about the risks of political economics, about limited resources, and scarce living space—and then they just colonize other planets."

— Carl Menger, "New Principles of Economics (Using the Example of Mercury)", Vienna, 1889

The planet Mercury contains copious resources and various other riches worth mining. Its planetary features, however, cause enormous discrepancies from the Terrestrial ways of discovering and exploiting these resources. The Twilight Zone is a very diverse area in this regard, and sports rich vegetation. Therefore, its riches do not consist in huge amounts of industrially usable resources, but rather in gems and mysterious flora and fauna.

Glow Crystals

In the vast swamps of the Twilight Zone, precious stones of over 8 lbs., or 4 kilograms, can be found which have been christened 'glow crystals' by those who discovered them. They can fetch prices between £500 and £3,000. These strange objects allow light to be transformed into electricity. Their name stems from the fact that they can store a certain amount of solar energy, depending on their dimensions and texture. If the limit is exceeded, they emit the excess amount of energy in the form of light. With relatively little technical effort, it is possible to utilize the electricity of the stones by discharging them.

Up to now, only a handful of large findings have been made on Mercury; smaller pieces, though, are in demand especially for their luminosity, and are sold as trinkets. Given the necessary size, glow crystals can be utilized as autonomous energy sources for numerous applications, including fuel for miscellaneous small machines. Geologists assume that there are huge deposits in the swamp areas of the planet, which would make a rich man of whoever discovers them. At the moment, no means of finding the precious stones directly has been found. The objects found in the swamps have without exception been accidental discoveries. Similarly to the gold rush in California forty years ago, most people searching for glow crystals put their faith in their own intuition, in more or less questionable rituals, and love to maintain a mysterious silence about the specifics of their approach.

Plants

Sigillaria Cones

One can pick up from the moss at the foot of the trees of the Cathedral Groves (see page 31) one foot, or 30 centimeters, long cones which not only exhale a narcotic smell of resin, but can

additionally be used for the production of liquors and antiseptics. After a period of four Earth months, the sigillaria lose these cones. One should be quick to collect them, since the delicious-smelling cones attract all kinds of animals.

Mercurian Truffles and Other Edible Mushrooms

A series of very delicious mushrooms can be found on both sides of the World River. However, up to now they have appeared only on the menus of prospectors and researchers; exporting the mushrooms through the Solar System to Earth would be cumbersome and expensive. One exception to this rule is the so-called *Mercurian truffle*, which does not have much in common with the Terrestrial truffle other than a similar taste. Because of this, some specimens of this mushroom have been transported to Earth as delicacies. Since it is a parasite and grows extensively on tree bark—while Terrestrial truffles only occur in small amounts and are hard to find—the food production company *Nestlé* is planning a commercial cultivation on Earth and has already and secretly planted the mushroom in a forest in Switzerland. It is uncertain how the numerous critics who warn against a mass infection of Terrestrial trees would react to such controversial information.

Other Mushrooms of Value

- The value of mushrooms for medicinal use has barely been researched and is the field of expertise of only a few scientists advocating theories far off the accepted scientific consensus. According to some representatives of their guild, supposedly a universal remedy against all maladies is hidden within the mushroom cultures of Mercury. Orthodox medical practitioners dismiss this theory as ridiculous and argue that fungi rather cause illnesses than heal them.

- One accidental finding traces back to a mushroom, although the discoverers have not realized it yet: During the return flight of a German ether flyer from Mercury to Earth, the captain had opened a bottle of quite undrinkable and sour Rhine wine, leaving it in the open due to its lack of quality. After passing Venus, however, the wine had developed an excellent noble rot, making it a delicious dessert wine. The reason for this was in fact a parasitic yeast fungus that has spread unnoticed through the ship's liftwood. To this day, only the transport on this special ship has shown any real success. The overjoyed captain, who makes good money with the wine, has not realized yet that the fungus is attacking the liftwood of the ship as well, which sooner or later may cause leakage.

- It is worth mentioning that some prospectors are smuggling so-called 'Magic Mercury Mushrooms', since they had little success with the honest search for resources. All kinds of Mercurian mushrooms cause hallucinations and states of intoxication which have proved popular in the opium dens of the Empire. Depending on the species, they are said to cause dream images, allow 'mental etheric voyages', or lower the frame of mind and the desires of civilized Britons for a time to the level of ages gone by—a quite tempting idea for well-behaved, but far too constrained citizens. There was at least one case of attempted murder by a hitherto respectable citizen that can be traced back to the consumption of Mercurian mushrooms.

Fruits

Mainly the heatwards part of the Twilight Zone produces a number of quite delicious fruits, including the Mercurian pineapple, reddish banana-like forbs and all kinds of citrus fruits. The coldwards side, on the other hand, produces different kinds of berries.

Although they are on the menus of both Princess Christiana Station and most expeditions, the fruits are not very widespread outside of Mercury since they spoil easily. Only a few Terrestrial importers cool them with ice and fly them in from the Dark Side as delicacies. Because of this, however, the prices are so exorbitantly high that the fruits are ostentatiously presented and enjoyed only during formal dinners of the high society. For his 50th anniversary on November 9th, 1891, the 'eternal heir apparent' to Queen Victoria, Edward, is planning an exquisite fruit buffet for dessert, consisting of the fruits of all planets as well as of sorbets made from Mercurian ice and citrus fruits.

Noble Wood

While many trees on Mercury are the source of more or less cheap, poplar-like wood, the excellent properties of the *twilight rosewood* have been recently discovered. The trees mainly grow in the central area of the Twilight Zone. Their wood is hard, very resilient against vermin, and musical instruments made of the wood have remarkable tonal qualities. It lends a spherical, even 'ethereal' sound to the instruments. Its grain is astounding as well, forming wavy patterns instead of the annual rings found on Earth, a result of the planet's nutation and the gentle climate changes connected to it. In addition to making instruments from it, twilight rosewood is used as an accessory during séances, also with reference to the wood's 'ethereal sound'.

Another precious material is a dark fine wood similar to teak, which grows in the heatwards areas. For its use in making heavy furniture in Colonial style, *Mercurian teak* is in great demand with decadent buyers.

Some speculators hope that, among the extremely high-growing and not yet fully researched trees of Mercury, there might be an alternative to the Martian liftwood. Up to now, this is only wishful thinking.

Mercurian Titan Arum

Some Mercurian plants have adapted their life cycle to the delicate obliquity fluctuations of Mercury (see page 7), with the result that their emission of spores and color changes depend on it. Since it is very difficult to predict those cycles—whose length can be measured in years—it is not known which plants react to the planet's different tilt angle in relation to the Sun. A recently discovered example, though, is the Mercurian titan arum.

Its Terrestrial equivalent, *Amorphophallus titanum*, 'the tallest flower on Earth' with a height of 10 feet, or 3 meters, was discovered in 1878 by the Florentine botanist Odoardo Beccari on Sumatra and has recently come to blossom for the first time in the civilized world in the *Royal Botanic Gardens* in London in 1889. The Mercurian titan arum, by comparison, reaches for the skies of Mercury at a proud height of up to 25 feet, or 8 meters. However, the corm only sprouts during certain periods of nutation. The carrion odor then released to attract pollinating beetles is so intense that, at that time, numerous larger predators feel attracted and lurk in the vicinity of the plant. In contrast to its

Terrestrial counterpart, the flower blooms in fantastic and bright colors, and for some the view alone is compensation enough. By harvesting and pressing the flowers, precious colorants can be extracted, which, depending on the hue, circulate under names like *Mercurian indigo* or *solar purple*.

Animal Products

The fauna of the Twilight Zone gives a profit-oriented prospector numerous reasons to hunt the local wildlife. As such, the mollusk-like shells of many large crustaceans are a source of nacre and, in some cases, even big pearls. Some animals, as for example the *crystal lizard* (see page 27) and the *coronet lizard* (see page 25), sport crystal structures on their bodies which pique the interests of scientists and goldsmiths.

Shell Gland

This substance, falsely called 'amber' after the precious ambergris of whalers, is actually the gland of the Mercurian giant crab hidden under its back shell. The organ, about the size of a walnut, exhales a unique strong odor reminiscent of musk, and the perfumers back on Earth use them to make several very popular perfumes. The shell gland was originally a waste product, since these primeval creatures were mostly hunted for food or scientific purposes. By now, the promise of high profits causes adventurers to deliberately hunt for the sought-after substance. Depending on its size, a single gland can fetch prices between £10 and £60 when sold.

Immediately after the removal of the shell gland from the crab's body, it must be cooled with ice, or it loses its odor. Since it is quite difficult to acquire the substance and it is relatively unknown, there are various counterfeits and imitations in circulation, for example certain adenoidal secretions from the Terrestrial muskrat or an extract from the North-American monkey flower.

Deep-Bottom Feeder

Deep-bottom feeders are bony and repulsively ugly crustaceans. Protected by their high-vaulting shells, these creatures of about the size of a calf stolidly claw their way through the bottom of the World River. From the mud, they filter the fine metal dust which is blown there by the desert wind from the Hot Side of the planet, strengthening their natural armor. Their waste is a high-quality fertilizer which constitutes a major part of the livelihood for several river plants. The animals are also able to quickly turn barren rivers and lakes on Earth into fertile areas which, in turn, can be used for fishing, for instance. These hideous animals qualify as a 'resource' insofar that their natural life cycle is disturbed by the changes between day and night on Earth, making them lose their ability to breed. Because of this, they frequently have to be imported anew from Mercury.

The deep-bottom feeder's shell is a strange material, combining metallic and biological properties in an unusual way. High toughness goes hand in hand with outstanding plasticity and flexibility. Unfortunately, the animals' armor is subject to natural, if very slow, decay.

The creatures do not pose a real threat to any hunters; their weight, though, is a problem and so is the fact that they suffocate at once in fresh air. So they must be painstakingly lured into water

tanks and removed with them. The development of methods for processing and shipping a huge amount of the animals is still pending.

Mercury Nacre

The *Hollington centipede*, a centipede living in treetops, provides a kind of nacre when its silvery chitin gown shell is ground up. The substance can be further processed at will, providing the basis for dyes and lacquers. The centipede's prehensile claws serve as exotic jewelry when complete.

Luminescent Jellyfish

The Mercurian settlers and adventurers have come to favor a jellyfish which starts to glow when put in saltwater. Since this light is quite dusky by nature, it is questionable whether it might prevail as a cheap substitute for other sources of light. However, it could be of interest in places where open fire must be avoided or oxygen needs to be rationed, for instance below ground or during ether space flight.

Flora and Fauna of the Twilight Zone

Land Dwellers

Coronet Lizard (Mercurian Dimetrodon)

The discovery of the Mercurian dimetrodon, also called the 'coronet lizard', triggered another lively discussion since the animal bears a strong resemblance to the Venusian sailback and to the fossil of a Dimetrodon discovered on Earth in 1878. It seems as if a very similar lifeform had evolved on three different planets at different times. More evidence for convergent evolution, or another sign from God? There are numerous differences between the coronet lizard and the sailback, of course. The coronet lizard does not inhabit swamps, but rather the dry zone between the Twilight Zone and the desert. An untiring cursorial hunter of 10 feet, or 3 meters, length, the animal stalks its prey for miles. The name 'coronet lizard' stems from the fact that the back sail of the creature is covered in tiny, brilliant crystals—obviously silicon-based lifeforms which have entered a similar symbiosis with the coronet lizard as they did with the eryops living on the warm banks of the World River (see page 28).

Coronet Lizard

Animal Companion 2

Archetype: Dinosaur Health: 9

Primary Attributes

Body: 5 Charisma: 0
Dexterity: 5 Intelligence: 0
Strength: 5 Willpower: 3

Secondary Attributes

Size: 1 Initiative: 5
Move: 10 (5)* Defense: 11**
Perception: 3 Stun: 5

Skills	Base	Levels	Rating	(Average)
Brawl	5	3	8	(4)
Stealth	5	2	6***	(3)
Survival	0	4	6	(3)

Talents

Skill Aptitude (+2 Survival Rating)

Weapons	Rating	Size	Attack	(Average)
Claw	3 L	-1	10 L	(5) L
Bite	4 L	-1	11 L	(5+) L

* Coronet Lizards use their full Move rating for swimming, and half their Move rating when on land

** Coronet Lizards have a thick hide that provides a +2 bonus to their Passive Defense

*** Coronet Lizards suffer a -1 Size penalty on Stealth rolls

Grass Crab

If your lower extremities are suddenly amputated during a stroll over the grassland on the cold side of the River bank, you have most certainly encountered one of the infamous grass crabs. Although this alien land crab, whose exterior is similar to an edible crab, is a herbivore, it is still considered one of the most dangerous and thus most hated creatures along the World River. As its name implies, the grass crab mainly lives in vast meadows. Its greenish shell is covered by all kinds of mosses and grasses. For this reason, the animal is very hard to detect despite the fact that it grows up to the size of sea turtles. If one is not careful when nearing a crab, the animal attacks with a quick and sudden movement and causes its victim grievous injuries with its powerful pincers. Thick boots only help against small grass crabs. The grass crabs do not stop growing during their entire lifetime, so there are specimens big and strong enough to cut a man's leg right off. During walks through Mercurian grassland, it has proved prudent to test the way ahead with long poles.

Grass Crab

Animal Companion 1

Archetype: Animal Health: 7

Primary Attributes

Body: 5 Charisma: 0
Dexterity: 2 Intelligence: 0
Strength: 5 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 2
Move: 7 Defense: 9*
Perception: 2 Stun: 5

Skills	Base	Levels	Rating	(Average)
Brawl	5	2	7	(3+)
Stealth	2	5	9	(4+)
Survival	0	4	4	(2)

Talents

Skill Aptitude (+2 Stealth rating)

Assassin (When unnoticed, it can make a Surprise Attack using its Stealth rating instead of its Brawl rating against the Passive Defense of its victim)

Weapons	Rating	Size	Attack	(Average)
Claws	3 L	0	10 L	(5) L

* Grass Crabs have a thick hide that provides a +2 Bonus to their Passive Defense

Mercurian Velvet Worm

The famous Mercurian velvet worm appears to be the most intelligent lifeform of the World River. This clever predator, looking like a beagle-sized chubby version of the Terrestrial velvet worm, is as intelligent as a dog. Mercurian velvet worms live in packs of up to ten animals and are characterized by a complex social behavior. Like velvet worms on Earth, they can spray cobweb-like capture threads to immobilize their prey. The velvet worms' hunting strategy is that some of the creatures scare up their prey which in turn are 'taken under fire' by the other, hidden members of the pack. This way the Mercurian velvet worm can kill prey that is several times bigger than itself. It is fascinating that the animal can be domesticated and obviously easily befriends humans. There is even a small pack of pet velvet worms at Princess Christiana Station, replacing some of the dead guard dogs. In theory, these sympathetic creatures might be dangerous to humans since packs of them hunt animals bigger than men—but there has never been a report about any attacks on humans. British scientists have classified the Mercurian velvet worm as a full-fledged working animal in each and every case.

Mercurian Velvet Worm

Animal Companion 0

Archetype: Animal **Health:** 3

Primary Attributes

Body: 2 **Charisma:** 1

Dexterity: 5 **Intelligence:** 1

Strength: 2 **Willpower:** 3

Secondary Attributes

Size: -2 **Initiative:** 6

Move: 7 **Defense:** 9

Perception: 4 (8) **Stun:** 2

Skills	Base	Levels	Rating	(Average)
Archery	5	3	8	(4)
Brawl	2	2	4	(2)
Empathy	1	1	2	(1)
Stealth	5	3	10*	(5)
Survival	1	5	8	(4)

Talents

Skill Aptitude (+2 Survival rating)

Keen Senses (+4 Perception rating on tactile senses)

Weapons	Rating	Size	Attack	(Average)
Bite	1 L	+2	7 L	(3+) L
Capture Thread (Ranged)	2 N	+2	12 N	(6) N

* Mercurian Velvet Worms receive a +2 Size bonus to Stealth rolls



Sapo

One animal is of special interest to the scientists of Princess Christiana Station: With the sapo (from 'salamander' and 'pony') it is possible to study the evolutionary transition from reptile to mammal, which on Mercury seems to take a similar course as on Earth. Some biologists have theorized that these animals are related to the coronet lizards which, over a period of millions of years, migrated into the stretches of woodland of the Twilight Zone and became herbivores. In addition, the sapo has been successfully domesticated—as a substitution for milk cows. After all, a gourmet has to put something into his tea, even if it is just a yellow, sweet-tasting fluid. Adult specimens reach a body length of up to one and a half meters, a third of which is taken up by their wide, spear-like tail. The head is elongated with a round mouth and tiny erect ears. Four splayed-out legs end in clawed paws. The body is covered with short bristles. The bellies of females are covered by a thick hair coat, through which they secrete the milky fluid, moistening the laid eggs and—according to one hypothesis—enriching them with nutrients (the small, spotted eggs are an acquired taste, though). As long as their young are not threatened, the sapos are harmless, indifferent even. They are useless as guard animals.

Sapo

Animal Companion 1

Archetype: Animal Health: 4

Primary Attributes

Body: 3 Charisma: 0
Dexterity: 3 Intelligence: 0
Strength: 2 Willpower: 2

Secondary Attributes

Size: -1 Initiative: 3
Move: 5 (10)* Defense: 7
Perception: 4 Stun: 3

Skills

	Base	Levels	Rating	(Average)
Brawl	2	2	4	(2)
Stealth	3	3	7*	(3+)
Survival	0	4	6	(3)

Talents

Alertness (+2 Perception rating)

Skill Aptitude (+2 Survival rating)

Weapons

	Rating	Size	Attack	(Average)
Bite	1 L	+1	6 L	(3) L
Claws	1 L	+1	6 L	(3) L

*Animals with four or more legs double their Move rating when running

** Sapos receive a +1 Size bonus to Stealth rolls

Swamp Lurker

Although the swamp lurker resembles an insect on the outside, it does, in fact, live like an amphibian. It lurks on the banks of the World River or in the morass between the towering trees. By doing this, it is hard to discover since it digs itself in and only its tiny telescopic eyes goggle through the mud.

Adult swamp lurkers reach a body size of three feet, or one meter, and they hunt alone, while their young stalk in hordes of up to a dozen animals. They pounce on potential prey and attack them with their pincers and a kind of sharp beak they push out of their mouths.

Swamp Lurker

Animal Companion 1

Archetype: Animal Health: 5

Primary Attributes

Body: 3 Charisma: 0
Dexterity: 3 Intelligence: 0
Strength: 4 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 3
Move: 7 (4)* Defense: 6
Perception: 2 Stun: 3

Skills

	Base	Levels	Rating	(Average)
Brawl	4	3	7	(3+)
Stealth	3	4	7	(3+)
Survival	0	3	3	(1+)

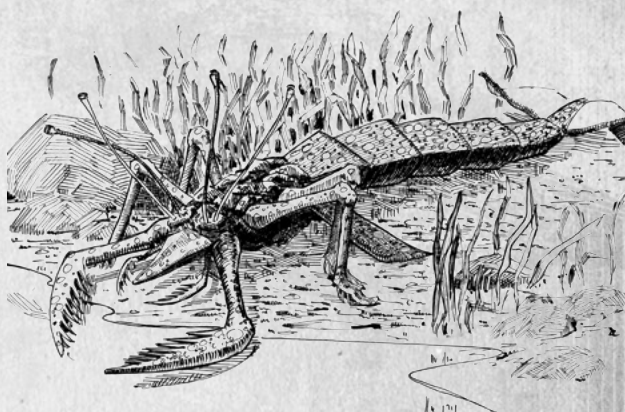
Talents

Assassin (When unnoticed, it can make a Surprise Attack using its Stealth rating instead of its Brawl rating against the Passive Defense of its victim)

Weapons

	Rating	Size	Attack	(Average)
Bite	2 L	0	9 L	(4+) L

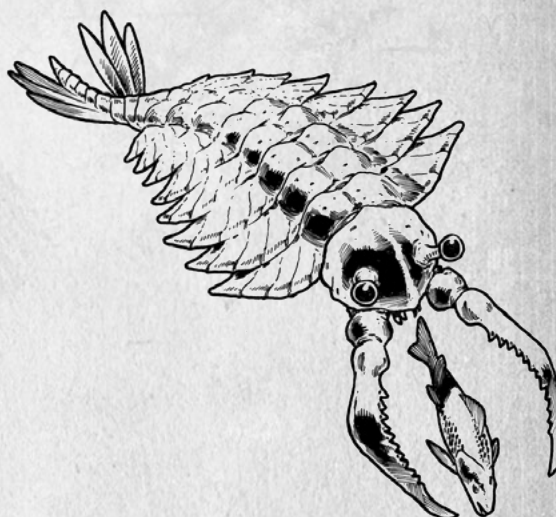
* Swamp Lurkers use their full Move rating for swimming, and half their Move rating when on land



Aquatic Animals

Anomalocaris

What the great white shark is to the Caribbean, the bizarre anomalocaris (plural anomalocarides) is to the World River—a fast, bloodthirsty predator of surprising deadliness. The anomalocaris is no fish, however, but a crustacean. The predator can grow to a size of 8 feet, or 2.5 meters, and also poses a severe threat to humans. Usually it feeds on smaller animals, but at times it does go for some bigger prey. Similarly to a Terrestrial shark, the scent of blood can put it into a murderous frenzy. Humans are especially in danger when they bathe open wounds in the river, or when there is a large amount of blood near them in the water. Anomalocarides prefer attacking from an ambush, trying to clutch their prey with both of their grapplers. They are very hard to get off once they have bitten into something. It is assumed that the predator does not rip off small body parts after attacking crustaceans, but rather sucks the smooth flesh right out of the shell. It has occurred that anomalocarides have attacked boats from below and overturned them. In this case the passengers luckily have some time left to prepare themselves for another attack of the predator, since the animal has bitten on to the wood and must first break away from it.



Anomalocaris

Animal Companion 2

Archetype: Animal **Health: 12**

Primary Attributes

Body: 7 **Charisma: 0**
Dexterity: 3 **Intelligence: 0**
Strength: 6 **Willpower: 4**

Secondary Attributes

Size: 1 **Initiative: 3**
Move: 18 (0)* **Defense: 11***
Perception: 4 **Stun: 7**

Skills

	Base	Levels	Rating	(Average)
Athletics	6	2	8	(4)
Brawl	6	4	12	(6)
Stealth	3	3	5**	(2+)
Survival	0	4	6	(3)

Talents

Skill Aptitude (+2 Survival rating)

Skill Aptitude (+2 Brawl rating)

Weapons

	Rating	Size	Attack	(Average)
Bite	2 L	-1	13 L	(6+) L
Ram Attack	5 N	-1	16 N	(8) N

* **Anomalocarides double their Move rating when swimming, but cannot move outside of the water**

** **Anomalocarides have a thick hide that provides a +2 Bonus to their Passive Defense**

*** **Anomalocarides suffer a -1 Size penalty on Stealth rolls**

Eryops

With its corpulent body and its large mouth, the eryops appears like voraciousness incarnate. On Mercury, the eryopoi fill a niche that is roughly similar to the one occupied by crocodiles and alligators on Earth. Some soldiers who are stationed at Princess Christiana Station, however, are of the opinion that the Terrestrial crocodile is far more preferable to the eryops (which is sometimes called 'froggygator'). At least a crocodile would make for a good purse and would have the decency to cry for its victims—the eryops does not. In fact, the fat, greasy amphibious skin is hardly suitable for producing leather. Some eryopoi are excellent sources for exotic crystals, though. Similar to hedgehogs, the eryopoi of the warm side carry an armor of spikes on their backs—a silicon-based parasite. 'Crystal lizards', meaning armored eryopoi, can only be found on the sun-facing banks of the World River. It seems that the animals living there would not cross the river even by chance. Crystal-armored eryopoi have never been observed on the 'cold' banks nor on any of the River's islands.

Eryops

Animal Companion 2

Archetype: Animal **Health: 12**

Primary Attributes

Body: 6 **Charisma: 0**
Dexterity: 2 **Intelligence: 0**
Strength: 4 **Willpower: 4**

Secondary Attributes

Size: 2 **Initiative: 4**
Move: 6 (3)* **Defense: 6 (8)****
Perception: 6 **Stun: 6**

Skills

	Base	Levels	Rating	(Average)
Brawl	4	3	9	(4+)

Stealth 2 5 5*** (2+)

Survival 0 5 7 (3+)

Talents

Skill Aptitude (+2 Survival rating)

Skill Aptitude (+2 Brawl rating)

Quick Reflexes (+2 Initiative rating)

Alertness (+2 Perception rating)

Assassin (When unnoticed, it can make a Surprise Attack using its Stealth rating instead of its Brawl rating against the Passive Defense of its victim)

Weapons

	Rating	Size	Attack	(Average)
Bite	4 L	-2	11 L	(5+) L

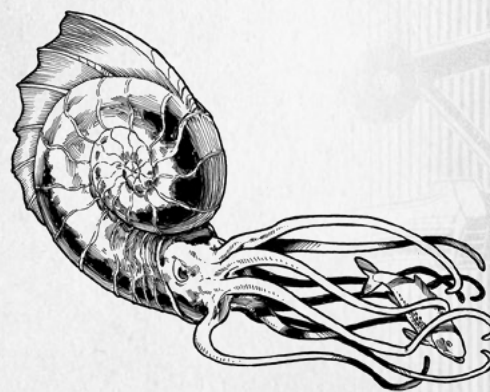
* **Eryopoi use their full Move rating for swimming, and half their Move rating when on land**

** **The rare Crystal Eryopoi have additional crystal plates that provide a +2 Defense bonus to their Passive Defense.**

*** **Eryopoi suffer a -2 Size penalty on Stealth rolls**

Sailback Ammonite

The sailback ammonite is one of the largest cephalopods of the World River. The animal is easily recognizable by its characteristic big 'fin' on the topside of its snail-shaped shell. The fin protrudes from the water almost all the time, since the sailback ammonite lives exclusively just beneath the surface. The cephalopod eats virtually anything its tentacles can tow into its mandible-like mouthparts protruding from the front part of its shell. It rejects neither plants nor animals. Since it lives just beneath the surface, numerous land or air dwellers have become part of its menu. With astounding agility, the creature grabs its land-dwelling prey, pulls it into the water and drowns it before eating it. As of yet, it cannot be explained how it detects its prey on the river bank. Although it can actually move on land for brief periods of time, it rarely does so. Sailback ammonites have attacked humans more than once. The animal is hunted for its spectacular shell, and its meat is more or less palatable as well.



Sailback Ammonite

Animal Companion 3

Archetype: Animal **Health: 12**

Primary Attributes

Body: 6 **Charisma: 0**
Dexterity: 4 **Intelligence: 0**
Strength: 6 **Willpower: 4**

Secondary Attributes

Size: 2 **Initiative: 6**
Move: 10 (5)* **Defense: 10****
Perception: 4 **Stun: 6**

Skills	Base	Levels	Rating	(Average)
Brawl	6	4	12	(6)
Stealth	4	4	6***	(3)
Survival	0	5	7	(3+)

Talents

Skill Aptitude (+2 Survival rating)

Skill Aptitude (+2 Brawl rating)

Keen Senses (+4 Perception rating on tactile senses)

Quick Reflexes (+2 Initiative rating)

Dual Wield

Weapons	Rating	Size	Attack	(Average)
Bite	2 L	2	12 L	(6) L
Ram Attack	4 N	2	14 N	(7) N
Tentacle	0 L	2	10 L	(5) L
Grab	0 N	2	10 N	(5) N

* Sailback Ammonites use their full Move rating for swimming, and half their Move rating when on land

** Sailback Ammonites have a thick hide that provides a +2 Bonus to their Passive Defense

*** Sailback Ammonites suffer a -2 Size penalty on Stealth rolls

Flying Animals

Gliding Snake

Biologically speaking, the creature which was named 'gliding snake' by those who first discovered it is no snake, but more like an axolotl without hind limbs, with a snake-like body of up to 10 feet, or three meters, in length. People who are attacked by one of these animals usually do not care much for this substantial difference, though, since the gliding snake does indeed behave like



a 'normal' constrictor. The animal lives in the water and in the air. Its flattened body, the small flying membranes on the (fully developed) front extremities and other foldable webbings on the body allow the creature to push itself from the water surface and fly some fair distance. To the disappointment of the New York Zoo personnel, the snake cannot fly under the strain of Earth's gravity. The gliding snake is extraordinarily fast and agile both in the water and in the air; when forced to crawl on the ground, however, it is far slower. Gliding snakes can survive for months without food. As soon as the hunger period sets in, they start hunting with a feverish rush. The combination of a python's strength with an absurd speed makes them terrifying opponents.

Gliding Snake

Animal Companion 1

Archetype: Animal **Health: 7**

Primary Attributes

Body: 4 **Charisma: 0**

Dexterity: 5 **Intelligence: 0**

Strength: 4 **Willpower: 3**

Secondary Attributes

Size: 0 **Initiative: 7**

Move: 9 (18)* (5)** **Defense: 9**

Perception: 3 **Stun: 4**

Skills	Base	Levels	Rating	(Average)
Athletics	4	4	8	(4)
Brawl	4	4	10	(5)
Stealth	5	2	7	(3+)
Survival	0	5	7	(3+)

Talents

Skill Aptitude (+2 Survival rating)

Skill Aptitude (+2 Brawl rating)

Quick Reflexes (+2 Initiative rating)

Weapons	Rating	Size	Attack	(Average)
Bite	2 L	0	12 L	(6) L
Entangle	5 N	0	15 N	(7+) N

* Gliding Snakes double their Move rating when jumping

** Gliding Snakes use their full Move rating for swimming, and half their Move rating when on land

Floating Jellyfish

As if it were not enough that large portions of the Mercurian waters are teeming with jellyfish, a species of flying specimens has developed on the planet. Gas-filled bubbles, the low gravity, and the dense atmosphere have allowed some jellyfish to abandon the waters in order to glide through the air. The spectacle they present is beautiful, but it is unadvisable to touch them, since their cnidocytes (stingers) are highly poisonous and can cause severe corrosive skin burns and even death. Floating jellyfish flow with the wind and cannot control their course, but are absolutely silent. For this reason, more often than not small prey fall victim to their deadly cnidocytes. Humans, too, can be unpleasantly surprised by the floating jellyfish. It is less a question of killing the jellyfish (the animals are exceedingly sensitive); even after the death of the animal, the cnidocytes and the gelatinous mass remain poisonous and corrosive. If the gassy bubble which keeps the jellyfish in the air is hit, the creatures explode with a deafening bang and poisonous shreds of mucus rain down to the ground. Being splashed by stinging bits of floating jellyfish is *not* a pleasant experience.

Floating Jellyfish

Animal Companion 1

Archetype: Animal **Health:** 3

Primary Attributes

Body: 2 **Charisma:** 0
Dexterity: 5 **Intelligence:** 0
Strength: 1 **Willpower:** 2

Secondary Attributes

Size: -1 **Initiative:** 5
Move: 6 (3)* **Defense:** 8
Perception: 2 **Stun:** 2

Skills	Base	Levels	Rating	(Average)
Brawl	1	1	2	(1)
Archery	5	1	6	(3)
Stealth	5	4	10**	(5)
Survival	0	2	2	(1)

Talents

Poison 2 L (caustic; see Rules on Caustic Damage in the Core Rules, p. 215)

Unstable (the Explosion of the Floating Jellyfish inflicts damage to all targets within a 6 ft. or 2 m radius)

Weapons	Rating	Size	Attack	(Average)
Touch (Poison)	1 L	+1	4 L	(2) L
Explosion	6 L	+1	13 L	(6+) L

(Ranged) (Unstable)

* Floating Jellyfish use their full Move rating for flying, and half their Move rating when on land

** Floating Jellyfish receive a +1 Size bonus to Stealth rolls

Flora and Small Fauna

There has been a torrent of literature about how much the flora and fauna of Mercury resembles that of Earth's bygone eras. In fact, life on Mercury seems to correspond with the evolutionary state Earth went through about 300 million years ago. However, the distinct circumstances on Mercury provide all kinds of differences.

Due to the low gravity, the numerous *horsetails* and *club mosses* of the planet grow to unknown heights and are characterized by a slim growth that would not be possible under Earth's gravity. There are bizarre shapes, too—for example stems twisting upwards like corkscrews, spiral forms apparently weightlessly floating through the air, and massive treetops sitting on trunks of immense height, yet no wider than a lamp post. It is especially striking that the plants are not green all over, as are those on Earth, but present different leaf colors depending on the species and the location. In the vicinity of the Dark Side, their leaves are almost black in order to absorb even the tiniest bits of light, while the plants near the desert form a silvery reflective layer so they will not burn up. Between these extremes, there are not only green plants, but also many red, purple, cyan, or blue ones. It appears as if the Mercurian flora has not really decided yet which wavelength of light it prefers for photosynthesis.

The primeval fauna in and around the World River appears very much as varied and 'experimental' as the flora. In many regards, the Mercurian fauna resembles that of the Terrestrial carboniferous coal forests. In addition to the various species of amphibians and arthropods, there are other lifeforms which are impossible to categorize by any schemata commonly used on Earth. For instance, there is the bizarre *opabinia* with its four telescopic eyes and its prehensile trunk, or the weird, worm-like *diplocaudus* sporting hardly recognizable feeding, sensory, and excretory organs on both

ends of its body. Amazed, the researchers on Mercury catalog oddities like screw-shaped jellyfish, the loud-voiced '*phantom toad*' with its transparent skin and its semi-transparent muscles, or the ' *jumper*', a tiny insect with two grippers and a large jumping leg. It appears as if God had reserved Mercury for His most weird and unusual creatures—only for the purpose of baffling the naturalists from Earth. Thanks to the environmental conditions on Mercury, flying creatures developed earlier and in far higher amounts than on Earth. Some of the animals, like the floating jellyfish or the gliding snake, grow to immense sizes, though most of the creatures are smaller. Insects aside, obviously all Mercurian flying animals have directly descended from water animals. There are many different flying fish which, unlike their Terrestrial counterparts, are actually able to fly, as well as some flying amphibians and even a species of shallow-water sea cucumber, called '*flipstick*', which can catapult itself out of the water by recoil and is able to fly short distances by gliding. And these are only the wonders which have been discovered during the short time mankind has been on Mercury. It will be very interesting to see what more sensations the little planet has to offer.

Mercurian Mushrooms

Many different mushrooms sprout in the dark undergrowth of the woods. Their astoundingly large species diversity has scarcely been researched and is prone to offer travelers a lot of surprises. Some are tasty, some are poisonous, and some are both; some are gargantuan and offer shelter from the rain, others fly as spores through the primeval forests—and a floating species of very lightweight mushrooms with a radius of several meters does both. At least one prospector died a painful death, suffocating and vomiting blood, after inhaling fungal spores. An autopsy of the poor man revealed that his lungs were completely infested by the nesting fungi. In many cases, Mercurian mushrooms and plants form strange symbioses. One of them is a sticky kind of fungus which catches and digests small animals. Obviously, the nutrients also benefit the tree on whose trunk the fungus spreads. However, there are also parasites that destroy a tree's growth.

Points of Interest in the Twilight Zone

The River's Memory (p. 116)

Due to the sheer force of the World River and its frequent flooding of its banks, nothing lasts that the river touches. All is in a state of transition, threatened by oblivion. Some people, though, have made both fascinating and unsettling observations suggesting that specific sections of the river seem to accomplish the opposite: They show some kind of memory.

Every time something important happens in the water or on the river banks—from the perspective of the currents, that is—it appears as if the river would remember what happened and would try in time to avoid a recurrence by changing its waters accordingly.

Most scientists consider such reports to be cock-and-bull stories and as an accumulation of random events caused by the wildly unexplored nature of Mercury; especially since there are rumors

circulating about faces imitated and voices crudely mimicked by the water. A couple of bright minds, however, have recognized some common ground in these tales. The places mentioned are usually those with moderate currents, lush plant growth, and relatively high water temperatures—perfect conditions for the large-scale cultivation of micro-organisms.

The Crystalline Lakes of Mercury

Besides being traversed by the World River, the Twilight Zone is dotted by countless lakes. Some are many times larger than Lake Constance. Others are boggy ponds with muddy and brackish water, not unlike the swamps on Venus or the Everglades on Earth. A specific number of the Mercurian lakes, though, are characterized by a remarkable phenomenon—their water is almost unnaturally clear and allows observers to look down to 165 feet, or 50 meters, deep! Up to now it remains unexplained why the water in some location is clearer than it is supposed to be. Traveling on these ‘Crystalline Lakes of Mercury’ is less like traversing a lake and more like gliding on a thin foil above a world right out of a fairy tale. At the bottom of the Crystalline Lakes, vast coral reefs are formed, whose nature changes depending on which side of the World River they lie. Towards the Hot Side lie Crystalline Lakes with colorful and tropical coral reefs which glow in brilliant colors. In these lakes, swarms of fish, trilobites, and bizarre Mercurian creatures bustle about between curious aquatic plants. Despite their beauty, the Crystalline Lakes on the planet’s bright side are dangerous places, since many predators lurk among the bristling mass of the corals. In the Crystalline Lakes near the Dark Side, one can observe fascinatingly shaped plates of Mercurian azure corals in the icy cold water. There are swarms of silvery fish and other marine creatures floating through the waters, but they are less numerous than in the lakes on the bright side. Some animals are even bioluminescent. All Crystalline Lakes which have been discovered so far are connected to the World River either by small surface streams or by underground waterways.

Cathedral Groves

In the more dry and stony areas along the World River, so-called ‘Cathedral Groves’ formed here and there, which were named after the ‘sacred’ atmosphere they exude. On the moss-covered ground of debris and boulders, but mostly free of any undergrowth, grow sigillaria trees up to 330 feet, or 100 meters, high, at intervals of 33 to 50 feet, or 10 to 15 meters. The gravity on Earth would never allow the thin stems to bear the deadweight of the sigillaria. The straight and column-like stems are without branches until they reach the treetops where they form a few curved ‘fronds’ made of thick needles. A human observer is under the illusion of standing beneath a naturally-grown gothic vault. In addition, the usually omnipresent silence, the incidental light breaking through the ‘vaulted ceiling’, and the stern sobriety of the scenery are reminiscent of a church. Beyond the lasting mystical impression of the Cathedral Groves, they also offer a precious resource (see page 23).

The Sky Forest

“Trees are the poems Earth writes onto the Heavens.”

— Khalil Gibran

In the primeval forests of the left river banks, there exist woodlands sporting what are probably the weirdest trees of Mercury, if not of all the Inner Planets. These *sky trees* do not grow from the soil but directly out of the sky. What allows them to float so remains a scientific mystery.

While the bare and thick-as-an-arm trunks appear less than attractive, the vast and delicate web of roots seemingly explode in an iridescent play of colors at great heights, unfolding an almost irresistible attraction which is the doom of many aerial flyers. Once caught in the roots, there is virtually no escape. At once, the sticky roots excrete a caustic compound that can cause severe damage to nearly all flesh. Not even the oldest trees ever touch the ground, even if they have been hovering above it for centuries. Whether this would otherwise cause a harmful chemical or physical reaction remains unclear. Near the ground, the plants grow hydrogen-rich fruits which partially swell to the size of balloons before they detach themselves and fly up into the exosphere. There they burst and distribute their spores over vast distances, although no second sky forest has been discovered yet. Possibly, this is caused by unique conditions, as the trees grow in a mostly windless area. A ring-shaped mountain range acts as a weather divide; additionally, the emitted gases seem to influence the atmospheric weather conditions of the region in an as yet unexplained way.

Beyond botanical fascination, the sky trees elude any technical or scientific use. Britain’s hope of finding a material similar to Martian liftwood remains unfulfilled as of yet. The rubber-like sky tree wood is too soft and starts rotting shortly after it has been ‘uprooted’. In addition, it accelerates the decay of materials bonded to it. There may be a possibility of the hydrogen fruits competing with German zeppelins one day, but there are no specific plans for this ambitious idea either.

The High Plateau

“His gaze is weary of the sight of passing worlds / of visions turned to naught, so tired / he imagines worlds a thousand-fold / but not one single place his heart desired.

Only at times, the curtain of his quarters / will open up, an image earlier barred / of a high plateau of highest excellence / and starts growing in his heart.”

— Rainer Maria Rilke, “The Space Captain”, Paris

The World River divides the planet into two clearly distinguishable spheres, one of which, due to its flora, is vaguely reminiscent of the Terrestrial conditions in North America, while the other half is more reminiscent of South America. Following the currents from Princess Christiana Station for about 300 miles, or 500 kilometers, downstream, one reaches a place where this clear division seems to be null and void. A vast high plateau of rigid stone forces the River to find its way through a narrow ravine. The higher it rises, the narrower it becomes, and it is possible to cross the River, gurgling in the dark depths, with only one step, while the River meanders in underground ways. In places where the vegetation is quite dense and where webs of roots and the soil have created solid ground, one can only guess where the crevice

lies, and easily lose sight of it. The High Plateau is but one of the many formidable obstacles faced by anyone attempting to circumnavigate Mercury.

On the High Plateau, the most distinct vegetation of the warm and cold climates becomes mixed up in a very unique way. For a long time, the primeval flora of Mercury has been fighting a battle, and both sides have only been victorious for a while. For this reason, plants have developed which cannot be found anywhere else in the Solar System, living in some curious symbiosis or occurring in unusual adjacencies.

The High Plateau is of strategic importance because, while the ascent may be difficult, the view of the surrounding plains is spectacular. Additionally, it would easily be possible to control the surrounding lands from a higher level. On a giant tree, which is visible for kilometers, a British flag was hoisted halfway up the stem, but the flag has awkwardly become entangled. There are even larger trees, and whoever managed to plant the regalia of his homeland there would earn a huge burst of prestige.

The treasures of this fantastic world are numerous. After his return to Princess Christiana Station, British adventurer and botanist *Edward Smith* made a report of a plant that bears a strong resemblance to a potato. Marked by his hardships during the *Great Famine* in Ireland in the 1850s, Smith guessed that this plant could prove to be more resilient than the potatoes on Earth, thus limiting further catastrophic crop shortages. After his sudden death caused by the bite of a poisonous snake, a search for the plant was delayed indefinitely. The snake had been hidden in a box filled with seemingly tropical fruits from the plateau region.

The Needles (p. 116)

Again and again, ether travelers from Earth believed they had found evidence that humankind was not the first species to have overcome the space between planets. As such, no one was surprised when in 1887, 70 miles, or 112 kilometers, outside Princess Christiana Station, a site was discovered that apparently showed



alien intelligence at work. In the middle of the World River, a needle made of an unknown metal protrudes from a sandbank. Its base has a diameter of 7.5 feet, or 2.3 meters, and its height is exactly 171.82 feet, or 52.37 meters. The metal appears as polished silver or chrome. Anything else about it is unknown, since the material is so resilient that until now it has been impossible to even file off a sample. It was further discovered that in cyclical periods of 267 minutes, the needle emits a strong magnetic field lasting for 12.5 minutes. Within a radius of 15 kilometers, all compass needles suddenly turn in the direction of the needle. During the following months it was discovered that this needle was not the only one of its kind. Meanwhile, five of these strange "monuments" have been discovered, standing exactly 226.785690 miles, or 364.97619 kilometers, from each other. Based on these distances, Dr. Pendergast from Oxford University predicts a total of 42 of these monuments, because 226.785690 miles, or 364.97619 kilometers, is the forty-second part of Mercury's circumference of 9,525 miles, or 15,329 kilometers.

The Nugget-Filled River Sand

*"In a cavern, in a canyon,
excavating for a mine,
dwelt a miner forty-niner,
and his daughter, Clementine ..."*

— American ballad, folk tune

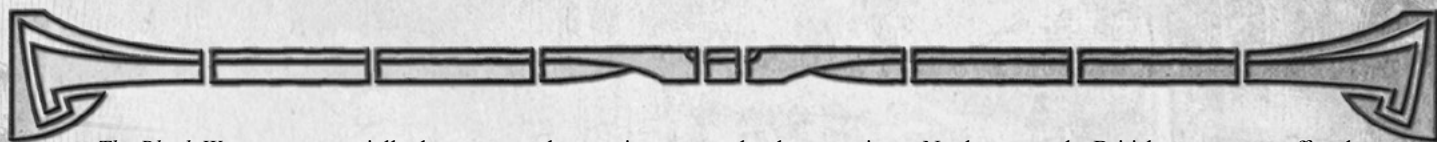
Almost every child on Earth knows the story of the great Californian gold rush. Forty years ago, hundreds of thousands of people heeded the siren's song of the glittering metal, willing to take risks for a chance to live a better life. Only very few were successful, and other gold rushes in other remote regions of the world followed. Mercury is a virgin world, and more than a few adventurous young fellows on Earth learned from their fathers how to wash pure gold out of river sand with little more than a pan.

The Mercurian winds constantly blow fine metallic sand into the World River idly circumnavigating the planet. These are ideal conditions for deposits of gold and other precious substances. Two adventurers have already returned to Earth with alien nuggets in their baggage, which they found in the cold waters of an inflow coming from the Mount Wilson glacier. Provided the two settlers—who are mortal enemies—do not kill each other beforehand, a new gold rush could start on Mercury.

The Black Waters

"Man cannot create nor direct the stream of time, but only travel on it and pilot in order to avoid being shipwrecked due to more or less experience and skill."

— Otto von Bismarck



The *Black Waters* are a specially dangerous and mysterious section of the World River of which tragic tales (but also auspicious rumors) are told. Underwater volcanoes painted the currents pitch-black with silt and ash and laced them with foul-smelling gases. Not only do the gases lower the buoyancy, causing whole ships to sink, but they are highly flammable, too. In addition, the waters are partially boiling hot and covered by a thick blanket of steam.

While any minimally responsible captain circumnavigates this zone of about 10 square miles, or 25 square kilometers, by staying near the river banks, treasure hunters, scientists and adventurers are downright pulled towards its center. As disgusting and dangerous this place may be, the more attractive are the secrets which supposedly wait on the River bed for their discovery. There are rumors circulating about numerous treasures, weird vehicles, and a sunken city about which nobody knows who built it, when, or for which purpose.

There is no evidence for these absurd claims and assumptions, since no one in a dive bell has ever been able to reach the River bed or see further than an arm's length in distance. Because of this, all hopes of the curious and daredevils rest on the arrival of a diving boat announced by an unknown investor.

Seamore's Island

In areas subject to flooding, the river is frequently flushed with plant matter that is usually spit out elsewhere. Sometimes, though, the flotsam accumulates and is compressed into a floating island. Some of these islands may reach diameters of several hundred meters and pile up to become swimming towers.

The peculiar thing about them is that they often form small and unique ecosystems in which plants or even animals can evolve that are unusual even for Mercury. It is also possible that they take root in shallow waters, thus posing a severe problem for this particular region if, for example, the islands introduce unknown predators.

The Irish captain *Finnigan Seamore* found an unusual use for the floating islands. He may have lost his ship and half of his crew while trying to circumnavigate Mercury on the World River, but he still kept his chin up. Without further ado, he had the salvaged rigging and some huts erected on *Seamore's Island* and now he is on the brink of continuing his journey. Still, Captain Seamore will have to face the challenges of waterfalls, rapids, and other obstacles separately.

The Shallows

In two places, the World River runs so wide that it takes up almost the complete width of the Twilight Zone. These 'shallows', named '**Percy Shallow**' and '**Bricks Shallow**' after the men who discovered them, are streaked everywhere by sandbanks and tiny islands. Similar to the islands of Northern Germany, the isles of the Shallows consist mostly of sand with no noteworthy tree growth, being instead thickly carpeted with moss and grass. The World River permanently reshapes the sand banks and tiny islands, so it is virtually impossible to draw any maps which could remain valid for long periods of time. In uncountable places the water is shallow enough to allow wading, if it were not for the muddy soil and the highly venomous silt worms, thick as an arm and lurking in the mud. The Shallows are the most inconvenient areas for boat trips on Mercury, since the sandbanks and small isles frequently change their positions and thus really make it

harder to navigate. Not long ago, the British government offered a reward of £2,000 for anyone who could find a safe, solid passage through the Shallows.

The area may appear desolate, but it is not without natural beauty. The giant '*Victoria water lily*' grows there. Its egg-shaped 'blossom', which floats on the surface of the water, reaches a diameter of up to 13 feet, or 4 meters, and is composed of a delicate, rose-colored and transparent gelatinous mass. Inside the 'blossom', the *Victoria water lily*'s spores, shaped like white and fluffy small balls, grow on vine-like extensions. During the course of its life cycle, the *Victoria water lily* stores more and more gas until the 'blossom' finally bursts open and blows the spores up into the air. At certain times the air around the Shallows is filled with the spores to such an extent it seems like it is snowing. This is a problem for sensitive persons, since the 'fluffy balls' might cause skin irritations as an allergic reaction. It is of special interest that, contrary to beliefs held some years ago, the *Victoria water lily* is no plant at all. On closer inspection it turns out that the water lily is really a large kind of jellyfish, which, according to its anatomy, could only have evolved in the low gravity of Mercury.

Spring Tide Lowlands

"Time and tidings wait for no one."

— Sailors' proverb

Mercury is a fixed planet, unmistakably divided into cold and hot sides by the grip of the Sun—according to the common scientific consensus. Its nature is subject to little changes or even sudden disasters. Its slight nutation (see page 7), however, has the effect that this image sometimes fails. In certain places along the World River there are regular, annual 'spring tides' during which huge bodies of water get redistributed. Known for this are **Lake Throckmorton**, **Lake Plimsell** and **Sterling Bay**. There, sudden tidal waves of over 80 feet, or 25 meters, in height flood the surrounding lowlands, carrying away both plants and animals, smashing or drowning them. The phenomenon can be calculated with relative accuracy, but ignorant adventurers might face the waves at a moment's notice.

Nature on Mercury created a series of adapted plants and animals around these regions. Trees and ferns root very deeply or are oriented in the direction of the flood; some plants use the bodies of water to spread their spores and seeds. The local animals escape by climbing high trees, by boring into trunks or by clutching ruined trees. Some use the floods for mating because a spawn hidden in a high tree is well protected after a flood and finds enough food in the form of carrion.

After the waters have drained off, the lowlands are full of dead and destroyed remains: Smashed trees and carrion lie everywhere, attracting animals from far away. Oftentimes, quicksand is formed as well.

The Lost Colony

While the English were busy building Princess Christiana Station, agents of the German Empire also made an attempt to quickly conjure up a colony on Mercury. The hasty venture proved to be a failure, though. The captain of the German ether flyer was not prepared for the fierce winds prevailing in some areas; to save his ship he was forced to drop his precious cargo. Since Mercury





was inadequately charted at this time, and the captain had been far adrift, he was not able to mark the drop point on a map. At least he managed to keep the incident a secret.

Since then 40 boxes, almost fully overgrown by plants, lie strewn in a thick jungle area. They contain all of the equipment necessary to build a base station, and in addition basic supplies of food, weapons, and maybe even other objects of great value (see the Artifacts on page 112). Not everything was damaged on impact, believes the captain of the ether flyer, who under the influence of some good German beer gets quite talkative and tends to forget that the whole operation had been declared top-secret.

The Water Stairs

Waterfalls and currents are encountered more often than not on the World River. Quite unique, though, are the so-called *Water Stairs*, where the River flows over several stepped plateaus with an altitude difference of nearly 330 feet, or 100 meters. The real peculiarity is that the waters flow uphill!

At first a simple optical illusion was thought responsible for the phenomenon, which naturally drew the attention of British travelers. After several unfortunate accidents occurred during surveying efforts, it was established that the Water Stairs were *not* an illusion. For a while, the Water Stairs were believed to be impassable and had to be painstakingly ‘circumnavigated’ by land. But then the old sea dog *Elmo Collyns* surprisingly made the passage in his decrepit jolly-boat. Wondrous floating metallic objects on board pointed to a huge, but strictly limited magnetic field—a probable explanation for the failures of the modern steam and iron ships.

The underlying phenomenon has not yet been researched; diamagnetic repulsion effects are known among scientists, but not on this scale, especially since unlikely concentrations of iron particles in the water would be necessary. Various expeditions are currently being prepared to investigate.

The World Spine

*“Great things are done when men and mountains meet;
This is not done by jostling in the street.”*

— William Blake

Having followed the World River from Princess Christiana Station about halfway around the planet, a mountain range with extraordinary features rises. With its almost 13,200 feet, or 4,000 meters, the World Spine can hardly hold a candle to the highest mountains on Earth, but it stretches from the *Forbidding Desert* across the whole *Twilight Zone* to the glaciers of the *Ice Sheath* in an arc which is about 300 miles, or 500 kilometers, long.

While the roaring World River disappears between the rocks and reappears after a journey of 30 miles, or 50 kilometers, through underground tunnels, a traveler must decide on how to cross the mountains.

If he chooses the direct way through the Twilight Zone, he should have some experience as a mountaineer, as steep faces and craggy rocks obstruct the path. The low gravity of Mercury, however, accommodates the traveler. Depending on the height and exposure to the Sun, the climate between the mountain ridges is subject to strong fluctuations, meaning that heatwards-oriented

and jungle-covered lowlands lie in the direct vicinity of coldwards-oriented mountain sides.

Alternatively, the mountain range can be circumvented along its heatwards foothills. Exposed to the burning Sun, it is a passable way, but it leads along barren slopes through a region similar to a rocky desert. Due to the numerous mountain formations, shade can be found quite frequently, and travelers from Earth knowledgeable of deserts can put their experience to good use.

Going coldwards along the mountains, the foothills merge smoothly into the glaciers of the Dark Side. A traveler should have some experience with arctic or high-mountain conditions in order to overcome the dark mountains and all their crevasses.

Princess Christiana Station

"At long last there can be no more doubt that the Sun will never set on the British Empire."

— Harper's New Monthly Magazine 10/1883

Nine years ago, the *British Royal Society* founded Princess Christiana Station in the Twilight Zone. What began as a research facility to study the Sun, the nature of an alien planet, and to find new raw material supplies, has by now become a small English village at the end of the 'world'. The only human settlement on Mercury stands near the North Pole on the right bank of the World River.

The research station is a frequent starting point for adventures on Mercury. Together with the local scientists, the characters can plan out expeditions into the wild to discover the flora and fauna or to search for precious minerals. More often than not, something goes awry on journeys to the Dark or the Hot Side, so the authorities are constantly hiring adventurers for rescue missions. In addition, the station is of strategic importance. The stationed soldiers protect the researchers, but they also secure the British supremacy on the planet. Thus it might happen that the characters become embroiled in military or diplomatic conflicts. It is somewhat more tranquil when they move as guests into a bungalow in the living quarters, taking part in the village life as tourists, reporters, visiting scholars, or crewmen on a freighter for a while. The perpetual twilight evokes Victorian gothic horror of the alien kind, and strong nerves are required when dealing with unexplained phenomena or settling disputes between inhabitants who have fallen victim to Mercury Fever.

Walking Tour

Whoever has been to Mars and experienced the bustle of the Syrtis Major spaceport, will open their eyes in wonder when approaching Princess Christiana Station. Ether flyers land where the high treetops along the World River keep a small clearing free for a moment.

The **landing field (1)** on the edge of the settlement is a cleared meadow without any additional buildings. A single ether flyer is standing there, but it is already part of a decommissioned generation. It is questionable whether Colonel Shawbridge's *Esmeralda* is still capable of flying the ether. Every six months, a supply ship from Earth touches down, delivering provisions, equipment, mail, and passengers. At irregular intervals, the Royal Navy deploys an ether flyer to check if everything is in order and to change soldiers if necessary. Standing in a proper line at the edge of the field, there are three modern flying steam boats of the British Flying Launch class. The station's scientists use them to survey the planet and to head for the sites of their research projects.

A raised footpath leads from the landing field to the village. In order not to let the never-changing depressing twilight kill the pioneers' mood, the station's architects endeavored to create a cozy place among the exotic surroundings. Gravel paths with sign posts lead through parks with trees clipped down to Terrestrial shapes and sizes—although their leaves are pale-purple. Steam turbines generate electricity so the street lamps illuminate the walkways with bright light. By this, one can encounter weirdly-shaped flowers by the wayside, and can pass a corral in which the villagers keep livestock which appears like a cross of salamander and pony and supplies the inhabitants with a milk substitute (see page 26). The walls of smaller houses are decorated with stucco. The bigger functional buildings are built with reddish brown bricks, adorned with picture-perfect wooden doors and occasionally with glass walls.

On the left stand the **barracks (2)**, small rooms housing the British soldiers stationed on Mercury. In addition to supplies and all kinds of station materials, a great **warehouse (3)** also holds the military guns, including three Nordenfelt guns which can be mounted on the prow of a flying launch.

The dynamite for blasting open mining tunnels is stored separately in a locked **tool shed (4)** to the right, together with an arsenal of tools and mining gear: protective suits and helmets, boots weighted with lead of different weights, climbing gear, gas lanterns, navigational instruments, measuring devices, specimen

Twilight Zone



cases, tools for cutting, polishing, digging and drilling, and photographic cameras. The **laboratory complex (5)** consisting of multiple brick-wall houses stands next to the shed. This is where the scientists retreat to analyze specimens and to ponder their theories. The furnishings of the long corridors and dusty workrooms tend to be practical. In the scarce light, devices, huge machines and a multitude of cabinets dominate the scenery and are sure to house some wondrous inventions. These could be steam-driven drills, devices for geological analyses to screen rock samples via an arc lamp, but also useful artifacts like a silicon-bacteria vacuum or solar glass (see p. 114). Electricity is supplied to the work stations and they are brightly lit.

Strolling across the central meadow, one finds the **administration (6)**, including the long wooden hut serving as a **cafeteria (10)** for the residents. Already in the morning, the kitchen serves a real English breakfast. There is an **infirmary (11)** with four beds and a small **chapel (12)**. The main building—one could say the town hall—rises above everything else. The brick building is the only one with two floors. On top lies an adjoined watch tower from which one has a view of the untamed nature on both sides of the World River. In the perpetual twilight, a large clock regulates the work and life rhythm of the people. The employees of the colonial office, especially the administrator *Choat*, have their offices in the building. The commanding officer of the military, *Colonel Shawbridge*, also performs his duties under the eyes of a larger-than-life portrait of Queen Victoria. Visitors who want to arrange a meeting with those two or would like to announce their arrival first present themselves to *Miss McCannon* at the reception. The sparsely furnished, always tidy waiting hall hints at the fact that any and all visitors will have dealings with proper bureaucrats.

For the duration of their stay, the receptionist will assign a bungalow in the **living quarters (7)** to announced guests who can present an invitation. The white stucco houses are located on a meadow off the administration and laboratory buildings, reaching to the sprawling woods. The regular personnel are housed in twenty-seven bungalows. Numbers are constantly rising, but not all huts are occupied at the same time. Scientific expeditions sometimes take weeks and not every member returns safe and sound. All windows are furnished with shutters, simulating a 24-hour rhythm, and they are ventilated via fans. Comfortable bedclothes are available. Most inhabitants try to arrange a homely atmosphere like on Earth, though most of the green plants do not fit that description. The experienced scientists, higher officials and the officers inhabit the slightly **bigger houses (8)**. The décor of these free-standing brick houses is of higher quality. They stand nearer to the laboratory complex, and the river bank is not far away.

A narrow, stony path without a handrail leads down to the **bathing beach (9)**. The little spot on the warm, salty water is more a place for quiet and relaxed moments—maybe for two—than a busy public bath. Three white-painted rudder boats are moored to a wooden landing stage. Wooden signs along the river bank warn against dangerous currents and indicate recommended rowing stroke frequencies. Beyond the beach, the trail leads a bit further and ends behind a bend in a passage leading under the river floor. The rocks there are honeycombed with a system of caves which the geologists have only just begun to survey. Some tunnels have already been widened by workers and secured with wooden stays. Modern steam turbines supply the lamps along the main tunnel with electricity.

Administration

It may be just a figure of speech that in an outpost of about one hundred inhabitants everyone knows everyone. For the administration personnel, however, it is absolutely vital to be informed about all inhabitants, guests, and any of their tasks and affairs in the station at all times. After all, the two government officials and the four employees of the colonial office do represent Her Majesty's interests. They see to it that everything runs smoothly and scientific and economic projects make headway. They manage the correspondence with Earth, especially exchanges of goods, information, and personnel. Due to the long journey through the ether, planning ahead is obligatory.

Station Personnel

The highest ranking government official—the Governor of Mercury, so to speak—is **Sir Arthur Choat**. Officially, he is obligated to manage the station. Sir Arthur is a gentleman, presents himself as a welcoming administrator, but has been aging. He walks with a stick, probably just thanks to the low gravity on Mercury. Choat puts great value in honesty and proper appearance. He represents the dignity of age, although it is possible to describe his prim and undemanding ways as old-fashioned. Thus, he fades in contrast to the feisty military commander Colonel Shawbridge, who de facto has a firm hand on the tiller of managing the station.

Randolf Forbes Carrington is Sir Arthur's dedicated assistant and lieutenant. With his transfer to Mercury, Carrington's career in the colonial office has just picked up pace. The modest, proper and yet ambitious Briton keeps both eyes open for everything that is going on in the station. While Choat is a passive bureaucrat, Carrington uses his investigative skills to uncover and solve undesirable developments and possible crimes. For this, he sorely misses allies, like policemen. If the young administrator does not tread wearily, his ambition might lead him into disaster one day.

Claude Brumford is one of three employees of the colonial office. Unlike his colleagues, who follow their duties with decency and care, Claude hates the job. There are no opportunities for advancement. Against all odds, the transfer to the station did not bring him fame and fortune. Instead, he is sitting on a God-forsaken planet with a bunch of bores. If the situation does not get decisively better, he will stop at nothing to further his career. In essence, Brumford is a plain fellow: black suit, black hair, a heavy growth of beard and deep-set, restless eyes constantly avoiding another one's gaze—a dark shadow in the Twilight Zone.

Iris McCannon is a stout, middle-aged Irishwoman. As secretary, she occupies the reception on the ground floor. The pointedly formal lady meets new arrivals with a certain behavior ranging from distrust to rejection. One has to know her for a certain time to experience her friendly and caring side. She earned respect by knowing how to keep secrets. The religious Irishwoman has the soul of a romantic, and she loves poems by Keats. A couple of years ago, she was stationed in India with Colonel Shawbridge. It was her idea to paint the houses of Jaipur pink for the visit of Prince Edward. Iris has become a loyal companion to the colonel over the years. She also admires him as a man, but knows how to hide her feelings out of decency.

The Scientists

In total, there are twenty experts from the fields of biology, chemistry, physics, astronomy, and geology (called “hermology” on Mercury) working in the research center. It is a given in a scientific environment to meet people of all nationalities. They all have their proper places in one of the laboratories, where they try to answer all kinds of questions, starting with obscure details—“What is the position of the sailback ammonite within the food net of the World River?”—to the big questions—“How does gravity emerge?”. There have been expeditions in a radius of 930 miles, or 1,500 kilometers, in order to collect measurements and samples.

Scientific Personnel

In the 19th century, science, like society, is dominated by males. And yet, one can find a female researcher or two in a team who earned her position due to hard work or simply because she was more courageous than one of her colleagues who preferred his desk at home to the dangers of an alien planet. In addition to the young xeno-zoologist **Miss Florence Miller** from the adventure *Journey on the World River* (see page 70), we would like to present a prominent professor, an example of a leader of an expedition or an employer for the characters.

When the universities in France opened their doors to women, **Maria Fournier** was one of the first who took the chance, and she graduated in physics and chemistry. Since then, she has turned an impeccable career and enjoys an excellent reputation as a geologist. Her fields of expertise are the structures and compositions of planets. Recently, Professor Fournier gave up her chair in the Sorbonne and traveled to Mercury to study the cave system beneath the World River. The small, agile Frenchwoman is about fifty years of age and a confident, clever person, who does not think herself above taking up a shovel. The station inhabitants—especially the soldiers who were away with her on business—describe her as a capricious woman, alternately delivering boastful lectures and roguish teasing. In Paris, she followed the lifestyle of the Bohemians. She threw parties for her circle of illustrious friends during which, with lots of alcohol, they passionately talked philosophy, wrote poems, and discussed politics without any taboos. Maria loves metaphysical poetry, especially that of John Donne.

Maria Fournier

Primary Attributes

Body: 2 **Charisma: 3**
Dexterity: 3 **Intelligence: 5**
Strength: 2 **Willpower: 3**

Secondary Attributes

Size: 0 **Initiative: 8**
Move: 5 **Defense: 5**
Perception: 8 **Stun: 2**
Health: 5

Skills	Base	Levels	Rating	(Average)
Academics (Literature)	5	2	7	(3+)
Academics (Philosophy)	5	1	6	(3)
Athletics	2	2	4	(2)
Bureaucracy	5	3	8	(4)
Diplomacy	3	2	5	(2+)
Medicine	5	1	6	(3)
Science (Chemistry)	5	3	8	(4)

Science (Geology)	5	4	9	(4+)
Science (Physics)	5	3	8	(4)
Survival	5	2	7	(3+)

Resources

Contacts 3; Fame 1

Equipment

Mining lamp, sample case, tool box

Weapons	Rating	Size	Attack	(Average)
Hammer	2 N	0	2 N	(1) N

The Military

Twenty infantry men of the Royal Navy serve in the station. They secure the base and protect the scientists on their journeys. Not every soldier sees sense in some of the daring enterprises of the theoretically-minded researchers taking imponderable risks only to collect stones of different hues of grey. But still, orders are orders, and in the end the Empire might profit from it. More than the veteran officers, the younger comrades are the ones who are willing and interested to fit in with the villagers.

Officers

The commander-in-chief of the British military presence on Mercury, **Colonel Ernest Shawbridge**, presents himself as an honest warrior, although he is quite busy with his administrative work. He leaves dangerous field missions to his underlings. Officially, Shawbridge is a government agent. In fact, he is the commander of the station—no, of the planet. The heavyset officer with his combed-back black hair, which has turned grey at the temples, is over 60 years old and will retire soon. He wants to top off his career on Mercury and create a legacy. This happens less by acting on visionary ideas and more due to the fear of losing face because of a mistake or negligence. Thus he strives to be a paragon of good conduct and to radiate authority, demanding absolute discipline from his subordinates. The colonel must be informed about everything and always keeps control over every event in the station. Shawbridge is a rational skeptic with a simple world view and little understanding of the inquiring minds of his wards. Nevertheless, as an honorable patriot he is mindful of his responsibility to the inhabitants and the economic importance of the mission. Shawbridge was married once, but apparently that was a long time ago. As his best friend, he still has Miss McCannon, and also the true object of his desire, the decommissioned ether flyer *Esmeralda* which he tinkers with during his infrequent spare time.

Further officers are the charming **Lieutenant Palfreyman**, the unsure but always correct freshman **Lieutenant Alexander** and **Lieutenant Horwell**—small and stocky, an easy-going optimist with sparkling eyes. Iris is entitled to call him James. The dashing **Lieutenant Sandford** is described in the adventure *Journey on the World River* (see page 70).

Lower Ranks

Among the lower ranks, **Corporal Paul Heath** is one of those experienced military men the station administration would make available to characters on an expedition, along with a couple of privates. Unlike Shawbridge, Heath has not joined the military to further his career, but out of conviction. He is prepared to die for his ideals—for the good of the Empire and his belief in God. Paul

needs strict rules, structures, and directions. Then he puts on some elbow grease and takes matters into his own hands, stubbornly following his path. He is a simple-minded man whose world view is black and white. In the Twilight Zone, the corporal is pushed to his limits. Since he was redeployed from a mission in Africa directly to Princess Christiana Station without being allowed to visit his beloved mother, he is always nervous—uptight, in fact. And yet he is proud of his good upbringing and strives to be a gentleman—especially in the presence of a lady. Heath tries to make friends with Nurse Juanita and is always looking forward to accompanying Professor Fournier on a field mission. He is beginning to see some kind of substitute mother in her. As long as this works out, he is doing a great job. But he better not get into a situation he cannot handle—at this point it will become apparent that the pitiable Paul is mentally fragile and poses a potential threat. To be honest, it would not be wise to entrust someone like him with the key to the weapon depot.

Private Blair is among the large group of soldiers of the lowest ranks. He is a bit anxious about the phenomena of the alien world. Two pals of Heath's consort with Blair: **Saul** and **Joe**. Saul, a wiry colored man able to put on an air of menace, has experience with the terrain and knows the cave system. In case of an emergency, he always carries a bottle of rum with him. Being a recipient of orders, he gets nervous when he has to make a decision by himself. The same goes for Joe, the team's demolition expert. He is loyal to the military and skeptical towards civilians. His fiancée **Joan** also lives in the station. Another person of notice is **Khan**, an Indian and follower of the Sikh religion, who wears his turban at all times.

The accompanying booklet to the Space: 1889 *Game Master's Screen* includes stats for officers (colonel, lieutenant) and enlisted ranks (corporal, private), which must be completed with special Skills (for example *Gunnery*, *Demolitions*, and *Pilot*) to include the soldiers into the game. As an alternative, you may use the *Officer* example character from the **Core Rules** (p. 186) as a corporal or private after lowering the Skill levels.

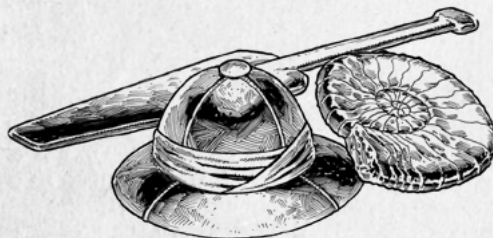
Other Personnel

Among the fifty servants and workers, there are also those with special responsibilities caring for the physical and spiritual well-being of the inhabitants in such a dark place.

Doctor Richard Schell is the station's physician. The strong man in his mid-forties with his untamed white shock of hair stands out due to his flippant manner of speaking. Many patients appreciate his lax and cheery nature as well as his sympathy. When he is not treating patients in the infirmary or making some routine examination of the personnel, he can usually be encountered smoking his pipe.

The doctor is supported by Nurse **Juanita Lopez**. Everything the vivacious Spaniard says is underlined by some dramatic gesture. She is dedicated, confident, and looks back on many years of experience as a nurse on Earth. She is still quite new to the Twilight Zone. Dark hair flows around her tanned face, and there is a fire burning behind her eyes. Or is it that Juanita just shines out as an exotic amidst the predominantly British community? Her strong accent, at least, does emphasize this impression. Lopez is convivial and has already made friends with some people of the station.

If one is worried, which can easily happen in a strange environment, one consults the **Reverend Lydon**, man of the cloth, who also regularly holds church services in the little village chapel. The tall, lean Welshman has a comforting and distinct voice. He meets everyone with cheerfulness, exuberance even. It is his nature to encourage his parish with honest optimism. Lyden presents himself as an open-minded and modern man. For him, traveling the ether and discovering space are chances for mankind to broaden their horizon—this also applies to questions of faith. Nobody would dare contradict a man with his authority. In private, Lydon is quite untidy and a night owl—surely no disadvantage in the Twilight Zone.



The Dark Side

The Ice Sheath

Width: 435 Miles / 700 km
Temperature: 32 to -101°F / 0 to -74°C

"How small all of our creations appear compared to the works God has performed in nature! On the twenty-sixth day, our journey led across one of the river's branches into an area just beyond the terminator—a cold heath in the eternal twilight. At this point we could see ... the edge ..."

— **Nigel Planter, North American prospector
in service of Edison Electric**

Between Heath and Glacier

While on the heatwards side the Twilight Zone gradually passes into the desert and becomes hotter and drier, the transition into the Dark Side of the planet is far more radical. Massive glaciers cover Mercury's dark hemisphere, some of which tower many miles high with the power to move mountains. As a result, some of the mountains function as a geographical divide between the World River's fertile meadows and the perpetual ice. The transition between the Twilight Zone and the night side happens in three different parts: The flat *Heath Fringe*, a narrow belt between the Twilight Zone and the mountain range, the quite massive *Border Mountains* created by end moraines and glacier fronts, and the icy *Glacier Highlands*.

The Heath Fringe

Mosses and Fungi - the Dark Flora of the Heathlands

With growing distance from the World River the forests get more open while the grass doesn't grow as high. With growing darkness, the plants become smaller and punier. Finally, the trees disappear

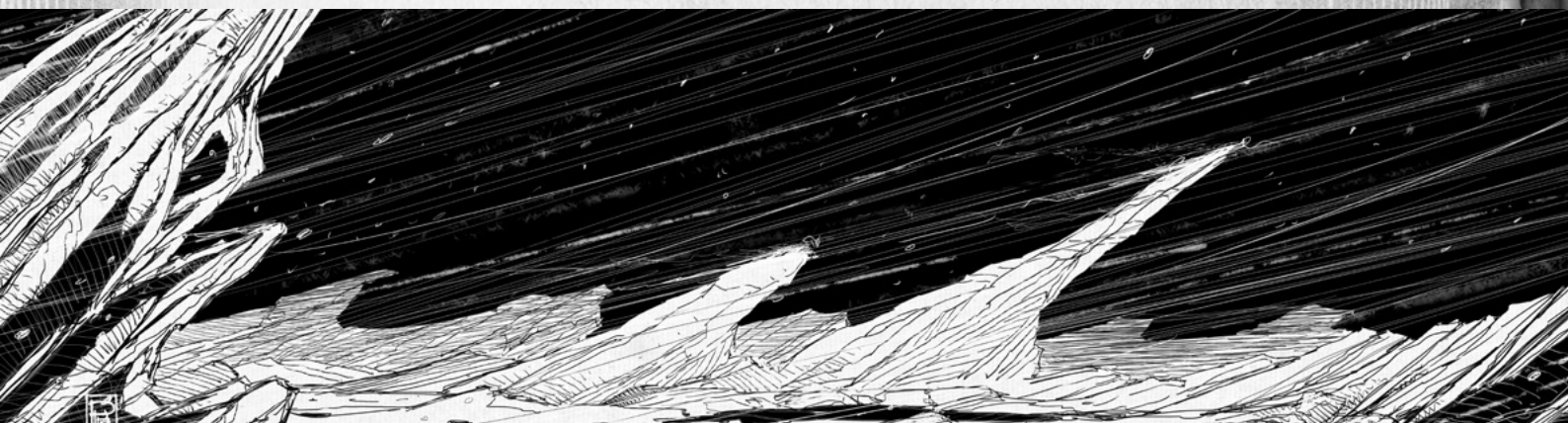
completely, leaving you in a seemingly desolate area covered in mosses, lichen, fungi, and primitive heather. Among the plant life of this barren place live many carnivorous plants that are however tiny in size. Since many plants don't get enough light and nutrients from the soil they have developed that the means to feed on numerous little insects and moss crabs. Yes, even the heathers use their sticky leaves to catch tiny critters. The tallest plant of the Heath Fringe is the so-called *lantern-weed*, a symbiont between fungus and plant, which grows stalks that are ten feet, or three meters, high, spiraling like corkscrews and forming luminous bulbs at their tips. In addition to the stars and the twilight at the horizon on the heatwards side, lantern-weeds are the brightest light source of the Heath Fringe. The Heath Fringe blooms only at a specific time. Occasionally the phenomenon of the so-called 'nodding' or 'swaying' (i.e. 'nutation') exposes parts of the heathlands to sunlight for hours or even days. Only then do heather and moss bloom in glowing colors and grow almost explosively only to shrink back to their original height once the life-giving sunlight has disappeared again.

Landscape

The heath's fauna is as meager as the flora and, as far as we know, it is limited to small animals like bugs, crabs, and tiny frogs. Rumor has it that there are wolf-like predatory lizards that hunt in the fog but that probably is the stuff of legends. There are mainly two kinds of soil: depending on the amount of water, there is marshy ground reminiscent of the raised bogs on Earth, and there is dry screes. Every so often, large boulders dot the landscape. Running through the terrain are numerous icy rivers and streams coming from tall glaciers. Bigger lakes of shallow depth aren't rare, either.

Climate

Laymen often assume that snow and ice on Mercury start just when the sun completely disappears behind the horizon. Thanks to warm air masses from the Hot Side, this is not the case. Depending on the air currents, the Heath Fringe still enjoys temperatures between 32 and 5° F, or 0 and -15° C. In many places, a warmer body of water from the World River gets too close to the cold zone, creating perpetual ground fog. Occasionally, the visual range will drop to under 65 feet, or 20 meters. Another weather phenomenon is called the 'flickering', which happens when wind stirs up the fine ice crystals lying on the glaciers. They reflect even the tiniest flicker of light in every color of the rainbow floating across the taiga like 'star rain'.



Border Mountains and Transition Area

Nature

In many places on the sun-opposing side, the heath transitions rather abruptly into the Border Mountains. To many people these mountains constitute the limit of the habitable area of Mercury. According to a research study of the *Institute of Planetary Science* at the *University of Königsberg*, the mountain range probably formed due to the Mercurian ice sheet. In some places, the mountains and the edge of the glaciers form a massive wall between the Twilight Zone and the Dark Side. Some glaciers are hundreds if not thousands of feet high. The heatwards side of the Border Mountains—the glaciers' 'end moraine'—consists mainly of rocks while the side opposing the sun—the actual nose of the glaciers—is made of ice. Crossing the Border Mountains without an aircraft is difficult, but even with a flying vehicle it is advisable to cross the mountains at a sufficient height as not to be caught in a dangerous downdraft; a detour however is often time-consuming. Although the highest peaks of the Border Mountains amount to 'merely' 15,000 feet, or 4,500 meters, certain features make them deadlier than any mountain range of the known Solar System—except for maybe the airvoid mountains of Luna. First, a reliable map of the mountains is still missing, and secondly the low Mercurian gravity allows for much steeper rock formations than the Earth, which is why the mountains are more pointed and craggier than anything human explorers are used to. Some valleys are so wide that they host small areas of heath vegetation, but mostly there are only narrow ravines and gorges. That alone impedes any progress heavily.

Dangers in the Dark

The absolute gloom covering large parts of the mountains is even nastier. Even though the nodding occasionally dips the highest peaks in golden sunlight—making for a majestic view, but also for an extremely dangerous phenomenon due to the sudden melting of the ice—most valleys don't even see the slightest ray of light. Unstable walls of rock and erratic air currents only add to the difficulties of any expedition. A traveler wishing to cross the Glacier Highlands on foot or with ground vehicles has to rely on the few places where the Border Mountains are not as high or where he can find gaps providing a relatively safe path. Once he reaches the perpetual ice, the terrain becomes even more dangerous. Crisscrossing the glaciers are numerous crevasses, cracks and fissures forming a tight network of gorges in the Border Mountains. The ice is far more brittle than the rocks. Every valley, ravine, and chasm is in danger of collapsing. Some cracks are big enough to create valleys. However, these are not safe places. While the walls in the rocky part of the Border Mountains are steep, in these places they are vertical or even form overhangs. Since the glaciers are constantly changing due to chasms collapsing and reforming, it seems redundant to mention how futile mapping the glaciers would be. The best thing you can say about this area is that it doesn't seem to have any dangerous predators. At least none that we know of.

The Glacier Highlands

Nature

Once you survived the journey through the Border Mountains, took the long way around them, or overflowed them in an airship, you find yourself in awe on the vast ice sheet of Mercury. Beyond lies a zone with temperatures that a human wearing average arctic gear could still survive. This place is also not as dark as the Border Mountains: Even though it's further away from the sun, when the sky is clear the white ground reflects the starlight, illuminating the scenery at least a little. Mercury's night sky is also a little brighter than Earth's, thanks to a stronger gegenschein (sunlight back-scattered by interplanetary dust) and the occasional aurora (particularly near the planet's poles). Now and then, high-altitude winds push so-called noctilucent clouds into the Dark Side's sky, clouds which glow because they are high enough so as to still be in sunlight. The landscape is reminiscent of the polar ice caps on Earth and Mars. A flat ice plain seems to stretch to the horizon almost without end, with only a few snowdrifts creating little hills here and there.

The Ice of Mercury

It takes a closer examination to notice the differences from the ice landscapes on Earth. When lit with a spotlight, the ice can be seen to reflect the light differently than the ice on Earth. Ice and snow are still as white as they are on Earth but everything is covered in multicolored sparkles as if peppered with tiny, colorful stars. Even bigger boulders of ice gleam in many colors depending on the angle at which the light hits them. This phenomenon still baffles the scientists. They assume that either the ice crystals form differently due to the lower gravity, that the chemical components of the ice are different (since the mineral ingredients are different), or that microorganisms are responsible for the unusual reflections. Rumor has it that some extremely rich millionaires on Earth would pay thousands of pounds for authentic Mercurian ice just to cool their drinks with it.

Interestingly a lot of lichen still grows on the edge of the ice sheath. Here and there, it forms a real 'coat'.

Fauna and Dangers

Apart from the Jotun ice worms that occasionally find their way into this area, there doesn't seem to exist any animal life. It looks like the glaciers start in a zone where animals based on water aren't native anymore while those based on ammonia aren't native yet. Overall, this region seems less dangerous than the Border Mountains—but that's misleading. Of course, the same dangers exist in the Glacier Highlands that can be found in other frozen regions. Blizzards and the low temperature are always perilous enemies. The ground is still precarious, especially close to the glacier's nose. Sometimes, pieces of the glacier that measure multiple square miles suddenly break off, threatening to carry travelers with them. In 1885, this happened to the Austrian Küppers-Hartmut expedition. It seems to be thanks to the mercy of some higher powers or mere luck that only four out of ten members of the expedition were severely injured. Ice crevasses can be many miles deep—some areas look more like table mountains standing

close together than a solid glacier since chasms and ravines can be up to a hundred feet wide in places. The closer one travels to the cold pole, the more massive the glaciers get while the ravines are smaller and the ground becomes more stable. Soon one reaches areas where the temperatures are so low humans could not enter them without wearing special suits.

The Dry Ice Zone

Width: 500 miles / 800 km

Temperature: -101 to -202°F / -74 to -130°C

"Fear hardens the soul as cold does steel."

— Joseph Joubert

Sir Basil Throckmorton didn't draw the line between the Ice Sheath and the Dry Ice Zone arbitrarily but based his 'cryography' on the physical properties of the increasingly occurring ammonia and carbon dioxide. Below -101°F, or -74°C, both substances start to solidify gradually and are significantly responsible for the bizarre nature of this 500 miles, or 800 km, wide land strip.

Only the starlit sky illuminates the endless ice deserts and grotesque mountains of the Dry Ice Zone. Not even wind drives off the solitude of this place; only the cracking of large sheets of dry ice, the endless march of the 'Singing Glaciers' and the eruptions of scattered geysers interrupt the silence like thundering gunshots.

Land of a Thousand Lakes

Dotting and traversing the Dry Ice Zone are muddy ponds and lakes made of a mixture of water and ammonia. Here and there, veritable inland seas spread out for many miles. Some of the colorless solid ammonia flocs floating on them grow to a massive size, looking like immaculate plains to the traveler's eye—until he disappears forever into the depths of a suddenly gaping crack. Underwater currents occasionally cause the flocs to rotate, creating perfect rings of ice over the years. Ammonia ice floats on liquid water but sinks in liquid ammonia; since the proportions of ammonia and water in the lakes often varies with depth, ammonia flocs can be a hazard at any depth.

While scientists are able to plausibly explain this phenomenon there's one mystery yet unsolved: There are reports of shadowy movements underneath the translucent ice crust that some people attribute to unknown creatures. Since those would have to be much bigger than the enormous Jotun ice worms that Throckmorton already discovered, this hypothesis is unsustainable.

Despite the ever-sinking temperature, thanks to underground volcanic activity the ice lakes on the coldwards side keep their muddy consistency for a long time before finally freezing solid. These deep down magmatic processes also cause toxic vapors to

The Fire Rivers

On the Dark Side of Mercury, the dominance of the ice is not as absolute as one might expect. Geysers at the seams of the dry ice glaciers are the most visible sign of volcanic activity. In some places, channels of magma meander close under the surface for many miles before disappearing into the deep again. Some of these Fire Rivers are said to be hundreds of miles long and stretch deep into Kelvin's Land. These lava tubes run through the ice encased in a solid rock crust, the glowing magma becoming briefly visible only when a tube cracks. Liquid mixtures of water, ammonia and carbon dioxide flow around and along the lava tubes.

It's theoretically possible to advance more quickly and far deeper into the Dry Ice Zone because the temperature above the magma rivers is measurably more bearable than further away. However, geysers (especially above small lava lakes) and icefields that are unstable thanks to these huge differences in temperature pose a sizable threat. Especially since the still arctic temperatures and the absence of water make it necessary to perfectly insulate humans and materials preparing everything meticulously.

Geologists and arctic explorers generally assume that the Fire Rivers are natural phenomena even though in (pseudo) scientific circles some crude theories stubbornly persist. Supporters of the 'Channel Theory' postulate that these are the remnants of ancient channel systems similar to those on Mars. Measurements that supposedly prove the netlike, systematic arrangement of those channels are generally considered an error or simply shrugged off as flights of fancy.

Supporters of the 'Worm Theory' take a completely different approach and attribute the channels to the Jotun Ice Worms that Throckmorton discovered. On the one hand, on Earth we know of migratory birds, fish, or turtles that periodically wander to breed or find food; on the other hand, the vast size of the Fire Rivers would suggest that those beasts get bigger the farther coldwards they are. Not a pleasant thought indeed.

rise and cover the land like a burial shroud bringing death to any visitor not wearing the appropriate gear. Unlike carbon dioxide, ammonia can burn, so there is a danger of fire or even explosion when it is present in the vapors. Deeper inland, the vapors fall to the ground as crystalline snowflakes that are as harmless as they are beautiful.

The Stairs of the Gods

"To understand the secret of the deep sometimes you need to look at the peak."

— Henri Bergson

Below -148°F , or -100°C , carbon dioxide and ammonia exist as solids except in volcanic hotspots. A seemingly endless continental plain stretches ahead, interrupted however by a few mysterious phenomena. Ethereal music echoes across the almost unnaturally smooth plateau, sounding like ghostly wailing or whale songs. Some rumors tell of expedition members that jumped across an airship's railing or simply lost their minds under the influence of those siren's songs. Generally, however, the 'Singing Glaciers' hypothesis is widely accepted. It explains the sounds in a surprisingly simple way as a result of the glaciers' movement, friction, and the contortion of their material.

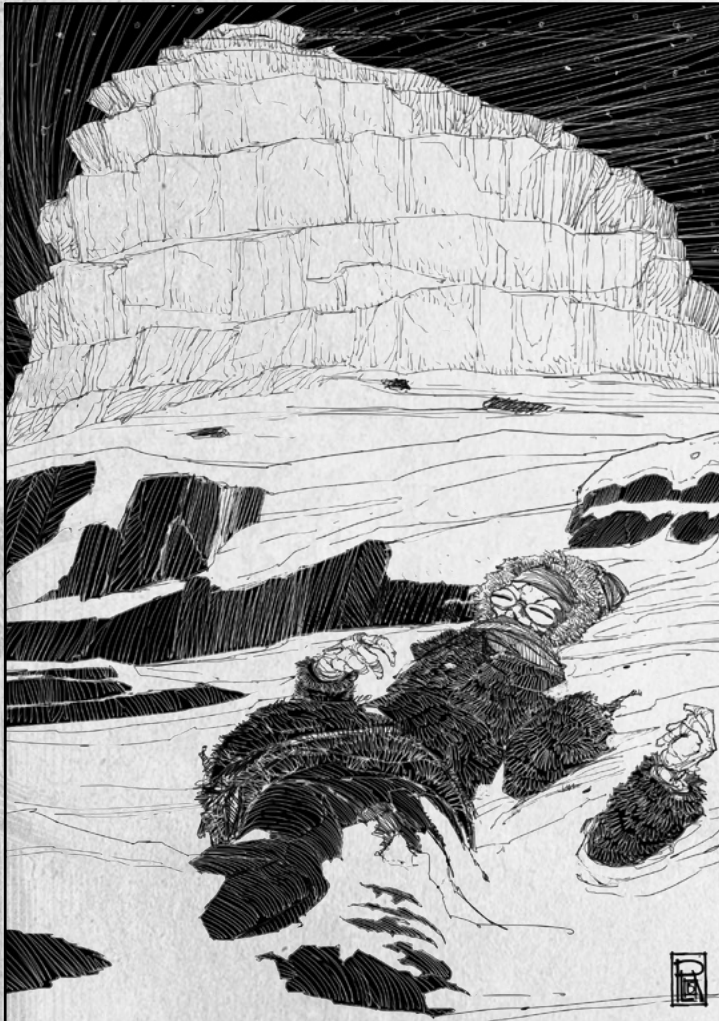
No one has yet found an explanation, though, for the stair-like glacier formations rising out of nowhere in many places, consisting of multiple rectangular scarps that are up to 1.25 miles, or 2 kilometers high. Their surface is so smooth and their formation so seamless that even renowned researchers doubt that their origin is natural. If they are artificial structures, the question remains: Who built these enormous stairs and what purpose did they serve? Future expeditions will have to see if seismic activity, erosion, meteorite impacts, or an advanced alien civilization created the so-called Stairs of the Gods.

The Glass Mountains

The transition zone between the Dry Ice Zone and Kelvin's Land is much more chaotic yet no less mysterious. This region consists mostly of icy, steaming vents hundreds of feet high and vast snowbanks most likely raised due to the lower gravity and massive gas eruptions. Since the temperature falls below -202°F , or -130°C , the fumes freeze into marvelous, crystalline formations reminiscent of volutes of cigar smoke. This creates caverns, towers, and bridges that are extremely fragile, some of which can be destroyed by one thoughtless touch. The subsequent rain of shards poses a threat that should not be underestimated. The Glass Mountains mainly exist due to the absence of strong winds and extreme weather, although catastrophic cascading impacts changing the face of the landscape happen frequently without any apparent cause.

Kelvin's Land

Width: circle of 1,367 miles / 2,200 km radius
Temperature: -202 to -301°F / -130 to -185°C



"Glory is the sun of the dead."

— Honoré de Balzac

Kelvin's Land is the complete opposite of any place a rational human being would wish to visit, coming quite close to the realms of the dead from many mythologies on Earth. The most obvious danger is the extreme cold of up to -301°F , or -185°C , making the air unbreathable unless warmed; even then, as one nears the cold pole, oxygen starts to liquefy out of the atmosphere, leaving the remaining air incapable of supporting life. Stretching the laws of physics, in this vast region spanning about 2,700 miles, or 4,400 kilometers, in diameter, massive electromagnetic tempests that can have fatal consequences for health, mind, and equipment start and dissipate in the blink of an eye.

There's a reason why the secrets lying below ice and time have not yet been discovered. Nevertheless, it's precisely these signs from time immemorial and the hope of abundant resources that causes the great powers and industrial magnates of Earth to gaze greedily into the darkness.

The Colors of the Night

"We can easily forgive a child who is afraid of the dark; the real tragedy of life is when men are afraid of the light."

— Aristotle

Most of the time, the almost complete lack of light on the Dark Side is a downright blessing since it hides

the endless vastness of this frozen land of death. Occasionally though, it's rather a curse denying the view of one of Mercury's most beautiful wonders.

Kelvin's Land is a dark place. The sun is a dim, distant memory. Here and there, thin patches of odd-looking fog gather in low-lying areas. It is suspected these are pockets of heavy gasses starting to liquefy out of the air (as of 1889, none of the modern noble gasses has been identified yet, although their existence has been suspected since 1785). Thick low-hanging clouds of unidentified gas or gasses dim the starlight. One needs at least a small, rare gap in the clouds to see the colorful veins that are at first permeating the ice and finally result in a stunning patchwork rug of iridescent colors. Over millions of years, geysers and the movements of glaciers have brought up increasing amounts of the different elements, colorfully painting hundreds of miles of the plain. Large amounts of sulfur paint the ice fields yellow, red and black, while bromine dyes them orange, and nickel green. Since the colors appear fluorescent in some places, all you need is a small artificial light source to let large parts shine in every color of the rainbow for a while.

The Winter Tombs (🗡️ p. 116)

"Wise men say, and not without reason, that whoever wishes to foresee the future must consult the past; for human events ever resemble those of preceding times."

— Niccolò Machiavelli

Kelvin's Land is mostly flat and seemingly endless. The farther one travels, though, the more often the brittle glaciers reveal cracks and faults which the cold and impacting meteorites burst open. According to unconfirmed rumors, people who risk descending or ascending will be rewarded with wondrous discoveries; beds rich in extremely pure ore or conglomerates of valuable minerals are supposed to be the most common.

Treasures of the Dark Side

"Ammonia smells pungent and even one single splash destroys a lab coat. It is commonly regarded as a by-product. For science however this holds true: It starts being interesting where it ends."

— Justus von Liebig, 'Chemische Briefe' ('Chemical Letters')

The planet's dark side harbors large amounts of resources that are in short supply on Earth. The biting cold causes substances that are usually liquid or gaseous to exist in their uncommon frozen state and clump together creating massive mountains and even whole mountain ranges. Mining them is relatively easy, partially compensating for the difficult environment while making the mining look distinctly more lucrative.



Treasures in the Ice

Heath Gold and Magnetite

Even though it is relatively inhospitable, the *Heath* is an interesting region for prospectors. Some rivers carry placer gold in such amounts that the as of yet undiscovered (1896) gold deposits of the Klondike River on Earth pale in comparison. Working as a gold washer could be quite profitable here. Geologists also noticed that the rocks underneath the Heath's ground contain a lot of uranium and thorium (these heavy metals are generally found more often on Mercury than on Earth). In 1889, this is nothing more than a footnote since those metals had only minor uses (high-temperature ceramics, high refractive index glass, coloring glass and pottery glazes), but future generations or users of certain alien technologies from prehistoric times could find a use for these metals.

Climbing the *Border Mountains* seems only useful out of scientific curiosity especially since there are easier ways to the Dark Side. Nevertheless, even this forbidding area of Mercury contains valuable minerals in large amounts. In some places, veins of gold and silver run directly on the surface of the mountain walls. Additionally, there are large deposits of unusually pure magnetite. Should the 'magnetic rock' from the tales of the Arabian Nights truly exist, doubtless it would be on Mercury! Mining these treasures without putting in the necessary technological effort could cause the death toll among the workers to rise, but enough businessmen are ruthless enough to be willing to take that chance.

Ammonia

Only around half a century ago, the chemist Justus von Liebig discovered that nitrogen fertilizer based on ammonia is capable of revolutionizing agricultural production, substantially increasing harvest yields. Unfortunately, it is not yet known how to acquire sufficient amounts for industrial production (the modern Haber-Bosch process will be invented in 1909). This is partially due to the substance's treacherous nature itself: At a temperature of -4°F, or -20°C, the volatile chemical already boils, changing into its gaseous form. Mercury's exploration now presents a unique opportunity to overcome this predicament. The temperature on the dark side of the planet is so low it causes a natural phenomenon that is not known on Earth: Ammonia freezes into pale ice crystals in such large quantities that they are forming entire hills. This happens in those regions where the temperature stays permanently below -112°F, or -80°C.

On Earth, astute planners of the industrialized countries consider having ammonia available by the ton a highly important strategic goal that would enable them to increase agricultural production while decreasing the manpower required, freeing it for industry. Having a monopoly on mining Mercury's ammonia would therefore promise a substantial gain in supremacy and emphasize one's respective position as a great power.

Producing nitric acid using ammonia has a definitive military use as well: It would allow the production of a number of explosives, namely the recently discovered forms of nitroglycerin and trinitrotoluene better known as TNT. Every big nation needs large amounts of gunpowder for its armies as well. However, the required amounts of niter are currently only mined in South America. Hence, chemists in Central Europe are secretly searching for methods to create this valuable substance from ammonia so they wouldn't be cut off from the natural supply in the event of

war. Finally, because of its low evaporation temperature, ammonia is extensively used in cooling units. If someone would manage to transport ammonia to Earth at a low cost, the traditional ice cellars and cooling houses based on water ice would soon be obsolete and storing perishable goods would become much easier.

Mercurite

This ammonia-like substance contaminates some frozen ammonia deposits. Its melting point is around 20°F, or 10°C, lower than ammonia's. Thus, during transport into the planet's warmer regions, mercurite (that has accidentally been mistaken as ammonia) can unexpectedly vanish into thin air. This is especially dangerous since during its change of state mercurite expands around twenty-five times as much as ammonia does. The gas's low density allows for interesting applications, e.g. in air navigation where it might allow for considerably smaller airships and tethered balloons with comparable lifting capacity.

Mining the Ice's Treasures

Forays into the planet's Dark Side are similar to arctic expeditions but reaching the actual destination just like that is still not possible. There is the risk that the technical equipment stops working below a temperature of -58°F, or -50°C. One of the possible starting points to mine the valuable frozen ammonia are the rivers made of red-hot lava that push through the dark ice in several places. In their immediate vicinity, heat and cold are intertwined, creating a corridor with temperatures bearable for humans. Theoretically, it is possible to travel deep into the planet's Dark Side by staying close to these glowing hot streets. However, these lava rivers tend to meander, making detours unavoidable; besides, a slight breeze or an eruption of heat could throw the unstable temperature conditions off balance—with deadly consequences.

Another option for traveling is offered by the natural tunnels extending underneath the ice desert, which aren't only warmer but are also more stable as far as temperature goes. Ideally, a cooled lava stream or a tectonic shift of the massive ice sheets creates a cavity leading into a favorable direction. Far more often, though, the tunnels grow into a veritable maze or end at a collapsed site. Artificial tunnels would also be an option but require a huge amount of work. Ammonia needs to be transferred into appropriate containers before reaching its boiling point—since it would be life threatening if a large amount of gaseous ammonia leaked out within the tunnel system.

Treasures of Ice

Dry Ice

Even though it is barely possible to tell the difference just from looking at it, dry ice is not made of water but from carbon dioxide. Unlike water ice, it sinks in water. At its melting point of -112°F, or F -80°C, dry ice immediately changes into its gaseous form without liquefying first, which makes it almost ideal for cooling. On Mercury, heaps of dry ice can be found close to the ammonia mountains.

So far, there are no known economical uses. Celebrating the birthday of the tsar of Russia, a resourceful businessman from Vienna had the idea to recreate an ice palace in the ballroom as it is sometimes built close to big lakes in the deep of winter to amuse the Tsardom's nobles. Smart cooling with dry ice preserved this sinfully expensive spectacle for several days. For a short while, drinking your Wiener Melange on the battlement of the 'icy fairytale castle' was the most extravagant pleasure of the noble society and received a lot of appreciation.

Ice Worm Eggs

Reaching a length of up to 65 feet, or 20 meters, the Jotun Ice Worm (p. 46) is one of the most remarkable creatures of the Dark Side. The clutch of this odd beast with a unique ammonia-based metabolism consists of 25 eggs each the size of a human's head. These translucent objects have a sturdy shell refracting light in a fascinating way, creating lines that look like flames. They have an iridescent blueish color and are beloved by collectors and dealers of jewelry due to their alienness. The most valuable eggs are those in which the worm's larva has developed enough to recognize limbs, antennae, pincers, and tiny legs so that the atrocity of the hatching creature can be guessed at. On Earth, people are especially interested in these kinds of nightmarish objects since they offer a tangible testimony of the adventure that is the spacefaring across the ether and exploration of faraway worlds. Searching for ice worm eggs inevitably leads the treasure hunter into the worms' breeding areas and it is impossible to avoid killing the creatures that aggressively defend their nests.

It has not been determined yet whether the Jotun ice worms can hatch on Earth and if so, under which conditions. The Russian government keeps reports of a dreadful accident under wraps, which supposedly happened on the country estate of a wealthy industrialist near Finland's icy frontier. The investigation of the ruins could not conclusively establish that the broken shells had held larvae. If that were the case, several young worms possibly escaped into the countryside. Despite an extensive search, the bodies of the residents are still missing.



Flora and Fauna of the Dark Side

Land-dwelling Animals

Bison Grub

A herd of imposing bison grubs under the starlight is one of the most impressive sights the Dark Side has to offer. These huge animals can reach the size of a rhinoceros and move slowly and majestically across the wide plain. They look like oversized snails or caterpillars. Their body is shaped like a drop and is covered in a beautifully blue, iridescent fur from which grow white whiskers, several feet long. A bison grub sees the world through countless little beady eyes and eats by removing the top layers of the ice with its rasp-like 'tongue' and munching on buried microorganisms and ice worm webs (see The End of the Jotun Ice Worms, below).

Leading the herd is an aggressive alpha recognizable by four feather-like growths on its head. Most of the time, the herds wander around idly and feed. They also graze the bottom of ammonia lakes—these animals seem to be some sort of 'amphibians'. Only when threatened will they move extremely quickly and become highly aggressive. A 'stampede of grubs' can even kill large predators. Jotun ice worms as well as their larvae, the fenrir worms, and even Ice Dwellers feed on the meat of the bison grub. If you are lucky, you can meet a group of Ice Dweller nomads close to a herd—if you are unlucky, you will meet several Jotun ice worms! Humans are especially interested in the beautiful fur of these animals.

Bison Grub

Animal Companion 1				
Archetype: Animal		Health: 10		
Primary Attributes				
Body: 6		Charisma: 0		
Dexterity: 4		Intelligence: 0		
Strength: 5		Willpower: 2		
Secondary Attributes				
Size: 2		Initiative: 4		
Move: 9		Defense: 8		
Perception: 2		Stun: 6		
Skills	Base	Levels	Rating	(Average)
Brawl	5	1	6	(3)
Stealth	4	2	4*	(2)
Survival	0	4	6	(3)
Talents				
Skill Aptitude (+2 Survival rating)				
Flaw				
Ammonia-based Metabolism (Feeding on the meat of Terrestrial animals poisons the bison grub, causing it 4 L per combat turn, starting as soon as it has swallowed the whole creature.)				
Weapons	Rating	Size	Attack	(Average)
Ram Attack	4 N	−2	8 N	(4) N
*Bison Grubs suffer a −2 Size penalty on Stealth rolls.				

*Bison Grubs suffer a -2 Size penalty on Stealth rolls.

Glacier Ant

Swarms of eusocial animals can also be found on the Dark Side. Among them are the 'glacier ants' although the name 'ant' is misleading. They have a way of life similar to that of ants but these creatures are in fact thumb-sized, soft spherical entities with four flexible stumpy, tiny feet that communicate through bioluminescent blinking lights. A glacier ant queen, shaped like a cucumber, gives birth to these lively little creatures, continuously excreting new, ready-made glacier ants. These tiny animals can eject a sharp thorn that secretes a poisonous chemical. With this organ, they can kill prey as well as dig passageways. To this end, the glacier ant rams its thorn into the glacier and waits until the chemical melts the ice. These organisms are able to create huge caves in which even humans can move around. They also use these caverns as traps for bison grubs: the big animals break through the cavern's roof and fall to their deaths so the ants can feed on their carrion.

The caves and connecting tunnels built by glacier ants are so complex it seems like the swarm has some kind of intelligence. However, this is not the case—glacier ants interact with their environment on pure instinct and follow specific mathematical algorithms. Resourceful minds could use this though—for instance, they could expose the glacier ants to specific lights that they would mistake for signals from fellow members of their species. With the proper signals, the glacier ants could be directed to build arbitrarily-shaped halls and passageways in the ice. Single glacier ants are no more dangerous to humans than a hornet. At most, their sting leaves you with a painful lump. Thousands of them could be deadly, however!

Glacier Ant (Swarm)

Animal Companion 1				
Archetype: Insect		Health: 10*		
Primary Attributes				
Body: 5		Charisma: 0		
Dexterity: 4		Intelligence: 0		
Strength: 3		Willpower: 4		
Secondary Attributes				
Size: 1		Initiative: 4		
Move: 7 (14)**		Defense: 8		
Perception: 4 (8)		Stun: 5		
Skills	Base	Levels	Rating	(Average)
Brawl	3	3	6	(3)
Stealth	4	2	5***	(2+)
Survival	0	3	3	(1+)
Talents				
Keen Senses (+4 Perception rating on visual sense)				
Venom 3 L (causes nausea and dissolving of the inner organs)				
Weapons	Rating	Size	Attack	(Average)
Thorn (venom)	1 L	−1	6 L	(3) L

*Only attacks with an Area of Effect inflict damage on a swarm; all other weapons inflict a maximum of 1 point of damage per hit

** Animals with four or more legs double their Move rating when running

*** Glacier Ants suffer a -1 Size penalty on Stealth rolls

Snow Spider

One of the many nuisances that can bug a traveler on Mercury's Dark Side is the snow spider. It owes its name merely to its (very) rough similarity to Terrestrial spiders. In fact, these creatures are less similar to spiders than a daisy is to a dolphin. The snow spider's body is not segmented, but rather has the form of a flattened cone made of chitin with a diameter of 20 inches, or 50 centimeters, covered in blueish fuzz and small spots. At the 'pointy' end of the cone is a corona of mouthparts. Thin legs of about 5 feet, or 1.5 meters, with razor-sharp hooks for feet grow from the cone's flat top. These legs can easily be cut off but grow back within a few days. The number of legs varies between four and twenty. Living in burrow systems, snow spiders are ambush predators and hunt similarly to Terrestrial trapdoor spiders. With sticky secretions and chunks of ice, they build hatches disguising the opening to their burrows. Lying in wait behind the hatch until it senses vibrations in the ground, the snow spider leaps up and grabs the animal, dragging it into its lair to suck it dry. Unfortunately, these creatures also consider humans as prey.

Snow Spider

Animal Companion 1

Archetype: Insect **Health:** 7

Primary Attributes

Body: 3 **Charisma:** 0
Dexterity: 5 **Intelligence:** 0
Strength: 3 **Willpower:** 4

Secondary Attributes

Size: 1 **Initiative:** 4
Move: 8 (16)* **Defense:** 8
Perception: 6 **Stun:** 3

Skills	Base	Levels	Rating	(Average)
Brawl	3	3	6	(3)
Stealth	5	4	11	(5+)
Survival	0	5	5	(2+)

Talents

Skill Aptitude (+2 Stealth rating)

Alertness (+2 Perception rating)

Assassin (When unnoticed, it can make a Surprise Attack using its Stealth rating instead of its Brawl rating against the Passive Defense of its victim)

Flaw

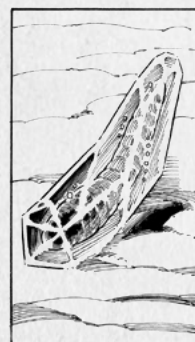
Ammonia-based Metabolism (Feeding on the meat of Terrestrial animals poisons the snow spider, causing it 4 L per combat turn, starting as soon as it has swallowed the whole creature.)

Weapons	Rating	Size	Attack	(Average)
Bite	2 L	0	8 L	(4) L

*Animals with four or more legs double their Move rating when running

The Life Cycle of the Jotun Ice Worm

During expeditions on Mercury's Dark Side, explorers made a remarkable discovery: An utterly strange lifeform dwells there whose metabolism is based on ammonia instead of water. Terrestrial creatures are highly toxic to them; however, they do not spare venturing explorers and could do a lot of harm before realizing that those are inedible. Some explorers observed many wormlike lifeforms living in the ice, most of which are only the length of an arm and quite shy. It is possible that the rather unique lifecycle of the Jotun ice worm originated in the evolution of these worms.



Fenrir Worm

The first stage of the Jotun ice worm's metamorphosis is a larval stage called the 'Fenrir worm'. These larvae of the Jotun worm form packs out of which only the strongest will survive. Those who think there could be nothing nastier than the Jotun worm obviously never had the pleasure of meeting Fenrir worms. They are dangerous, fast predators that attack in packs of up to 15 animals. All members of a pack come from the same nest. Their body grows up to ten feet, or three meters, long and is slightly thicker than a human thigh. The 'head' of the Fenrir worm is covered in a thick mane of needle-like bristles out of which protrude dozens of claw-like mouthparts that are constantly moving. A Fenrir worm pack instinctively attacks everything that moves, and acts with malicious ferocity. Their highly aggressive nature also causes them to often attack, kill, and eat each other within their own pack. From the very start, a pack has a limited lifespan. Finally, only the strongest alpha worm is left to pupate in a crystalline cocoon, changing into a Jotun worm through chemical processes that are toxic to humans. While growing steadily, fetid ammoniacal juices often ooze out of the cocoon. Destroying the cocoon kills the worm if immature enough but also causes toxic, caustic fumes to escape.

Fenrir Worm

Animal Companion 2

Archetype: Animal **Health:** 8

Primary Attributes

Body: 5 **Charisma:** 0
Dexterity: 6 **Intelligence:** 1
Strength: 5 **Willpower:** 3

Secondary Attributes

Size: 0 **Initiative:** 7
Move: 11 (22)* **Defense:** 11
Perception: 6 **Stun:** 5

Skills	Base	Levels	Rating	(Average)
Brawl	5	5	12	(6)
Stealth	6	1	7	(3+)
Survival	1	6	9	(4+)

Talents

Skill Aptitude (+2 Survival rating), Skill Aptitude (+2 Brawl rating), Alertness (+2 Perception rating)

Flaw

Ammonia-based Metabolism (Feeding on the meat of Terrestrial animals poisons the Fenrir worm, causing it 4 L per combat turn, starting as soon as it has swallowed the whole creature.)

Weapons	Rating	Size	Attack	(Average)
Bite	3 L	0	15 L	(7+) L

* Fenris Worms double their Move rating when digging; for each Move rank they can move 1 ft., or 30 cm, per hour underground

Jotun Ice Worm

The Jotun ice worm's form is only the second developmental stage of this creature. The Jotun ice worm grows to a length of 65 feet, or 20 meters, and is characterized by its highly aggressive nature. Its enormous strength and size added to its high animalistic intelligence make it a deadly threat. Jotun ice worms seem to be able to coordinate hunting in packs. The existence of a predator of this size on the Dark Side suggests that there must be prey of the same size as well. It is assumed that the bison grub meets that need.

Jotun Ice Worm

Animal Companion 4

Archetype: Animal Health: 15

Primary Attributes

Body: 8 Charisma: 0
Dexterity: 7 Intelligence: 1
Strength: 8 Willpower: 3

Secondary Attributes

Size: 4 Initiative: 8
Move: 15 (30)* Defense: 11
Perception: 6 Stun: 8

Skills

	Base	Levels	Rating	(Average)
Brawl	8	6	16	(8)
Stealth	7	6	9**	(4+)
Survival	2	3	7	(3+)

Talents

Alertness (+2 Perception rating)

Skill Aptitude (+2 Brawl rating)

Skill Aptitude (+2 Survival rating)

Flaw

Ammonia-based Metabolism (Feeding on the meat of Terrestrial animals poisons the Jotun ice worm, causing it 4 L per combat turn, starting as soon as it has swallowed the whole creature.)

Weapons

	Rating	Size	Attack	(Average)
Bite	4 L	-4	16 L	(8) L

* Jotun Ice Worms double their Move rating when digging; for each Move rank they can move 1 ft., or 30 cm, per hour underground

** Jotun Ice Worms suffer a -4 Size penalty on Stealth rolls

The End of the Jotun Ice Worms

In its last stage of life, the Jotun ice worm turns into a plant-like web growing underneath the ice surface, which the bison grubs happily feed on. This happens with worms that died of natural causes—which is surprisingly often due to starvation since the huge worm can hardly hunt enough food—but also with Jotun worms that have been killed: The body practically 'seeps' into the frozen ground forming said web.

All in all these metamorphoses form a surprising and delicate balance of energy: Apart from their prey, the bison grub, the Fenrir worms also hunt down each other, so at least one of them can grow into a Jotun worm and thus procreate until it finally turns into food for the bison grubs, which used to be their prey. It is safe to say that this lifecycle, sustained by cannibalism as well as an everlasting alteration of eating and being eaten, pushes the boundaries of the natural laws known on Earth and almost perfectly distributes the few resources of the Dark Side with as little loss of energy as possible. Some scientists think that the bison grub is also part of the Jotun worm's lifecycle but there is not yet enough evidence to either confirm or dispel this hypothesis.

Flying Animals

Air Swimmer

If it weren't a deadly predator, the air swimmer would be a funny creature. It looks like a shaggy sphere the size of a soccer ball that's moving on a number of strangely thin legs of six feet, or five meters length. Between the legs stretches a fine weave of skin. It bears its name 'air swimmer' due to its peculiar way of moving: it leaps ahead, controlling its movement with elegant 'swimming motions' while in the air. The air swimmer cannot actually fly but it can travel a remarkable distance of up to 130 feet, or 40 meters, with one leap, changing direction in the air and landing by suddenly pushing downwards. Apparently, it produces a light gas that it can manipulate at will—the same way many other animals move their muscles—making these flight maneuvers possible. The radial positions of its 6 to 20 legs, its compact, armored body, and its mouth opening at the lower end of its body led experts to conclude that the air swimmer must be closely related to the snow spider. Unlike the snow spider though, the air swimmer does not eat its prey by sucking it out. It pounces on its prey from above and everts its elastic stomach like a starfish. A rubbery shell suffocates the victim and slimy digestive juices smelling like ammonia digest it. Should the prey struggle too much, the air swimmer will try to stab it with the sharp ends of its legs.

Air Swimmer

Animal Companion 1

Archetype: Animal Health: 5

Primary Attributes

Body: 3 Charisma: 0
Dexterity: 4 Intelligence: 0
Strength: 4 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 4
Move: 8 (16)* Defense: 7
Perception: 2 Stun: 3

Skills

	Base	Levels	Rating	(Average)
Athletics	4	2	6	(3)
Brawl	4	4	8	(4)
Stealth	4	4	8	(4)
Survival	0	4	4	(2)

Flaw

Ammonia-based Metabolism (Feeding on the meat of Terrestrial animals poisons the air swimmer, causing it 4 L per combat turn, starting as soon as it has swallowed the whole creature.)

Weapons

	Rating	Size	Attack	(Average)
Leg Blades	2 L	0	10 L	(5) L
Engulf	4 L	0	12 L	(6) L

*Air Swimmers double their Move rating when jumping

Flora and Small Fauna

Currently, scientists on Earth are still frantically trying to fit the little information of the Dark Side that has been discovered so far into categories of terrestrial biology. It is to be expected that they will soon give up these desperate attempts. The lifeforms of the Dark Side are just too different from the life we know from Earth, Mars, Venus, and the Twilight Zone. The fact that these creatures

are based on ammonia is only the first in a series of differences. The differentiation between animal and plant alone makes no sense for the beings on the Dark Side. Basically, all of these living things show the same cell structure and a lot of the lifeforms switch between 'animalistic' and 'plant' lifestyles during different stages of their existence. There are worms that change into a network of roots and carpets of moss growing small capsules that turn into bugs that again turn into seeds creating a new carpet of moss. We only keep the terms 'carnivore' and 'herbivore' due to the different behavior of the individual creatures. Some animals mainly eat stationary (meaning plant-like) life while others hunt actively-moving lifeforms.

Ice Dwellers

If there's one thing mankind has learned since inventing space travel it's that life can be found in the oddest of places in the universe. It almost seems as if the old scholars of the 18th century were right to suspect that there's life on every planet in the sky. What about intelligent life, though? On Mercury, man hasn't yet discovered anything that would be more intelligent than the dog-like giant velvet worm. But so far expeditions have been limited to the World River and the outskirts of both hostile hemispheres. After observing some luminous phenomena and structures reminiscent of stone circles in the Dry Ice Zone, Captain Marsh of the HMS *Legacy* speculated that a race of ice-dwelling "Dark Dwellers" exists on the Dark Side but no-one is taking his hypothesis seriously. His surmise is completely right, though. Far from the sun, living in a land of eternal night, intelligent life exists on Mercury! It is a bizarre and strange race. Their exterior appearance is that of 'human crabs' even though they actually have almost nothing in common with terrestrial life. Their culture seems primitive and yet these creatures possess incredible knowledge and wisdom. Is

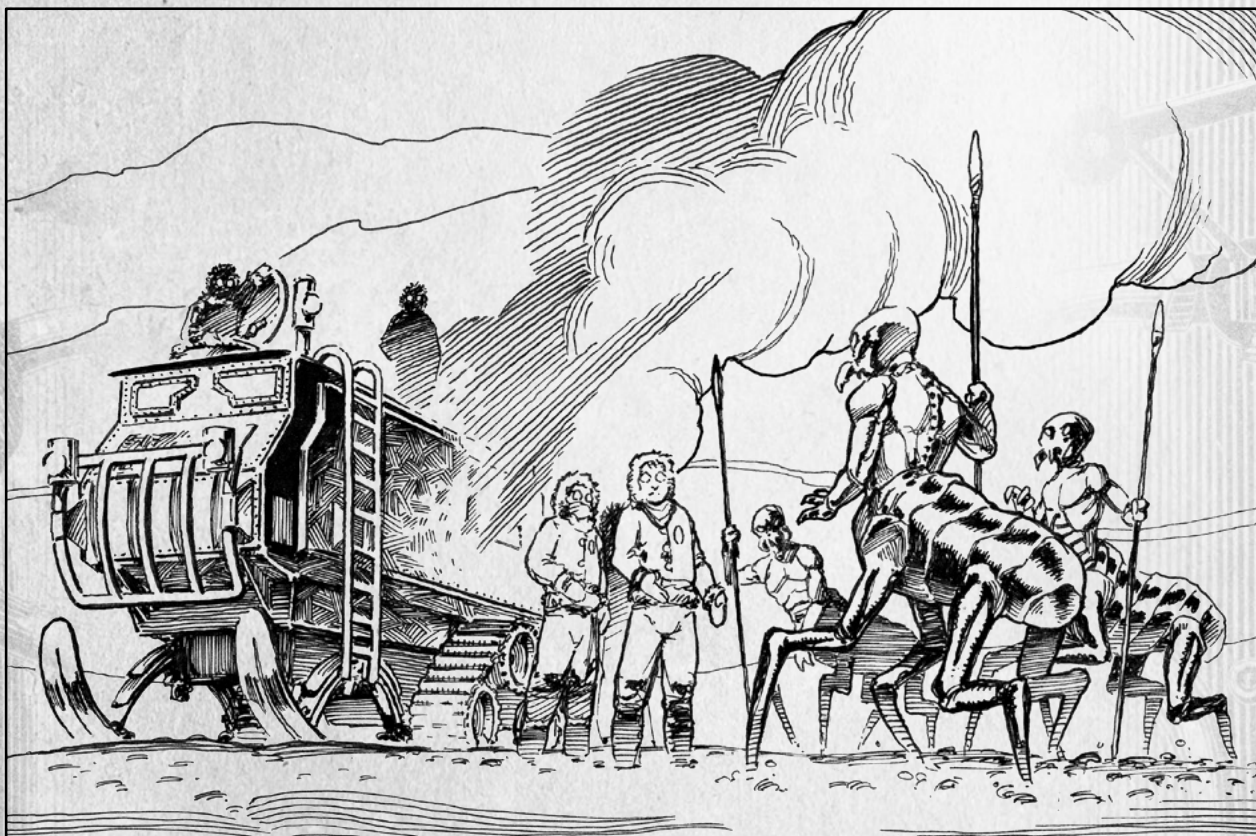
this because their crab form is only the 'larval stage' of something much bigger and more exalted than most humans can even imagine?

Appearance

Ice Dwellers might just be the strangest creatures man could meet outside of Earth. The silvery white body that stands as tall as a human appears as if someone crossed a crab with a hominid by putting a human torso onto the body of a crab. The abdomen of the Ice Dweller is nearly spherical and covered by a smooth chitinous exoskeleton. Protruding from it are four strong legs with claws at their ends that are perfectly suited for moving across the most slippery ice and steepest walls. The upper body is covered in chitin as well but its proportions are those of the torso of a *Homo sapiens* including its two arms. However, that's as far as similarities go: the Ice Dweller's face is dominated by mandibles, feeding tentacles, and compound eyes, while the hands have only three fingers including a thumb. Ice Dwellers are of a pure, almost artificial-looking white color that makes them hard to discern in their natural environment.

Diet and Perception

Unlike other known intelligent life of the solar system, Ice Dwellers are not omnivores but pure carnivores. They can't digest the twine-like plants of their natural habitat and thus depend on hunting. Even more than the Jotun worm, they are the most dangerous species of predators on the Dark Side. They are enormously skillful in fighting rival predators and going hunting. Despite their formidable hunting techniques, they developed ways of tending to livestock allowing them to store food. Since their organism is based on ammonia, they are just as incapable of digesting human food as humans are of digesting theirs.



Mother Nature gave the Ice Dwellers downright outstanding perception, creating a formidable hunter. While many of the worms and arthropods of the eternal ice have no receptors to perceive light, Ice Dwellers are blessed with compound eyes. How differently they see the world compared to us! These compound eyes enable these aliens to see everything with consistent acuity and precision. The Ice Dwellers cannot perceive colors the way humans do. Instead, they discern a wide spectrum of infrared rays and are far more receptive to 'see' the tiniest differences in temperature than the most keen-sighted Venusian. The warmer an object, the 'brighter' it looks in the eyes of the Ice Dweller. Furthermore, their eyes react to the smallest amount of light—with the disadvantage that bright light, e.g. like that of an electric lamp, can hurt them. Their eyes notice organisms that give off heat and instinctively file them as environmental phenomena (and not as a living beings). The Ice Dweller's hearing is also incredibly acute but doesn't perceive low-frequency sounds as well as the human ear. Ice Dwellers don't seem to have an olfactory sense. Instead, they can sense the slightest vibration in the ground, having a highly developed tactile sense in their legs and fingers to detect prey that moves beneath the ice's surface. To humans, their ability to sense electromagnetic waves and magnetic fields is almost incomprehensible. Ice Dwellers are capable of finding their bearings using their planet's magnetic field lines. They also seem to be able to 'hear' electromagnetic waves. We only use the word 'hear' for want of a better term since Ice Dwellers find it hard to convey what it feels like to perceive radio waves or sense magnetism.

Lifecycle

Ice Dwellers might be the species with the longest life span of the known Solar System. However, they don't spend their whole life in the 'crab stage'. The form humans call 'crab' is actually only the second stage of development in the lifecycle of these creatures. As a rule, they only mate once a year and their sex life is otherwise rather idle. Since they are hermaphrodites, usually both participants become 'pregnant' after mating. Five weeks after the coitus both parents create a nest of about 50 eggs in a lake of liquid ammonia or, if available, in a living prey the size of a pig.

First Stage: Larvae

After five more weeks, small, worm-like larvae hatch that don't look much like the Ice Dwellers yet. Staying in this stage for around five years, they grow into heavy worms about the length of an arm. Although they already possess the first signs of a childish mind, they act according to their instincts and, sadly, it is unavoidable that the larvae sometimes even eat each other. It is estimated that only three or four out of an average nest's 50 eggs mature into Ice Dwellers. Despite being taken care of by the Ice Dwellers, the rest of the larvae fall prey to predators, disease, or their own siblings, or don't even hatch at all. For Ice Dwellers, this does not cause any emotional distress since larvae aren't considered full-fledged individuals.

Second Stage: Ice Dwellers

According to the belief of the Ice Dwellers, the larvae receive a soul and become intelligent individuals only by digging an ice

cave for themselves and assuming their second, adult form within half a year. The Mercurian creatures consider bursting from the ice cocoon the actual birth. Right after the metamorphosis, they are still quite small, reaching their full size only after molting multiple times. Now and then, their exoskeletons can be found in the eternal ice. Immediately after leaving the larval stage, Ice Dwellers are sexually mature. Only after bringing the tribe an appropriate kill (usually a bison grub) are they deemed worthy of mating—which generally happens during the tenth year of their second stage of life. Then they are considered full-fledged members of their tribe. The second stage of an Ice Dweller lasts for around 40 to 50 years. Most of them die sooner though, due to accidents, disease, or predators. Once they reach 'old age', which only shows in the weakening of their physical abilities while the mind stays active, it is time for their transformation into the third and last developmental stage.

Third Stage: The Ancestors

( p. 117)

Out of 50 Ice Dwellers, only one reaches this final stage. Once the aging Ice Dweller gradually ceases to move, the other members of its tribe carry it to the 'graveyards' where they finally stop any physical activity. The body starts decomposing and the Ice Dweller might be considered dead—but behind that stage, a secret lies hidden that no human has figured out yet!

Concept of an Afterlife (p. 117)

During their cultural evolution, many intelligent species develop the idea that their ancestors are watching over them from the 'beyond'. For the Ice Dwellers, however, this is not just mere imagination—they seem to be certain of it! In their eyes, the end of their life as an 'adult Ice Dweller' constitutes the transition to another form of existence. Therefore, evolving into an Ancestor is considered to be another way of continuing life. This is why they differentiate between two kinds of death: the 'Dreaming Death', which describes the ancestral stage, and the 'Sleeping Death', which is actual death. These terms are quite similar and the concept of two different kinds of death might be truly incomprehensible for any Terrestrial observer.

Language

The Ice Dwellers' language is a so-called 'polysynthetic language' that forms long words building entire sentences by adding 'affixes' (word units) to one central term. On Earth, the languages of the Native Americans or some Siberian peoples are known to work in the same way. But apart from that, there are no similarities with human languages. Since Ice Dwellers have a completely different voice box, their words sound utterly different from humans. The voices of Ice Dwellers rather form whistling and howling sounds instead of actual 'speech'; however, it is possible to discern individual words and thus learn to understand their language. Mimicking words, however, works only marginally (in either direction). A human cannot flawlessly speak the language of the Ice Dwellers, and an Ice Dweller cannot perfectly imitate human words. Even so, with some practice imitating the other's

language would work well enough to be able to communicate. Ice Dwellers have no writing. They illustrate scenes from their legends or their daily life with drawings and reliefs carved into the ice but these pieces of art only contain illustrations and rarely any symbols similar to those in the desert varnish on the Hot Side (p. 56).

Their electromagnetic senses enable a few Ice Dwellers to communicate quasi-telepathically. To this end, one Ice Dweller concentrates on sending out electromagnetic waves over a short distance that other Ice Dwellers can receive and interpret. Ice Dwellers that reach the ancestral stage master this form of communication as part of their transformation. Among the 'living' Ice Dwellers, only a few are capable of this 'pseudo-telepathy'. Those few individuals that master this so-called 'voiceless speaking' in their second stage of development are destined to become necromancers (the Ice Dweller's priests) almost without exception.

Technology

The majority of the Ice Dweller species exists in a prehistoric stage of development. Due to the natural conditions on Mercury and the creatures' biological idiosyncrasies, it is far more difficult for them than it is for other species to leave this technological stage behind. Their most important resources are various vines, wooden bulbs, the chitin of their prey, as well as ice and stone. Nevertheless, they are capable of astounding technological accomplishments! Not only do they build weapons like spears, knives, and bows (the only weapons they know), but also vehicles. They use various kinds of sleds and carts as well since they do know about the wheel. Some technologically more advanced tribes even construct primitive sail wagons. The tribes alongside the ammonia oceans are aware of boats and use them for fishing. Most of the time, Ice Dwellers build their homes in the ice, creating complex and huge cave systems that can be closed with gates made of ice slabs. Building dwellings on the surface like igloos is rare but not unusual. Larger villages construct fortresses to defend against attacking predators. Metal rarely falls into the hands of Ice Dwellers. Most of the metals on the Dark Side rest many miles beneath the ice's surface or turn up among the things left behind by space-traveling races. Even if Ice Dwellers find such metal supplies, working with the material is immensely difficult since their kind is quite sensitive to heat.

Culture and Society

Society

The society of the Ice Dwellers has a fairly simple structure. Essentially, all adult members of the tribe are equal and the tribe's behavior is dictated by some sort of basic democracy. Epics passed down from eons ago, songs and anecdotes, as well as common sense inform their ethical principles. The ancestral collective functions as a living library providing the Ice Dwellers with a larger pool of songs and epics than would be possible with only an oral tradition. It is quite possible that this prevents the development of writing. Tribal elders and necromancers act as counselors; this does not make them superior to the others, though. An especially capable and charismatic member of the tribe could have a higher standing with its fellow Dwellers but that does not mean it has a

higher status as well. Chieftains and leaders are appointed only temporarily for a specific purpose. Since it is considered to be divine and immortal, only the counsel of the ancestral collective as conveyed by the necromancers is vaguely accepted as a command. The tribes are organized in small families. Ice Dwellers are always committed to lifelong relationships and 'adopt' young Ice Dwellers after they hatch from their metamorphosis to educate them. Before that, Ice Dwellers are not considered people, and biological parenthood is irrelevant.

Eternal Peace

Just like with any species, there are internal conflicts but they are usually settled peacefully in a ritualistic way. This is not just true within one tribe but also for conflicts between entire tribal communities. Ice Dwellers today only know of murder or even war from ancient legends. Thus, the Ice Dwellers might be the only intelligent species in the known Solar System that has actually achieved world peace. There is even a notion of an informal 'world government'—about every eleven Earth years (every 45 Mercurian years), the ancestral collective calls for a gathering of the delegates of all tribes. At this holy meeting they exchange information and stories, settle conflicts, and exchange resources. It is never possible for representatives of all tribes to come to these gatherings but an overwhelming number of them is always present.

Astronomy and Calculation of Time

Considering the primitiveness of their culture, Ice Dwellers have an incredible understanding of astronomy and the calculation of time since they were always able to observe the night sky. Stargazing and calculating time are an important part of the Ice Dwellers' culture. Interestingly, there are astronomical facts in their lore that the Ice Dwellers should not know. They even have a word for the 'sun' (although they could never see the sun in their world and live to tell of it) and know the exact number of moons of Earth, Mars, Jupiter, and Saturn (these last two numbers are considered ridiculously too large by 19th century Earth astronomers); they also know the orbital period of the legendary ninth planet, a world that is listed on old Martian maps of the Solar System but has not yet been found by human astronomers.

Subcultures

Below we will give a summary of the Ice Dwellers' three basic subcultures. It is important to note that unlike other intelligent species, Ice Dwellers do not name their tribes and see themselves as one people despite cultural differences between individual groups. Therefore, the tribes are labeled based on their way of life.

Herder Tribes

These 'most primitive' Ice Dweller tribes live semi-nomadically, following the big herds of bison grubs on their migration paths. Some of them do not just hunt the bison grub but have domesticated them for use as pack animals. The Ice Dwellers keep predators away from their herds as much as possible. They prefer to lead the tribe's herd on a way that commutes back and forth between different heat sources. There, the Herder Tribes put up stocks of

provisions serving as temporary villages as well. Multiple tribes share many of these storage depots. In some cases, the depots are even permanent since the tribes using them take turns so that one tribe only leaves once the next tribe has arrived. This way someone is always guarding the provisions.

Fisher Tribes

The Fisher Tribes live in solid villages on the shores of ammonia lakes and live from catching animals that live in the lakes—just like the fishermen on Earth that earn their living with fish. Ice Dwellers know how to fish and trawl, and construct long boats. The base materials of these are the shells of bison grubs that they obtain from the Herder Tribes. In return, the Fisher Tribes supply the herders with tools that they have trouble making themselves due to their semi-nomadic lifestyle.

Deep Tribes

Some tribes living inland settled at the heat sources and dug so deep into the ground that they now live in cave complexes far beneath the surface. They practice some sort of 'agriculture' by growing twines and mushrooms based on ammonia. Since they are carnivores they do not eat those themselves, of course, but use them to attract and fatten various worms that live underground. These worms are the main food source of the Deep Tribes. Additionally, they hunt in the ducts and caves for other prey. In their homes, the Deep Tribes craft remarkable ice sculptures and are considered great artists. Some tribes living close to the lava streams also know how to work metal using primitive casting techniques, which serve a ritual purpose. If the tribe desperately needs a metal weapon and the ancestral collective gives its blessing, a small group of select tribe members assembles. They then travel with thick cooling bags of ice and a ready-made casting mold to the lava streams down below, looking for an amount of liquid metal as conveyed by the ancestral collective. With great effort, they pour the metal into the mold forming a crude metal weapon. Since most of those involved in such a mission die, the Ice Dwellers have the greatest respect for these alien metal weapons.

Ice Dwellers and Humans

Since the two species haven't met yet and the adventure's outcome depends on the actions the player characters take, it is hard to say which direction a future contact between humans and Ice Dwellers might take. To Ice Dwellers, humans are an oddity that is difficult to understand. Their body heat glows so bright that to an Ice Dweller they appear as beings of pure light. Also, they are neither animal (meaning prey) nor Ice Dweller but capable of speech. Depending on the circumstances, curiosity or fear would win out. The ancestral collective recently noticed

the disturbances in the ether caused by human ether flyers approaching the planet and has started to remember similar incidents from the ancient past. It is quite possible that these memories soon determine the Ice Dwellers' behavior.

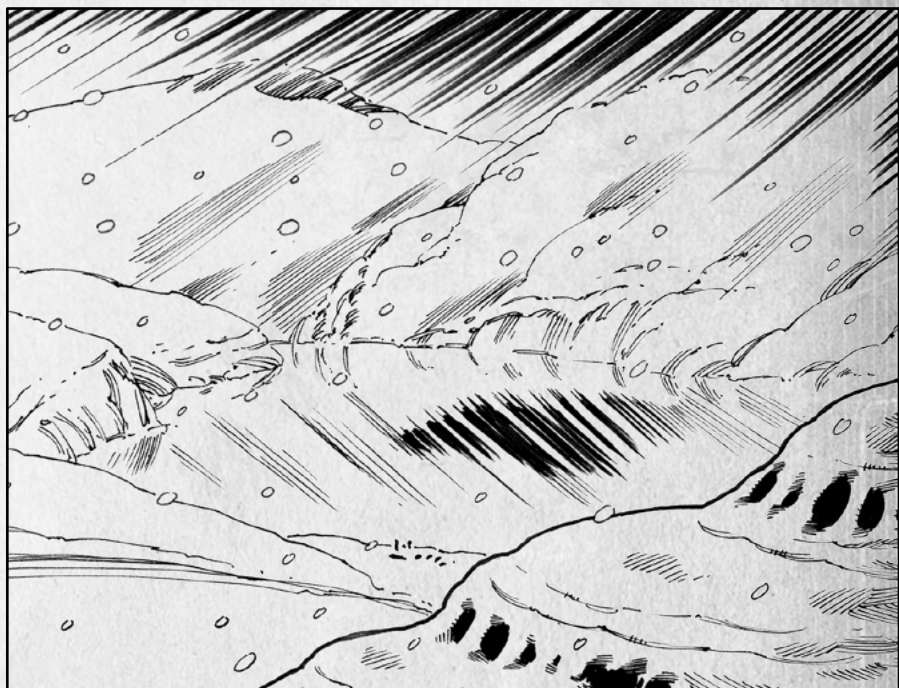
Humans probably tend to be scared of and disgusted by the Ice Dwellers, or simply consider them as animals. The Ice Dwellers are simply too bizarre and strange to be seen as similar to humans the way Martians or Venusians are. Many Earthmen already think Lizard-men are creepy—but an 'ugly' race dwelling in eternal darkness, that only feeds on meat, procreates in a parasitic way, knows things it shouldn't, and is governed by frozen brains sending telepathic messages from 'beyond the grave' would probably exceed the tolerable for a lot of humans. No matter how often the characters report how peaceful and gentle the Ice Dwellers are after meeting them, many eloquent zealots will still portray them as stygian monsters.

Points of Interest on the Dark Side

The Cyan Lake

Now and then, there are vast sheets of ice covering underground lakes on the planet's dark side. Even at lower temperatures that is not necessarily a gigantic block of ice since in some places underground heat sources keep the elements liquid. Bizarre ecosystems have developed here, secluded from the rest of the planet.

One specific lake of a strikingly cyan color can thus be a lifesaver for stranded members of an expedition. It is filled with various kinds of algae with thick strands covering every inch below the ice, eager to collect the trickle of starlight. Once the thick layer of ice is cracked, harvesting this peculiar plant is easy. Those that do not mind the awful taste can feast on copious amounts of this surprisingly nourishing plant.



It is however unknown what else hides in the dark depths of the lake. The very limited habitat is fully occupied, though: swarms of transparent shellfish lurk on crowded colonies of seashells, and much more.

The Empress Wall

One peculiar miracle of nature stands at the junction between the Heath and the Border Mountains. As if built by giants, a tall, vertical wall of ice stretches just under 105 miles, or 170 km, wide and rises on average 2.5 miles, or 4 km, high. For some mysterious reason no rocky mountains folded in this place: instead, the glacier starts directly beyond the heath. The Wall does not run perfectly straight but with slight ripples that aren't immediately apparent due to its enormous length. It rather gives the illusion of a perfectly straight wall. On most days, the edge of this incredible wall of ice rises above the clouds. It seems like where the Empress Wall starts, the planet ends. Numerous theories suspect an artificial origin for the gigantic wall of ice. A closer inspection, however, suggests that it formed naturally. Some believe that the gigantic edge of the glacier could be unstable and might collapse within a few decades. No one has conquered the Empress Wall yet. The person accomplishing this miracle might earn an eternal place among the gods of mountaineers.

The Secret Laboratory

The Kazakh steppe is vast and the government's control over its people is worse than lax. Still, when the Tsar's police task force almost tracked down the scientist *Fjodor Akhmatov*, he knew he had to take radical measures to get rid of his persistent pursuers and continue his illegal research unhindered. Filled to the brim, his ether flyer almost crash-landed on the Dark Side of Mercury. He and his loyal servant *Maxim* were lucky to be able to build their makeshift encampment in the cave system close-by. After a while, they got used to their new home and started their research again.

In the Russian's underground lab, he toys around with the innermost powers of the planet and conducts dangerous research into its geothermal energies. Drilling, he tries to affect and utilize the underground magma streams. The paranoid researcher's achievements are quite impressive: Deep in the deadly, cold ice, he made himself at home in his fortress while gas warmed by the ground runs through the heating pipes. The inexhaustible energy reserves of the depths combined with his steam-powered digging machines enabled him to expand his lonely home, adding countless passageways and chambers. Molten chemicals fill hydraulic systems and facilitate various remote controlled, automated processes that achieve superhuman feats.

This no longer serves as an end in itself but has become a necessity for survival. Over time, several failed experiments flooded entire sections with liquid rock, filled others with toxic gasses or crushed them after he caused the planet's surface to move. It also seems as if *Fjodor*'s mind drastically suffered from exposure to too much ammonia gas. He barely seems to notice the earthquakes happening more and more frequently close to his lab. It is almost as if he is so absorbed in handling the countless levers that open and close the steel gates in the heart of his laboratory, that control machines remotely and that direct the flow of steam that returning to reality seems to be difficult for him.

The underground lab is easy to find on the surface since several pipes regularly emit steam to relieve pressure. Maxim suspects that he and *Fjodor* will perish on Mercury if they cannot find a way to return to Earth. Among other things, they are running out of the supplies that they brought. However, he does not dare risk another temper tantrum by his master by making a suggestion on that front and desperately needs help from someone else.

The Heart of the Darkness

"Every period of time is a sphinx that throws itself into the abyss as its riddle has been solved."

— Heinrich Heine

Aside from scientific facts, core samples, and data, all too cryptic and grotesque reports from Mercury frequently reach Earth as well. Experts write these descriptions and speculations off as figments, signs of beginning madness, or the symptoms of a progressing Jotun poisoning (see p. 115). The strangest of these rumors known so far refer to a place that is commonly known as the *Time Prison*.

The unusual name belongs to a location close to the Cold Pole, the place on the Dark Side that is farthest away from the sun and where the temperatures supposedly drop rapidly from one moment to the next. Even Jotun blubber (p. 115) reportedly loses its effect so no one could quite reach the place. However, it is possible to watch the air from afar: all gasses first liquefy and then slowly solidify into glassy crystals, even the starlight supposedly drips from the sky like honey. Some reports stretch the credibility of these stories even further by mentioning golden cones of frozen light originating from stars that stopped glowing in the firmament a long time ago—and in between, the faint reflection of a fifth planet between Earth and Jupiter.

The most baffling phenomenon can only be observed when leaving the location: While for the exploration teams inside only a few hours might pass, for those that stayed outside entire days went by. The downright poetic assumption that it might be so cold in that place that even time freezes caused many to shake their heads within the scientific community. Physicists react with similar skepticism when dealing with these statements. In their view, absolute zero is merely a hypothetical state that cannot exist in nature.

From this ball of yarn comes another peculiarity attracting a lot more interest by respectable scientists. It tells of a crater illuminated only by faint starlight, which vapors of noble gasses refract like a kaleidoscope. The crater itself is supposed to be a huge, bottomless pit that might be the source of those mysterious storms in Kelvin's Land since terrible gusts of wind rise up—frequently like the breath of a sleeping giant—while the air crackles with electricity.

The tales also mention a dim light appearing in the depths at the same time as weird mechanical noises are heard, only to disappear again. Some scientists cautiously point out that a machine of some kind could surely work with ideal efficiency for all eternity at these low temperatures.

The Cathedrals of the Cold

"Where God builds a church, the devil builds a chapel."

— German proverb

Refuges to recover from the harsh conditions, the cold, and the exhausting journey are rare on the Dark Side. If providence is on your side, you will discover a small magma lake bubbling close enough under the surface to raise the temperature in its vicinity to a bearable level. However, suddenly erupting geysers heavily tarnish the picnic feeling, even for an accomplished gentleman.

This makes the rumors of underground caverns with a merely frigid climate and seamless domes of dry ice of fascinating craftsmanship sound all the more alluring. Instead of being the legacy of an ancient civilization, these caves of at least 30 feet, or 10 meters, are the work of builders very much alive. These microorganisms exist in isolated colonies everywhere on the Dark Side but are still quite rare. They nestle in glaciers of especially pure dry ice feasting on the carbon that they extract from carbon dioxide. They simply excrete the excess oxygen. This creates small bubbles of oxygen that slowly expand the bigger the population gets. Just before the caverns become unstable, they abandon their feeding ground, leaving behind bubbles that become a huge danger especially for unsuspecting travelers stepping on those fragile marvels.

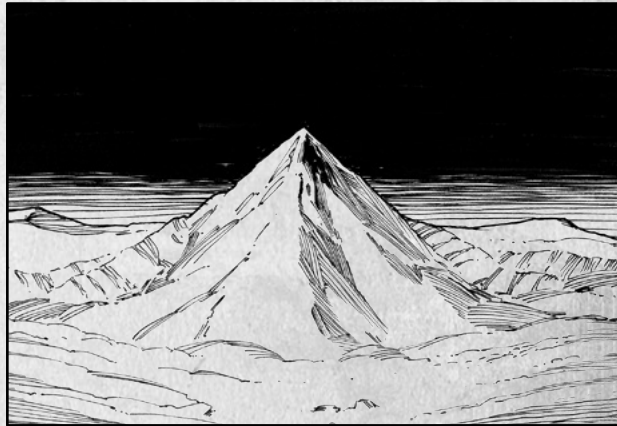
Even—or especially—inhabited caves are potential deathtraps. Now and then, underground entrances emerge through which the organisms eventually disseminate. An explorer squeezing through these narrow tunnels is led into a paradise of light, warmth, and pure oxygen since the creatures adorning the walls in hypnotic patterns are slightly photoactive and thermoactive. These caves could be perfect shelters if humans did not consist of delicious carbon as well.

The Crystal Forest

Even though Mercury's ice desert appears uninhabited, there are structures on the surface whose delicate branching is suspiciously reminiscent of plants. It is yet unknown if these are the ice-encrusted remnants of lifeforms that died long ago or if chemicals formed confusing patterns in their frozen state. Those seeing this natural phenomenon for the first time are inevitably reminded of an herbaceous forest of pure ice crystals which grows into a huge hill. Depending on the predominant material, the glassy structure is of a color that can be quite different from the ubiquitously drifting snow. When the snow falls through the forest's crystalline domes, the contrast results in a play of colors of breathtaking beauty and looks like fine veins running through the body of a giant creature.

Sometimes, the Crystal Forest is razor-sharp and as hard as diamond, other times it's rotten and brittle and crumbles into fine snow at a mere touch. A rough rule of thumb would be that with growing cold it becomes more solid, while increasing age makes it weaker. The only problem is that it is effectively impossible to estimate the age of a crystal mound without touching it. That is why the big domes of the Crystal Forest generally have a stable outer shell while the structures on the inside gradually degrade. Those that are able to enter a large mound through a natural or artificial entrance are highly likely to find an iridescent cave that could protect them from the worst atmospheric conditions.

Sometimes the crystalline residues form labyrinthine tunnels. Unfortunately, those aren't just a perfect safe haven for humans but also for all kinds of creatures native to the Dark Side. Often one might stumble across the exits of caves inhabited by Jotun ice worms. Being snowbound in a crystal dome without any exits is a more mundane danger: especially large and colorful structures have a higher risk of being strained and collapsing under slight pressure.



Mount Edison (p. 116)

In 1879, the great explorer of Mercury Sir Basil Throckmorton undertook his third expedition on the World River. For the first time, he wanted to orbit the entire planet and explore the Twilight Zone—in the process, he frequently took small detours to the Dark Side once he caught sight of an interesting landscape on his aerial flyer. One such opportunity arose a good 2,000 miles, or 3,200 kilometers, away from Princess Christiana Station at around two thirds of the way between the Station and Mercury's South Pole. There he glimpsed the silhouette of a mountain rising like a huge talon and forming some sort of barrier against the glaciers of the Dark Side.

This strange mountain fascinated Sir Throckmorton so much that he navigated his aerial flyer towards the eternal darkness of the Dark Side. He followed the course of a tributary stream of the World River and after 12 miles, or 20 kilometers, he reached the entrance of a narrow and deep ravine leading directly to the mountain. The explorer navigated his ship for another 40 miles, or 65 kilometers, through the icy darkness until the ravine opened up at the foot of the mountain. Downdrafts made it harder to navigate the aerial flyer but Throckmorton still managed to climb the mountain's wall. Gigantic icicles, in parts several feet in diameter, showed that there once must have been a waterfall that froze while flowing down.

The explorer wished to take a closer look at that splendor and instructed his crew to light the big lamp on the ship's roof. With a large lens amplifying the filament's light, the lamp could focus it precisely—while also creating heat so strong that Sir Throckmorton realized he only had little time to observe the waterfall before the ice started to melt. Magnificent colorful reflections and light effects were the reward for his efforts but the sudden change in temperature caused more turbulence that shook the ship. In hindsight, this could be considered a stroke of luck since the lamp's cone of light swayed across the mountain's wall instead of remaining in one spot.

Later, Sir Throckmorton and his crew swore that the mountainside beyond the ice was jet-black and seemed to virtually absorb the light. On top of that, they reported that the mountain seemed to consist of black stone slabs lying on top of each other like bricks—as if the mountain had been built artificially. Unfortunately, there wasn't time for further exploration since the lamp could no longer withstand the huge differences in temperature: It exploded and set the ship on fire killing a crew member. Sir Throckmorton headed back to the World River and continued his expedition—he never returned to Mount Edison. Because of the long distance from Princess Christiana Station, there hasn't been any other expedition to the mountain either.

Nevertheless, his report caught some attention in sophisticated salons, universities, and governments on Earth raising a certain interest in the mountain. While some believe in the mountain's artificial nature as suggested by Sir Throckmorton's report and ascribe its construction to the Phaetonians, others believe that the famous explorer fell victim to a mirage, misjudging natural geological processes. Finding an answer to this question must wait since the high cost of an expedition and the great distance has so far discouraged every institution.

One of the greatest proponents of Mount Edison's artificial origin is the French scientist *Dr. Jacques Le Durieux* who in 1887 calculated with a mechanical abacus of his invention that Mercury's nutation (p. 7) has a heavy impact on the mountain as well: According to his calculations, around every 300 years the nodding causes the mountaintop to no longer lie in the eternal cold of the Dark Side, allowing the sun to shine upon it through the ravine. Many colleagues doubt the calculations of Dr. Le Durieux but he views them as evidence that the mountain must be artificial—why else would its peak be in a place that the sun could reach?

Stoker Hill

While the main threats to humans on the Dark Side are the cold, the darkness, and the toxic nature, their technical devices face a different sort of danger. One of the most insidious is *Stoker Hill*. The tallest known table mountain of the Dry Ice Zone at three miles, or five kilometers, in diameter and with a height of 1.2 miles, or two kilometers, it is surrounded by a wide plain and can hardly be overlooked.

The first adventurer to fall victim to his own curiosity was *Benjamin Stoker*, one of Throckmorton's companions. During a halt, Stoker and a few other men took a trip to this place. They took a steam-powered snowplow with them that Stoker had used all his savings to purchase for the expedition. Having reached the foot of the mountain, the men hesitated though, since this small expedition went against Throckmorton's explicit wishes. At that, Stoker went on alone using his snowplow. Once he arrived at the plateau, his snowplow went slower and slower until the machine stopped altogether, even though the boiler worked at full steam. Unwilling to leave his investment behind, Stoker desperately tried

to free the plow from the invisible grasp that held it immobile, until his worried colleagues found him frozen to death.

They returned to the base camp empty-handed, having lost all metallic items. The men told of an eerie hum, electrical discharges on the mountain and a massive magnetic force that got stronger the closer they got to the center. Many of them complained about feeling uneasy, disoriented, and confused. Hence, people are skeptical of their supposed sighting of unnatural geometric patterns on the plateau.

19th century physics only knows about the *loss* of magnetic properties under extreme cold, which is why this 'cryomagnetism' is an unsolved scientific mystery. Throckmorton eventually named the mountain after his disobedient subordinate.

Two Paths into the Ice

"Styx, Acheron, Lethe, Cocytus, Phlegethon, and Eridanus: poison, fire, and death. These are the rivers of the underworld; these are the rivers of heaven: you find them in the darkness of Mercury."

— Ulrich von Wilamowitz-Moellendorff,
Inscriptiones Graecae, 1888

The low temperature and impassable terrain are the main obstacles standing in the way of quick travel. In some places, rivers break through the ice that do not carry water but fiery lava or deadly chemicals.

A journey along the riverside of *Magmoloeh* that meanders from Kelvin's Land almost through the entire Dry Ice Zone is a means to cope with the coldest of temperatures. The river *Mercuryx* consists of ammonia so even a ship could navigate on it. Its source lies deep in the Dry Ice Zone and it evaporates shortly before reaching the Ice Sheath.

The meandering rivers don't just prevent a direct travel route; they also harbor grave dangers: While clumping together and clotting in cold regions, in warmer areas the ammonia evaporates into poisonous clouds. Close to lava streams, however, the corridor with temperatures bearable for humans is very narrow. Of course, neither river cares about the wildlife of the Dark Side and both often run directly through the territories of the Jotun ice worms and other creatures.



The Hot Side

The Forbidding Desert

Width: 250 miles / 400 km

Temperature: 105°F – 210°F / 40°C – 100°C

The Semi-Deserts of the Transition Zone

"Everyone needs a little bit of desert."

— Sven Hedin

Starting heatwards from the Twilight Zone, the transition to the Hot Side of the Planet can take quite different forms depending on the region. There is a wide variety of landscapes that stretch several miles into the Forbidding Desert. The violent cyclones of the Hot Side often abate into mere dry, hot winds when reaching this zone. However, if Mercury reaches its maximum proximity to the Sun on its orbit, the storms extend into the desert.

The Savannas of the Eternal Dawn

Large parts of Mercury unfurling beyond the jungles of the Twilight Zone offer a spectacular view: A small strip of savanna is bathed by the red light of an eternal sunset that is unparalleled in beauty. More than one group of researchers has spent days in this area watching this marvel of nature. The dashing soldiers of the Princess Christiana Station watch deem the Savannas an excellent destination to which to bring female visitors to the planet, as it is supposed to be a promising preparation for an 'exploration mission', as they call it jokingly (meaning their objective is the underskirt of their female companion, not the planet).

The temperatures are high and a dry wind blows across the land. Apart from the vegetation of the steppeland, the light of the setting sun exposes delicate tall trees, some of which grow up to 330 ft., or 100 m high, protruding from the landscape at regular intervals. Among sods and dust, several undemanding species of monophyllos plants cover the ground. Plants resembling the Jerusalem thorn form patches of thorn savannas that stretch for several miles and are quite unpleasant to traverse. Tuber plants growing in the soil make for tolerable food and water storage, although some sorts are poisonous.

The Mercury Thornwoods

In some areas, the thick jungle of the left bank of the World River merges right into the Hot Side of Mercury. With less and less rainfall and an ever higher sun, the woods change into a dry

and thorny, almost impenetrable thicket. Because of their impenetrability, these thorn woods are still largely unexplored; it is supposed, however, that they offer a habitat for several resilient life forms. In some places, the dry wood appears to be more dead than alive, and insects have chosen the dead branches and roots as their breeding ground. Explorers report nests the size of a hill lying between the thickets, resembling anthills or termite mounds. They are inhabited by primeval, state-building insects, which sometimes, as if following an inaudible command, overrun a creature and gnaw off its flesh, leaving nothing but its bones. Spider-like creatures with fist-sized bodies have been spotted, too, as well as their metallic glistening nets. The largest of these nets ever discovered had a diameter of almost ten feet, three meters. The nets are razor-sharp, spanned tightly between the branches, and consist of a sticky silicon compound. While trying to break free, with every movement the trapped victims cause themselves more wounds until they bleed to death. Equally remarkable are the thorny, vine-like plants covered with metallic and glossy structures which are also assumed to be lifeforms subsisting on a silicon basis. A gel can be gained from this plant that has proven to be effective as sun protection (p. 114), however, possible side effects have yet to be examined. The silver gleam of skin creamed with the gel is reminiscent of the skin of mechanical men—a fact that has petrified more the one visitor to Mercury.

The Fog Deserts along the World River

The transition zones, where the World River is wide and meanders slowly along the heatwards edge of the Twilight Zone, sometimes form fog deserts. Rising up from the World River, the eponymous, eerie fog regularly gathers in these areas in the red twilight. Other precipitation is almost absent.

Some single-leafed plants can use the condensing fog as a water supply, thus resembling the Welwitschia plant endemic to Angola and Namibia. With a diameter of several feet, however, the Mercurian variants are much larger—and significantly uglier! The Terrestrial plant was already said to be "*without a doubt the most amazing plant that has ever been brought into this country, and also one of the ugliest*", according to its discoverer, the Austrian Friedrich Welwitsch. For this reason, the local British scientists jokingly named the Mercurian Welwitschia after the not-that-pretty emperor of Austria: *Franz Joseph leaf*.

The fog deserts are also inhabited by many primitive insects that can absorb the humidity from the fog with their body parts, such as their legs or their antennae, and thus supply themselves with water standing upside down.

The Desert Belt

"So close to the water and yet so poor in water."

— Alexander von Humboldt

The region where the sun burns down on the surface on Mercury, fully and permanently, and the temperature rises to more than 104°F, or 40°C, is referred to as the actual *Forbidding Desert*. The

Hot
Side

first half of the 250 miles, or 400 km, wide strip is covered with deserts ruled by temperatures comparable to the hottest Terrestrial deserts (approx. 160°F / 70°C). Yet there are some differences. First, there are frequent storms as the Hot Side of Mercury is roamed by an enormous cyclone that rises in intensity on the heatward edge. Even if there is no storm raging above the traveler, the sky is constantly painted red from the sand whirled up in other parts of the deserts. And second, the sun burns down mercilessly on the ground, preventing the unbearable temperatures from ever going down. It is thus impossible to travel during the cool night, nor is there any dew to be found in the morning or similar possibilities that could allow for natural survival.

Instead, there are some oases that lie permanently in the shadows of rock formations and mountains due to the stationary position of the sun and are never directly exposed to it. Furthermore, the lower gravity helps the traveler tire less quickly than he would in a comparable environment on Earth.

Rock or Gravel Deserts

The Mercurian traveler distinguishes different kinds of deserts by their degree of their erosion and the geological circumstances of the environment. Rock and gravel deserts can be found around hills and mountains. Their surface is covered with rubble and rock or gravel, the latter often found on the edge of sand deserts. Isolated patches of resistant thistles grow on the barren ground and some of the bizarre creatures of the Hot Side roam about the area. The often yellowish or reddish debris of the rock deserts is so abundant and dense that these regions can hardly be travelled through with land vehicles; the gravel deserts, however, are amenable to tracked vehicles, while automobiles will have their difficulties.

Past expeditions have painstakingly cleared paths between some of the oases and marked them with stone heaps at the roadside. Oases are comparably common in the rock deserts. In natural valleys, behind rock formations and small mountains, in ditches and hollows, permanently shaded areas can be found. These often host a remarkable collection of life forms consisting of tubers, single-leafed plants, insects, and earthworms. In some rare cases, deep canyons carry surface water from otherwise underground branches of the World River.

The Desert Varnish

( p. 117)

It is notable that many rocks of the rock deserts of Mercury are covered with the so-called 'desert varnish', a crust of iron, manganese, and other, sometimes very valuable metals. This phenomenon, which is also known from Earth, occurs quite commonly in the partly windless deserts of Mercury. The varnish forms when the appropriate metallic solutions dissolve from the rock by chemical processes that have yet to be researched and cover the rock with a film whose color depends on the metal. For a single treasure hunter, the rocks present an interesting collection of precious metals, although in quantities too small to be used for industrial purposes.

Apart from its worth as a resource, the desert varnish is of interest to scientists, for it has been discovered that the composition of the deposited metals is often contrary to that of the planetary crust of Mercury, showing higher percentages of certain substances than would seem plausible. Some eager scientists developed theories about silicon bacteria which are either able to extract precious metals from deep underground, carrying them up against Mercury's low gravity, or produce them as 'by-products' of vaguely-defined processes. Opponents of these theories mock these 'alchemistic dreams about the making of gold', while their supporters are currently working on provable models, studying the bacteria in the laboratories of Princess Christiana Station. However, the specimens usually die when transferred into the cool Twilight Zone, making any form of study quite difficult.

Earth Deserts as a Comparison

Desert	Region	Type	Max. Temperature
Sahara	North Africa	Rock, Gravel or Sand Desert	162°F / 70°C
Australian Outback	Australia	diverse	162°F / 70°C
Arabian Deserts	Arabia	Sand Deserts	140°F / 60°C
Gobi	Asia	Rock and Sand Desert	140°F / 60°C
Kalahari	South Africa	Sand Desert	104°F / 40 °C
Takla Makan	Asia	Sand Desert	144°F / 62°C
Mojave	North America	Sand Desert	131°F / 55°C
Karakum	Asia	Sand Desert	95°F / 35°C
Thar	India	Semi and Sand Desert	122°F / 50°C
Namib	Western Africa	Fog Desert	131°F / 55°C
Atacama	South America	Fog Desert	95°F / 35°C

Sand Deserts

The largest part of the Desert Belt consists of classic sand deserts dominated by quartz sand, which were created over time by Mercury's winds. The living conditions are even more merciless than in the rock deserts: aside from the sand storms, there are much fewer oases because there are fewer rock outcroppings that could provide shade. Very large dunes can be found here, some securely rooted, while others are wandering dunes.

Occasionally the many miles long dunes form temporary or even stable corridors, in which long distances can be covered in shadow. If the sand is rigid, sand deserts can be driven on relatively well; elsewhere, especially in deep and soft sands, it is rather toilsome. Tracks are erased very quickly by the wind and as such are nearly impossible to follow.

Sand Storms

Due to a permanent cyclone above its Hot Side, Mercury's deserts frequently face sand storms of gigantic proportions. The Black Storms are quite infamous, whirling up thousands upon thousands of tons of sand, capable of blacking out the sky for days or even weeks at a time. They are the only natural phenomenon which grants the otherwise permanently sunlit Hot Side some amount of shadow, even if only temporarily. Those who believe that traveling under such a sandstorm is easier or more practical than under the burning sun will be quickly convinced that quite the opposite is true: Whole expeditions have been buried under the sand to cruelly suffocate. Among prospectors and soldiers, many stories about these massive storms are told. Some claim to have seen life forms which can gnaw a body to its bones in a matter of minutes. Others tell tales about long-lost cities of an ancient, alien race which lie buried underneath thousands upon thousands of tons of sand, briefly uncovered by a Black Storm only to be buried again by the next one.

Salt Basins

Salt basins occur on Mercury in some valleys among large mountains and rock formations. They appear foremost in the Forbidding Desert, but also across the entire Hot Side up into the Tin and the Lead Zones. These valleys have no natural drains. They form barely passable swamps out of viscous brine under a crust of salt or even large, clay-like surfaces. Due to Mercury's nutation, some salt deserts exist even near the Twilight belt, which occasionally receive rainfall. This is especially dangerous for travellers, since without drainage these wadis quickly flood, drowning the unlucky in the resulting muddy salt lakes or swamps. On the other hand, there are also valuable accumulations of molten Mercury salts, which are in high demand as raw material with many possible applications (p. 59).

The Transition into the Boiling Wasteland

"One who ventures into the desert and returns, is no longer the same."

— Arabian proverb

It remains possible to venture deep into the desert belt despite the extreme conditions by making good use of the sheltered oases. However, after crossing at most half of the 250 miles, or 400 kilometers, breadth of the Forbidding Desert, it becomes inconceivable to go on. The heat becomes so unbearable that without cooling and shielding from the unrelenting sun it is only a matter of a very short time before dehydration or heat stroke claim lives. The storms are growing ever stronger and are hot enough to burn the respiratory tract and cause severe skin burns. Those unfortunate enough to find themselves stranded in the hottest areas of this region, after a catastrophic event such as an airship crash or the breakdown of a cooled transport, are literally boiled alive. The landscape is monotonous and mainly flat. Some rock formations offer shadow and temperatures compatible with human life. As such it is possible to persevere in an oasis's protection, at least for a while until help arrives. Liquids start to vaporize, at first alcohol at 172°F, or 78 °C, and eventually water at 212°F, or 100 °C. This is where the *Boiling Wasteland* begins.

The Boiling Wasteland

Width: 620 miles / 1000 km

Temperature: 212 to 450°F / 100 to 232°C

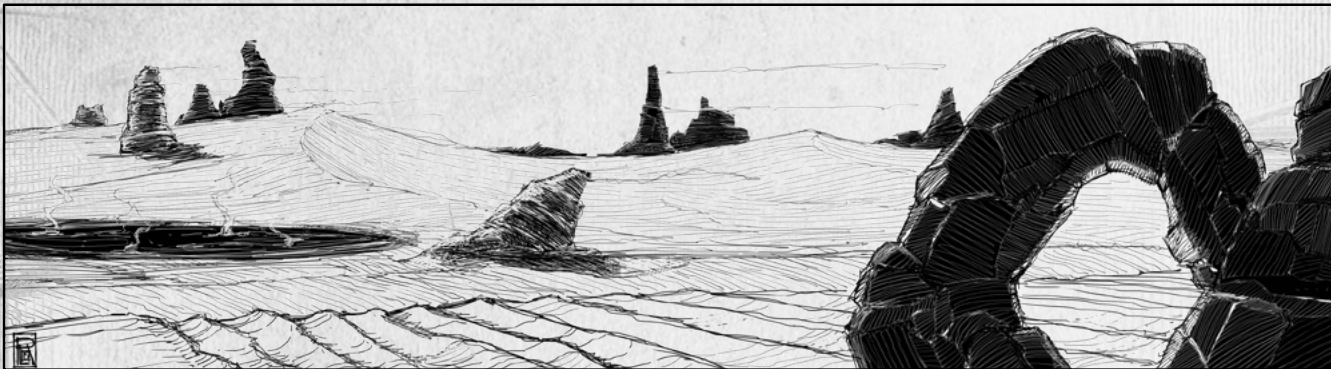
Geographical Extent and Layout

"Should a man's voyage to other celestial bodies only ever confirm how pleasant it is on our Earth, space travel will have fulfilled one of its most important purposes."

— Jules Verne

Researchers speak of the *Boiling Wasteland* in that zone where water starts to boil on Mercury. Survival for Terrestrial life is impossible without protective shielding and cooling. The body liquids vaporize and fat starts to sizzle. The Boiling Wasteland is a steaming, flat surface with very few landmarks that stretches over a strip of 620 miles, or 1000 kilometers in width. Bubbling hot brimstone lakes have formed in many places, while elsewhere other hard materials self-combust. In many places, the layer of sand has been baked to glass. While the view of a glassy plain is breathtaking, it can really only be appreciated from the protection of a cooled vehicle or an ether flyer. Above the Wasteland, burning fiery winds constantly blow. The Wasteland ends by definition at temperatures when tin starts to melt, for this purpose soldiers and researchers of Princess Christiana Station have developed a simple method of determination. They noticed that *Bradbury's original*

Hot Side



quality paper, the local researchers' office paper, spontaneously combusts exactly between 450°F and 451°F, or 232 °C and 233 °C, which marks the transition to the *Tin Zone*. As such, a reliable method to determine when and where the Tin Zone begins is to lower a notepad from a gunboat down to the surface.

dimensions and burning hot temperatures. Travelers who get caught in one of those storms only have a chance of survival with the most robust and heat shielded equipment. Those fire storms sweep across the surface at high speeds and only give a short warning through an intensifying red sky.

Phenomena and Life in the Wasteland

"No matter how far humans progress in their scientific understanding, they will always remain marveling children in the face of the infinite wealth and continual change within nature, and will always have to be ready for new surprises."

— Max Planck

Steam Geysers

Here, where even underground running water slowly starts to boil, a lot of geysers can be found on the surface. Terrestrial geysers are known from Iceland or in the recently-created Yellowstone National Park of the USA. While geysers there will regularly spout columns of steam up to 200 feet, or 60 meters high, on Mercury the impressive and at the same time dangerous spectacle becomes a real threat to flyers, with geysers reaching heights of hundreds of meters, partly because of the lower gravity, and partly because of the much more intense heat.

Underground Water Channels

The existence of geysers points to the fact that there have to be subterranean water channels, stretching all the way from the World River, running below the Forbidding Desert and the Boiling Wasteland, possibly even reaching deeper into the Hot Side, far below the planet's surface. So far no such heatwards channels have been discovered, but even one channel of sufficient size could serve as subterranean transportation route below the extremely hot surface. *The Electric Triumvirate* has already undertaken surveying with the aim of finding such routes and plans to use them for resource transportation.

Fire Storms

While the permanent cyclone above Mercury's Hot Side does not cover the Wasteland in its entirety, it often takes on enormous

Crater Lakes and Silicon-based Life

Mercury's surface is covered in craters from meteor impacts, some as large as hundreds of miles in diameter. Within the Boiling Wasteland these craters often feature a collection of molten matter such as lithium or the metalloid selenium. From the center of the Wasteland strip on, they are often liquefied to shiny black or silver pools. Near such lakes it is especially easy to find silicon-based lifeforms, which seemingly subsist at least partially on the lakes' contents, just like terrestrial desert-dwelling animals do on the water of oases. More about these life forms can be found on page 62.

The Names of Mercury's Craters

It has become established that during geological mapping, Mercury's craters are named after the explorer's nation's greatest artists. Dating back to Throckmorton's expedition, many craters bear great English names such as Keats, Byron, Dickens, or Shakespeare. Since the Brontë sisters have joined them, even female writers' names can be found among them. This feat has been made possible by the determination of the few women of Princess Christiana Station. However, the British are rightly bothered by the fact that some of the biggest craters have been discovered by the German Asseberg expedition as well as some Russian ether flyers: Beethoven, Goethe, Bach, Dürer, Wagner, and Heine are crater names just as well as Dostoyevsky, Pushkin, Tchaikovsky, Mussorgsky, and Tolstoy.

The Tin Zone

Width: 620 miles / 1,000 km
Temperature: 450 to 622°F / 232 to 328°C

"Reality delivers us facts so romantic, that not even our imagination can add to it."

— Jules Verne

The borders of this region are defined by tin's melting point of 450°F, or 232 °C, on the "cold" side, and lead's melting point of 622°F, or 328 °C, on the "hot" side. Within this zone tin melts and often flows into small lakes, forms a liquid film over rocks, or coagulates to a solid mass in the shadows. The sight of such bizarre shapes and filigreed metal constructs would be wonderful and enthralling were it not for the fact that the surface is hot enough that any Terrestrial life would die within a very short timeframe. Add to this the toxic phosphor fumes floating in swaths through the air, and it becomes very clear why this region is extremely hard to travel through. Even ether flyers at colder heights are often confronted with fiery winds. Liftwood is at risk of bursting into flames at a temperature of 572°F, or 300 °C, and its life expectancy is dramatically shortened. Ground vehicles have to be heavily shielded and strongly cooled, otherwise their crew would have less than a snowball's chance in Hell to survive. Common fuels like coal or diesel quickly ignite spontaneously at these temperatures and can cause explosions or fires in the vehicle's interior. However, solar power is a great energy source here.

The Lead Zone

Width: 930 miles / 1,500 km circle radius
Temperature: 622 to 932°F / 328 to 500 °C

The Outer Lead Zone

"Would justice be applied in all its rigor, Earth would soon resemble Mercury's hell of lead."

— Friedrich Nietzsche

We owe it to Throckmorton's and Asseberg's expeditions that we have impressions of the Lead Zone. Similar to the Tin Zone, the area around Mercury's Hot Pole derives its name and definition from its characteristic melting of lead into liquid lakes. The toxic

air is filled with swaths of gaseous quicksilver. Even asphalt and machine oil instantly burst into flames. However, it is of little consequence considering temperatures of up to 750°F, or 400°C, basically ruling out any ground-based travel.

The Hot Pole

"Perhaps this planet is just another planet's hell."

— Sir Arthur Choat, Princess Christiana Station

Ultimately, this area is the most hostile environment known to men. No one has ever travelled on its surface, as the area is permanently covered by an immense cyclone, which blows over the Hot Side and resembles a blazing firestorm. Even most rocks are melting in the extreme temperatures, twisting and bending to such bizarre forms that even the hardest explorers would find themselves shivering, reminded of Hell's terrifying horrors.

The pole is covered in clouds of brimstone, phosphorus, and quicksilver. Even rocks finding their way here from the planet's depths often catch fire within a very short time. Many metals melt, all others heat up to the point where they are so unbearably hot that no isolation or shielding could offer enough protection to make an approach by man or machine possible. Even from the ether it is very difficult to explore this region, only in the rarest of moments does the ever-raging cyclone allow a view of what lies beneath, on the Hot Pole's surface.

Treasures of the Hot Side

"Endless rivers of molten metals, the eternal song of hammer mills, everlasting, striking sparks. Rails, ships, and cannons. All these are my gifts to the German Empire, Your Majesty. You want more of this? Then I have only one word for you: Mercury."

— Alfred Krupp, Villa Hügel, 1883

The Hot Side has vast stores of metals, which can often be found in liquid state, because of the heat. Even though most of them are not valuable materials, the sheer quantities are more than enough to dominate the world market and bring any competition to ruin. The great heat of the sun-facing side liquefies metals and gathers them in basins and craters to form lakes.

Salts

"Of all jewels, salt is the most precious which the Earth gives us."

— Justus von Liebig

Mercury Table Salt

It has recently become a fashionable, extravagant luxury in the Empire to season a meal with exquisite yellow or red Mercury table salt. All sorts of curative effects are also attributed to it. Those who can afford the steep prices can leave quite the impression as hosts. Rumor has it that the Queen always enjoys her daily breakfast egg with Mercury table salt and even attributes her vigorous health to it.

Hot Side

Heat Storage for the Dark Side

Researchers are currently working on methods exploiting the Hot Side's heat to explore the Dark Side. Some acetate salts, which can be found in some salt lakes in large and liquid quantities, exhibit a strong exothermal recrystallization: they release energy as heat when a cold environment makes them assume a solid form again. If taken to the Dark Side in the liquid state, they could be used to heat the interior of a vehicle or even clothing (p. 114).

Application in Ether Space Travel

Great potential lies in the domain of thermal storage. The sun's heat could be collected by solar mirrors in ether space travel and stored for later use. Some salts are capable of storing the heat and run an ether flyer's steam boiler long after losing direct sunlight. Using such thermal storage as 'batteries' seems particularly promising for expeditions beyond the Asteroid Belt.

Further Potential Applications

- Salts which can be used as liquid heat carriers are very interesting and offer an alternative to steam. They could be used to solve high pressure problems in steam boilers.
- During the vulcanization process of rubber, different salts are used in the manufacturing process. Rubber has become an increasingly important material, especially since the relatively new invention of rubber tires. These salts can readily be obtained by siphoning off one of Mercury's many salt basins.
- Controlled heating during the curing process of metals, welding work or melting is achieved using cyanide salt.
- Photography requires salts during the development process in the darkroom. While it is not yet profitable to export, photographers on Mercury are already using local salts.

Alkali Metals and Metalloids

"When it comes to inventions, the first is always the fool, the second earns the glory, and the third becomes rich."

— Martin Kessel

Metalloids

Metalloids are not only of interest as food to Mercurian lifeforms, but also as resources within the Boiling Wasteland and the Tin Zone: The glass industry requires them and in light of ever higher buildings with large window facades on Earth, the extraction on Mercury slowly becomes economically viable.

These materials also increase the sunlight focusing abilities of solar mirrors. Above all, while examining Martian artefacts, it has been determined often enough that metalloids like selenium and silicon play a big role. Every attempt to replicate the artefacts requires the purest materials, which can be found on Mercury's Hot Side.

Silicon-based 'Animal Products'

Life on Mercury's Hot Side is mostly based on silicon compounds. Just like animal and plant life on Earth often yield valuable, useful compounds, the same is true of silicon-based life on Mercury, which offers its very own treasure trove.

Mercury Tissue is transparent as glass, foldable as textile, and flexible as rubber, which makes it very valuable for chemical companies. The gelatinous spheres of the *lens floaters* (p. 65) focus light in an astonishing way into deadly rays, and the British military is currently researching their applicability as weapons. Even silicon sun cream (p. 114) is derived from a lifeform from the Hot Side.

Medicine and Chemistry - The Application of Alkaline Metals

For example, lithium, which can be found as whole rock formations and bizarre plant-like constructs in the Boiling Wasteland, is not just interesting as part of alloys or in electrical applications. The medical field also benefits from this material's usage and applies it to treat gout and mental illnesses such as depression, *Mercury fever* (p. 6), hysteria, and schizophrenia. The lithium treatment is seen as a universal mental remedy and more than one doctor recommends a daily dosage of lithium salt in water, preferably from the 'young' planet Mercury, to increase life expectancy.

Tin

"Alas, the devout Christian is blessed, if he's rolling in money and success."

— Wilhelm Busch

The Tin Zone is characterized by molten and solidified tin constructs. In many places the metal can be extracted in its purest form, while on Earth it can only be gained through lots of effort and years of work. For this reason, extracting tin is very tempting. Despite technical engineering challenges, it is one of Mercury's most promising resources for industrial extraction. The quantities in which it is found here, even if considering only the purest form readily available in liquid tin lakes, could have a strong impact on the world market. Aside from cooled vehicles, tinkering has begun with pipelines to transport the metal.

The shimmering metal, which mankind first used millenia ago to create the first bronze weapons, has undergone a renaissance in the modern world of the waning nineteenth century. Its specific characteristics make it indispensable for alloys with a low melting point. Especially, the ether-shipping industry benefits from the fact that the shimmering metal resists many environmental conditions. Only very few geo-strategists suspect that Mercury's stockpiles are the number one tool to monopolize the tin market in one swoop—and then reap the benefits of the ever rising demand and increasing prices.

In day to day life it is appreciated for its color and vibration-dampening characteristics. Organ pipes and church bells have always been made of tin. Before the increasing scarcity, pots, cans, and fine tableware were often made of tin. Nowadays the industry tries rather inadequately to substitute other materials

fit for mass production. This promises a field of business of unimaginable proportions, particularly because it is a safe bet that tin plates from another planet, on the lunch table, would rather quickly become a status symbol among the nations partaking in Mercury's colonization.

Solar Tin

Individual tin lakes, located deep within the Hot Side, which have been exposed to the sun for almost an eternity, contain a viscous metal with an unusual quality. This metal, which is nearly indistinguishable from usual tin at first glance, is capable of storing heat for an unusually long time, cooling very, very slowly. Whether this molecular inertia is caused by amalgamation with a so far unknown material, possibly even of synthetic origin by another space-faring species, or whether this metal is just a rare planetary manifestation has not yet been researched. Whoever is capable of obtaining considerable quantities of solar tin would possess a means of energy storage which would not only significantly ease the exploration of the planet's Dark Side, but would also find applications in many different technical fields.

Heavy Metals in the Lead Zone

"More than gold, it is lead that changed the world."

— Georg Christoph Lichtenberg

Lead

As early as the outer rim of the Lead Zone, whole lakes can be found of this heavy metal, which reflects the sun's unrelenting heat with a silver grey color. Lead is a cheap construction material and can be used everywhere one wants to store as much weight in as little space as possible. Where heavy materials are required, lead is a suitable option, whether in machines, cannons, and ammunition. Due to its high material density, it possesses a higher penetrating power.

Highly resistant to corrosion and sulphuric acid fumes, this base metal also finds usage in many technical and chemical apparatuses. Furthermore, it is rather easy to mold into any desired shape. It is also used as a stabilizer or vibration dampener and sees broad applications in strengthening structures and technical devices.

However, it is not a material without dangers. In ancient times, particularly in the Holy Roman Empire of the German Nation, many scholars began to suspect that the lead water pipes that were used in ancient Rome led to the death of many rich families, paying dearly for the luxury of having their own fresh water supply.

The general population of the industrialized countries of Earth is not aware of this, and as such the cheap and robust material is used in construction without a second thought. Should the first experiences with lead on Mercury yield further insights and reveal the health risks, the promising lead extraction on Mercury could come to a sudden end and burst a big speculative bubble.

Other Heavy Metals

More profitable than lead is *cadmium*, which is rather rare on Earth but can often be found in liquid puddles and ponds on Mercury. It is nearly universally applicable in the industry: in paints as

corrosion protection, as a component in the replication or repair of Martian artefacts, as well as in stable alloys and electrical lighting. Once a cadmium pond has been discovered by airship, the approach and the lowering of chains is very difficult but still possible. After being pulled up again it cools off on the chains, ready to be transported to the Twilight Zone.

Quicksilver however only occurs in its gaseous state, which is why individual attempts have been made to capture the highly toxic clouds in containers able to resist the prevalent temperatures. Small doses of it are used in measuring instruments (e.g. at Princess Christiana Station) and in chemistry. It is also applied in medical therapies against syphilis, intestinal obstruction, and warts, as well as a contraceptive.

Mercurian Lead Granulate

A special form of this metal, which does not occur on any other planet, can be brought to light from the bottom of individual lead lakes. These are sharp-edged lead agglomerates, roughly pea-sized with a significantly higher density and stability than common lead. Because of this, the granules sink and can only be found at the bottom of the toxic lakes. These unusual balls are nearly indestructible and can be used as ammunition; with sufficient velocity, they are capable of ripping holes in even the heaviest of armor. On the downside, it is nearly impossible to process them further. They are thought to have been created by immense forces and unknown natural phenomena acting over endless aeons of Mercury wandering around the sun.

The Development of the Metal Lakes

German and British engineers are racking their brains to efficiently develop these sources of raw materials. The British approach features steam-powered vehicles which are sent into the planet's hot wastelands. The concept envisages shielding their crews from the deadly temperature using heat-resistant suits and stored ice. By this means it has already been possible to deliver shipments to the populated areas, however rather irregularly. It has to be mentioned that the profit is disproportionate to the effort expended. Every now and then, technical difficulties pose serious threats to life and limb.

The Germans think bigger, and are secretly working on a duct or pipe system. Once connected to a source, it would then drain the valuable liquids with help from the thermosiphon effect and deliver them to the populated areas where they would cool off and could then be handled with minimal danger.

The main difficulty here is that the materials the pipes are made of have to be heatproof, too. Furthermore the construction of such a *stannum-ductus* (Latin for 'tin pipe') raises new challenges which have not been resolved in the slightest and are the subject of many experiments.

Hot Side

Mining Mercurian lead granulate is quite difficult. Anyone who is not able to pump out a lead lake completely has to resort to random finds. These occur more often in areas with volcanic activity. Here, individual lead fountains could have distributed material from the bottom of the lakes to the near vicinity, waiting for treasure hunters to stumble upon them—just as it happened with the original discoverer of this most unusual metal.

Light and Noble Metals at the Hot Pole

The Dream of Gold

It is only an assumption, since no one has ever set foot upon Mercury's Hot Pole, but a few scientists believe that some rather veritable treasures in the form of liquid noble metals can be found here, just waiting to be skimmed off. Allegedly gold, silver, and copper could be found in huge liquid lakes, already meticulously separated from impurities. At least that is what scientists hope.

The most accurate measurements and calculations, however, claim the temperatures in the Lead Zone to be 'just' around 930°F, or 500°C, while the melting point of most desired metals are around 1,830°F, or 1,000°C. But, some people refuse to accept that these assumptions are correct. The hope remains that the constant surface heat, or one of Mercury's anomalies, the permanent fire cyclone or even the silicon bacteria (p. 56) found in the desert varnish could still fulfil the dream of oceans full of gold and silver. The best prospects lie in *Caloris Planitia* (p. 66), a gigantic lowland plain near the Hot Pole, its whole surface shimmering in metallic gold.

Aluminum – the Lightweight Metal of the Future

The assumption that aluminum can be found in this area is far more realistic. The metal's melting point is roughly 1,220°F, or 660°C, which could correspond with the highest estimated ground temperature at the Hot Pole. However, the real difficulty is getting alumina () to break down, which requires roughly 1,760°F or 960°C. Many industrial companies from Earth view aluminum as the metal of the future, which could replace heavier and brittle materials in nearly any area. Just imagine the advantages of machines, vehicles, or zeppelins, should all their parts just weigh a mere fraction of the original weight.

According to the most optimistic German estimations, the benefits of the valuable liftwood, under sole British control, could nearly be offset when it comes to zeppelin construction.

Aluminum is also in high demand in all fields involving electricity and offers previously undreamt of possibilities, which is why the *Electric Triumvirate* undertakes research in this area. On Earth, it requires immense energy input to process bauxite into aluminum; while this is not an impossible undertaking, it is quite expensive. Only time will tell whether lakes of aluminum exist near the Hot Pole and whether it is possible to siphon them off with less effort than extracting the metal from ores on Earth.

Random Crater Findings

Mercury is covered in meteor craters, which are particularly easy to spot on the Hot Side, since they are not immediately filled by snow drifts. The majority of these impacts are from space objects made of worthless rock or materials which vaporize shortly after the impact. However, in theory all kinds of metal finds are possible. Nobody can tell which route these objects have taken through the endless darkness of space, where they came from and how many eons they were underway. Apart from valuable materials, impact craters full of obscure materials are possible (e.g. crystal splinters in all shapes and colors, black iron, clumped Saturn glass), or even life-threatening finds (e.g. dusty chunks of pure arsenic sulfide, radioactive plutonium, treacherous sulfur puddles). Radioactive deposits are particularly dangerous because radioactivity itself has not yet been discovered in 1889.

A reconnaissance flight with an ether flyer or airship might be the best option for searching an impact crater, even though it is rather hard to distinguish different materials above a certain altitude. By now different coordinates with alleged or confirmed treasure finds circulate and are secretly traded among the colonists.

Flora and Fauna of the Hot Side

Land-dwelling Animals

Razor Vines

The sharp razor vines are quite possibly a relative of the glass root (see below) or even part of its life cycle. At least the similarities between both lifeforms are obvious. In particular, in both creatures' 'veins', boiling hot sulfuric acid circulates. Unlike the glass root's tubes, the razor vine is soft and elastic exception for its razor-like spikes. The razor vine rolls into a ball to move around, being blown by the wind, looking like tumbleweed made of glass. Once a razor vine touches a solid object, like a rock or prey, it unfolds and wraps itself around it. Organic lifeforms are usually cut to death by the sharp spikes. To further decompose its prey, it secretes sulfuric acid from its innards. Physical encounters usually end with serious injuries for humans, mainly because the vines cannot be cut without bleeding large amounts of sulfuric acid. It is advisable to keep a large distance between these creatures and one's self.

Razor Vines

Animal Companion 1

Archetype: Plant

Health: 3

Primary Attributes

Body: 2

Charisma: 0

Dexterity: 4

Intelligence: 0

Strength: 4

Willpower: 2

Secondary Attributes

Size: -1

Initiative: 4

Move: 8 (16)*

Defense: 7

Perception: 2 (6)

Stun: 2

Skills	Base	Levels	Rating	(Average)
Brawl	4	3	7	(3+)
Stealth	4	3	8**	(4)
Survival	0	3	3	(1+)

Talents

Keen Senses (+4 Perception rating on tactile sense)

Venom 4 L (caustic; see rules on Caustic Damage in the Core Rules on p. 215)

Weapons	Rating	Size	Attack	(Average)
Tendrils	2 L	+1	10 L	(5) L
Sulphuric Acid	2 L	+1	10 L	(5) L

***Razor Vines double their Move rating when jumping**

****Razor Vines receive a +1 Size bonus to Stealth rolls**

Mirrordrop

Arguably, only well-equipped expeditions to Mercury's Hot Side will ever encounter these creatures. The only information so far available about the strange 'mirrordrops' originates from two sources: Telescopic observations from an ether flyer, and a dead specimen found in the Boiling Wasteland by some prospectors. The creature's body is made up of a thick hull of a material similar to Mercury tissue (see p. 60). The mirrordrop sucks up liquid tin from tin lakes and thus takes the shape of a flattened metal ball. Its only form of locomotion is to roll, but while doing so it has been observed to eject deadly squirts of tin with great accuracy. It is assumed that this is used to catch prey. Obviously, the mirrordrop possesses some form of animalistic intelligence and perception. Thin, transparent spikes on its exterior suggests that it extracts minerals from its victims, as it has been observed to do to the Black Stinger (see below). The mirrordrop's natural habitat is the Tin Zone. Its elastic silicon hull, which seems to be the creature's actual body, is capable of storing the high temperatures of the tin core for a remarkable span of time, and as such the mirrordrop is capable of venturing as far as the Boiling Wasteland. However, if it does not return to hotter regions, it will eventually cool off and die.

Mirrordrop

Animal Companion 2

Archetype: Animal **Health: 6**

Primary Attributes

Body: 4 **Charisma: 0**
Dexterity: 4 **Intelligence: 0**
Strength: 3 **Willpower: 2**

Secondary Attributes

Size: 0 **Initiative: 4**
Move: 7 **Defense: 10***
Perception: 2 (6) **Stun: 4**

Skills	Base	Levels	Rating	(Average)
Archery	4	3	7	(3+)
Athletics	3	2	5	(2+)
Brawl	3	1	6	(3)
Stealth	4	2	6	(3)
Survival	0	4	4	(2)

Talents

Skill Aptitude (+2 Brawl rating)

Keen Senses (+4 Perception rating on tactile sense)

Silicon-based Metabolism (1 N damage from cold temperature starting at 50–95°F / 10–35°C, at lower temperatures +1 N; see table on p. 215 in the Core Rules)

Weapons	Rating	Size	Attack	(Average)
Tin Beam (Ranged)	3 L	0	10 L	(5) L
Overrun	1 L	0	7 L	(3+) L

***Mirrordrops have a thick hide that provides a +2 Bonus to their Passive Defense.**

Black Stinger

Just like there are bizarre beings that adapted to Mercury's climate on the Dark Side, the Hot Side developed its very own strange ecosystem. According to the latest research, life on the Hot Side is not based on carbon, but on silicon instead, and widely differs from Terrestrial lifeforms to the point that not even the slightest similarity can be found. Most of these silicon-based lifeforms are filigree crystal plants or slime mould like crystal gel lumps.

By far the most dangerous creature for humans on the Hot Side is the 'black stinger', an amorphous mass with a diameter of roughly 3 feet, or 1 meter, consisting of red jelly and black crystal needles with razor-sharp edges. The stinger drills these needles into its victim's body to extract salts and minerals. When hunting, the creature tries to roll over its prey and stab it to death. Once the prey has been successfully killed, the stinger remains on the corpse for quite a while where it grows not unlike a plant. If no corpse is available to feed upon, it attacks everything in its vicinity seemingly at random and with terrifying speed. The creature's behavior seems to be based only on reflex. Once the prey is dead, the stinger remains on the corpse and does not even show a self-preservation instinct.

Black Stinger

Animal Companion 1

Archetype: Animal **Health: 5**

Primary Attributes

Body: 3 **Charisma: 0**
Dexterity: 4 **Intelligence: 0**
Strength: 3 **Willpower: 2**

Secondary Attributes

Size: 0 **Initiative: 8**
Move: 7 **Defense: 7**
Perception: 4 **Stun: 3**

Skills	Base	Levels	Rating	(Average)
Brawl	3	4	7	(3+)
Stealth	4	3	7	(3+)
Survival	0	3	3	(1+)

Talents

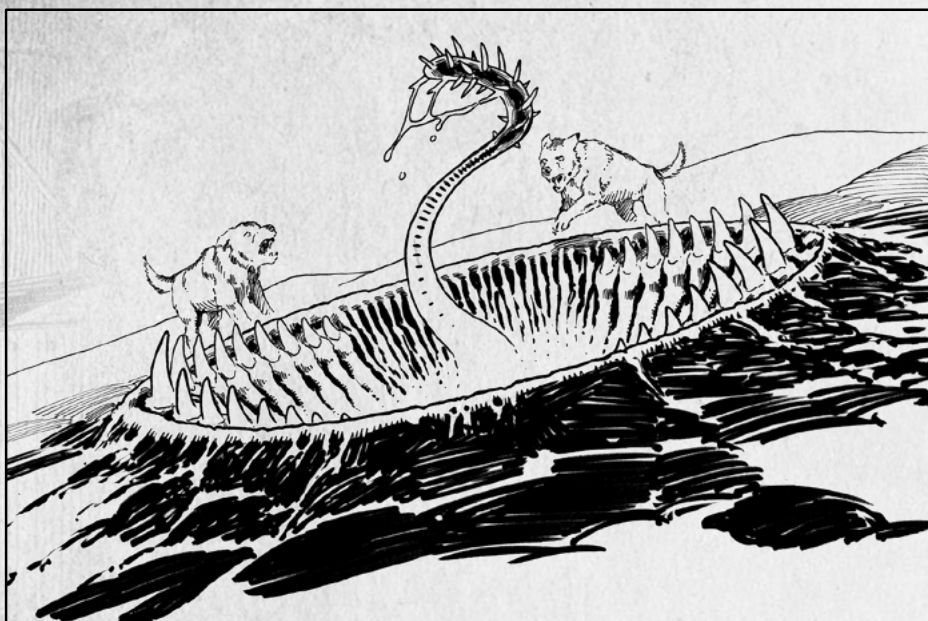
Alertness (+2 Perception rating)

Weapons	Rating	Size	Attack	(Average)
Crystal Needle	2 L	0	9 L	(4+) L
Overrun	1 N	0	8 N	(4) N

Maw Beast

One of Mercury's most malicious creatures is the maw beast. Native to the Forbidding Desert and rarely seen in the Boiling Wasteland, it burrows through the cooler layers of the desert soil in search of a promising spot to lurk in ambush. To this end it opens its maw wide and allows sand to trickle in, to form a sand hole which is nearly indistinguishable from the surrounding dunes. Once prey steps onto this trap, the maw beast grabs its victim with root-like tentacles and drags it deeper into the maw, eating it right away.

Hot Side



The unfortunate wanderer's last impression would be from within the round maw with rows upon rows of teeth. The whole beast can usually only be seen when one finds an entry to its tunnels and follows it: it lurks in its lair like a huge, fat toad with dry sand-brown skin. The neckless maw is locked in an open position facing upwards, waiting patiently. Under the skin, digestive juices pulse and bubble. It is a terrible sight, especially when one becomes aware of undigested corpse parts through its semitransparent layers of skin.

Maw Beast

Animal Companion 3

Archetype: Animal Health: 10

Primary Attributes

Body: 6 Charisma: 0
Dexterity: 2 Intelligence: 0
Strength: 6 Willpower: 2

Secondary Attributes

Size: 2 Initiative: 2
Move: 8 (16) Defense: 8**
Perception: 2 (6) Stun: 6

Skills	Base	Levels	Rating	(Average)
Brawl	6	4	10	(5)
Stealth	2	6	8**	(4)
Survival	0	6	8	(4)

Talents

Skill Aptitude (+2 Survival rating)

Skill Aptitude (+2 Stealth rating)

Keen Senses (+4 Perception rating on tactile sense)

Assassin (When unnoticed, it can make a Surprise Attack using its Stealth rating instead of its Brawl rating against the Passive Defense of its victim)

Weapons	Rating	Size	Attack	(Average)
Engulf	6 L	-2	14 L	(7) L

* Maw Beasts double their Move rating when digging; for each Move rank they can move 30 cm per hour underground

**Maw Beasts have a thick hide that provides a +2 Bonus to their Passive Defense

***Maw Beasts suffer a -2 Size penalty on Stealth rolls

Flying Animals

Flapper (also known as 'Jumping Grenade')

Flappers are small, flat and oval beings with four 'legs' or rather appendages, of roughly 8 inch, or 20 cm, body length.

The creature consists of a very hard, transparent gel, of a light blue shade. The characteristic flapping sound is caused by their jumping locomotion. Contrary to its amusing appearance, the flapper is anything but harmless, as it possesses an insidious

reproduction technique. Flappers cling to a larger prey and then explode. This explosion spreads parts of the victim and the flapper over a large vicinity. These scraps then function as seeds from which new flappers will grow. To humans, the creature's touch causes severe skin burns, since its body temperature is 840°F, or 450 °C. Prior to exploding, the flapper pulses in a reddish hue for roughly a minute.

Flapper

Animal Companion 1

Archetype: Animal Health: 3

Primary Attributes

Body: 2 Charisma: 0
Dexterity: 6 Intelligence: 0
Strength: 2 Willpower: 2

Secondary Attributes

Size: -1 Initiative: 8
Move: 8 (16)* Defense: 9
Perception: 2 Stun: 2

Skills	Base	Levels	Rating	(Average)
Archery	6	1	7	(3+)
Athletics	2	4	6	(3)
Brawl	2	2	4	(2)
Stealth	6	2	9**	(4+)
Survival	0	2	2	(1)

Talents

Quick Reflexes

Silicon-based Metabolism (1 N damage from cold temperature starting at 50-95°F / 10-35°C, at lower temperatures +1 N; see table in the Core Rules on p. 215)

Heat (see rules for Caustic Damage in the Core Rules on p. 215)

Unstable (the Explosion of the Flapper inflicts damage to all targets within a 6 ft. or 2 m radius)

Weapons	Rating	Size	Attack	(Average)
Touch (Heat)	2 L	+1	7 L	(3+) L
Explosion	6 L	+1	14 L	(7) L

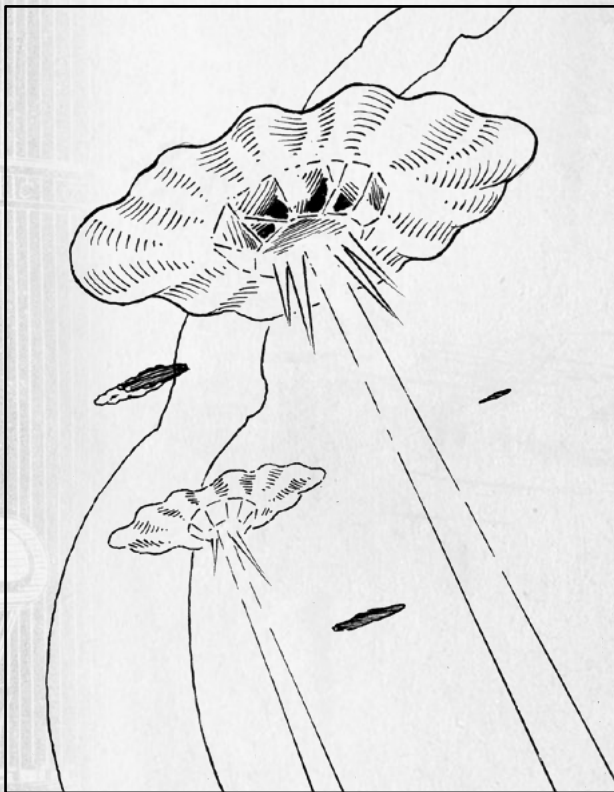
(Ranged) (Instable)

*Flappers double their Move rating when jumping

**Flappers receive a +1 Size bonus to Stealth rolls

Lens Floater

The bizarre lens floater is one of Mercury's rare flying animals. Due to its strange appearance, it has also been nicknamed the 'flying fried egg' by the personnel of Princess Christiana Station. The animal is roughly disk-shaped with a diameter of three feet, or one meter. It consists of a transparent, gelatinous sphere which is surrounded by a disk of rubbery tissue covered in blisters. The gelatinous sphere functions as the lens floater's weapon for its rather unconventional hunting practice. The sphere focuses light and projects it as a concentrated ray, which the lens floater uses as a deadly weapon. Once the prey has been killed, the lens floater lands on the corpse and starts a slow devouring process. It has been observed that the lens floater only hunts carbon-based lifeforms. As such its habitat should be limited to the Forbidding Desert and the temperate zone. How this creature manages to fly is unknown. Some researchers assume that it owes its flight ability to the combination of low gravity and dense atmosphere, which allows it to stay in the air by rotating wave motions.



Lens Floater

Animal Companion 1

Archetype: Animal Health: 5

Primary Attributes

Body: 3 Charisma: 0
Dexterity: 5 Intelligence: 0
Strength: 2 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 5
Move: 7 (3)* Defense: 8
Perception: 2 Stun: 3

Skills	Base	Levels	Rating	(Average)
Archery	5	4	9	(4+)
Stealth	5	4	9	(4+)
Survival	0	2	2	(1)

Talents

Silicon-based Metabolism (1 N damage from cold temperature starting at 50–95°F / 10–35°C, at lower temperatures +1 N; see table on p. 215 in the Core Rules)

Weapons	Rating	Size	Attack	(Average)
Energy Beam (Ranged)	4 L	0	13 L	(6+)

*Lens Floaters use their full Move rating when flying, and half their Move rating when on land

Flora and Small Fauna

Whether it makes sense to differentiate between flora and fauna when it comes to silicon-based lifeforms is debatable. Not much is known about these surreal seeming creatures. However, there seem to exist silicon-based lifeforms that can be considered plants, mostly because they are stationary. Small silicon plants can already be found in the desert near the terminator or, as it is more commonly called, the Twilight Zone. Yet, it has been discovered that they become bigger and more frequent heatwards. Perhaps whole crystal forests thrive near the Hot Pole, an environment deadly to any human.

The most common is the **glass root**, which is a tangled mess of interwoven crystal tubes. In these thin tubes sulfuric acid fumes circulate, which makes the contact with these fragile constructs rather dangerous.

The **sphere tower** seems to be related to the glass root. It is a growth of chains of razor-thin crystal spheres, which can arise with surprising speed from the ground just to burst in clinking cascades once they reach a height of 30 feet, or 10 meters. The sphere towers too are filled with sulfuric acid fumes.

A cross between plant and animal, the **running grass** forms whole meadows out of thin, red crystal needles. Its funny name cannot hide the fact that it is razor sharp and punctures even thick boot soles. It remains motionless at the same location for many Earth days, and then bursts into sudden movement.

On the contrary, the **flicker rocks** are harmless. These man-sized rocks are round and smooth, conglomerating next to each other. Their color is constantly changing, forming colorful, erratically arranged stripes on their surface in always new patterns. Whether these rocks are one whole lifeform or whether the colorful flickering is caused by a layer of microorganisms has not yet been elucidated.

The shimmering **sculptor mold** seems to feed on stones. Wherever the crystal dust takes root, it starts to digest the rock. The dust becomes a blistered mass of foam, eventually eating away geometric holes into the rock. New dust is formed by the disintegrating rock, which is then blown away and the whole process starts anew someplace else. The mold's activity creates some bizarre sculptures.

A mix of spider webs and thin, transparent foil with extraordinary characteristics, **Mercury tissue** can often be found among rock needles and larger rocks. Chemical companies have already shown a marked interest in samples (p. 60).

Giant quartz can be found from the center of the Wasteland onwards. These rugged columns of transparent, green crystals can reach a height of up to 100 feet, or 30 meters, and occasionally form veritable groves. So far it has not been determined whether they are lifeforms or just rock formations.

Hot Side

Coal Plague

The 'coal plague', also known as 'Pikes's crystal syndrome', is a nasty disease from the Hot Side. The disease is named after *Dr. Henry Pike*, the man who first researched it and who also lost his right hand to the coal plague. To this day 11 people have been infected with the disease, of which 5 have died after suffering horribly.

Infection: 4, due to stab wounds. The disease is caused by microscopic, parasitic crystal lifeforms. They deprive carbon-based lifeforms of carbon to create new crystal formations.

Symptoms: During the disease's course, crystals slowly grow around the puncture wound and in the victim's flesh. These can cause severe internal injuries. In the process, the infected body part slowly withers away. In advanced stages, the coal plague causes feverish dreams and hallucinations. The duration of the disease is usually around four weeks. While recovery in the usual sense is not possible, the patient can be saved by fast amputation of the infected limb (or in mild cases, cutting out the infected skin or flesh). Since ten out of eleven victims were infected during surveying coal deposits on the desert's edge, it is feared that all of Mercury's coal deposits might be home to the contagious crystals.

Healing: 3 (15 successes are required to cure the disease). A Body check is required each day, beginning with the day of infection. Long-term medical care adds 2 additional dice to the patient's checks to recover from the disease.

Points of Interest on the Hot Side

Bates Valley

"Their elegant shape, showy colors, and slow, sailing mode of flight, make them very attractive objects, and their numbers are so great that they form quite a feature in the physiognomy of the forest, compensating for the scarcity of flowers."

— Henry Walter Bates

Discovery and Name

This place has to be one of the most unusual oases ever to be found on Mercury's Hot Side. Just recently an expedition from Princess Christiana Station discovered the hidden valley within the Forbidding Desert, roughly 220 miles, or 350 kilometers, downheat (southeast) of the station. The oasis was named after researcher Henry Walter Bates, who became famous for his Amazon expedition and has visited the station very recently. It seems to be the perfect name for the oasis, no other comes to mind than that of the discoverer of more than 8000 new insect species and of Batesian mimicry. While most shaded areas on the Hot Side are nothing more than less hot, meagre places, the Bates Valley thrives with wondrous life.

Characteristics

The Bates Valley is a long fissure, 650 feet or 200 meters deep and 2 miles or 3 kilometers long, with an otherwise subterranean river flowing freely through it. It pours forth from its coldwards end, forming a spectacular waterfall, and continues its flow heatwards. The narrow valley is the result of seismic activity that once ripped open the ground, revealing the underground river.

The valley is roughly triangular in cross-section, its walls only a few meters apart at the top. The Sun shines only on a central strip while the rest of the valley lies in permanent shadow. Enough of the Hot Side's heat gets in to make the river's water very warm, partially steaming to a wet haze, clinging to the rock faces.

These extraordinary conditions allow for a locally limited, dense growth of plants, only comparable to the ones in the Twilight Zone. After covering the first 65 feet or 20 meters on barren rock, lianas ease the climbing and spathiphyllum proliferates from the rock faces. Occasionally, thorn bushes make the climb more difficult. Ferns rise above the warm mist, covering the narrow fissure's floor and the riverbanks.

Lifeforms (p. 117)

A buzzing environment, rich with life, exists among the plants, making it appear more like the Brazilian jungle than a narrow valley on Mercury's Hot Side: Insects of remarkable size and bizarre shapes flitter and creep amongst the plants. Animals, some only known from the World River, nest here and support the hypothesis that the river feeding the valley is a tributary of the planet's mostly subterranean lifeline. Farther up, near the hot surface, even filigree silicon-based lifeforms exist, with butterfly-like silvery wings, preying upon the valley's insects. Bates Valley offers an isolated ecosystem, full of extraordinary wonders waiting to be discovered, just like its dangers.

Caloris Planitia

The Latin name of this circular lowland plain measuring hundreds of miles across roughly translates as 'heat basin'. As the name suggests, it is located within the Lead Zone, close to Mercury's Hot Pole. So far only little information exists about it. However, with the most advanced telescopes, it is possible to observe from the ether through occasional gaps in one of the most vicious Mercurian cyclones. During observations, some shimmering metal surfaces have been discovered, which seem to cover all of the lowland plain. For this reason, the Caloris Basin has become known as 'El Dorado' to Mercury bound treasure hunters, since it is thought that pure gold can be found there.

What actually happened was that the lowland plain was the site of an immense impact by an asteroid with a diameter of roughly 60 miles, or 100 kilometers. The released force and heat brought rock and metal ore from the interior of the planet to the surface. During this process, even precious metals, which usually would not melt at the Hot Pole's temperature, were liquefied and flowed together to form large pools and then cooled off. This way a surface smooth as glass formed from the rock, but also from gold, silver, and platinum, just waiting to be hewn off the ground.

Caloris Montes (p. 117)

Around the lowland plain, the impact created rugged 'heat mountains' which rise up to 6,500 feet, or 2,000 meters. Just recently a mysterious gap was discovered in the downheat (southeast), allowing entry to the plain through the mountains. The means of reaching the lowland plain through that gap are far from obvious. A vehicle that could penetrate this far heatwards is the tin juggernaut (p. 113), although it would require further modifications. Attempts to approach it from the ether have so far failed because of the fierce winds. However, a Royal Navy officer claims to have glimpsed through the dust winds that the chasm and the mountains were...shifting. Later, at Princess Christiana Station, he was assured that it must have been *'just a hallucination due to the tension'*, considering mountains and chasms obviously cannot move.

Fata Morgana

"The future's best prophet is the past."

— Lord Byron

The permanent sun radiation on the Hot Side not only affects the body, but also the mind. Therefore it is occasionally challenging to differentiate between uncommon, but still very real, environmental phenomena and figments. And sometimes it is even harder to decide what would have been the better decision. Even in the Forbidding Desert there are areas which have *never* seen shadow. Reports from these areas claim that there are mirages that seem so realistic that even the most rational scientific minds were convinced that the observed was real and sometimes could even be touched. The further heatwards the affected had been, the richer and more unsettling the details of the alleged illusions became. While most of these encounters are thought to have been hallucinations, some doubt remains. Such is the case of a report by a British expedition whose members all saw the same silhouette of a sky-high rock city at the horizon. They even perceived sounds and smells of lively activity. The report is even more remarkable when one considers that none of them showed any signs of dehydration or fatigue. When they eventually got near the site, towers, bridges, and walls collapsed and all that was left was dust, just as expected. However, this would have been too easy an explanation. While they searched the site, they found ghost lines on the stones under all that sand—or could the strange geometries just have been traces of rock-dissolving bacteria?

The question of whether all this was just a fallacy could not be brought to a satisfying conclusion because of a brewing sand storm. Even after hours of searching, the expedition could not find the site again. Regarding the complexity of these mirages, it seems much more plausible that the sun might burn more than just natural materials into the ground and release them again under the right circumstances.

The Living Craters

"There we are, standing on the fringe, thinking to ourselves: What a strange, leathery soil is this? When suddenly there is a gaping hole in the ground that could swallow a man whole, all covered in teeth, sharp as daggers! We're still completely shocked and

nauseated by the rotten smell coming from that sinkhole when a furred tongue lashes out and goes after our legs. It grabs our porter and drags him into the depth, swallows and burps. Then the maw closes just as fast as it opened."

— heard at Princess Christiana Station around tea time

The area around the Twilight Zone is home to an insidious danger, especially to those travelers who look forward to using the shaded side of an impact crater. Beings straddling the boundary between plant and animal are sometimes nesting there, waiting to devour anything that triggers their snap trap. The danger increases when the maw is covered by loose earth, dust, or rock and is not immediately distinguishable as such. More about these creatures can be found on p. 64.

The Moon Mountain

"Good folks go to the Moon, evil ones down to the Earth."

— Roald Engenbreth Amundsen

At first glance, Mercury and Venus have very little in common. However, these two fundamentally different neighbors share one unique, nearly mysterious characteristic: Neither has a celestial companion and they are, as such, the only moonless planets of the known Solar System.

The question of 'why' is as much a very popular topic of controversy now as it was in the past. This debate has reached pseudo-scientific as well as esoteric circles, and these have manufactured more than one crude hypothesis. Lost asteroids and devouring sun eruptions are rather harmless explanations compared to dimensional rifts and invisibility devices. However, one of the latest findings within the Tin Zone might offer new fuel to reignite a serious discussion, at least about Mercury.

The so called *Moon Mountain* is a gigantic, dome-shaped elevation with an estimated diameter of 9 miles, or 15 kilometers, and a height of 3 kilometers, or 5 kilometers. Its surface has been smoothed by constant sun winds and the Hot Side's eternal storm. The area is not showing any signs of vegetation. That the mountain is the only elevation within an otherwise completely empty plain, and that its base area is a nearly perfect circle gives rise to lively speculations within the scientific community. The possibility of an artificial complex seems rather improbable, considering the mountain's size. Another popular hypothesis is currently gathering enough followers that it should be mentioned here: the Moon Mountain is Mercury's missing moon, shrunk in size by the apocalyptic impact and by millions and millions of years of constant erosion. This hypothesis is supported by soil samples, as their composition includes ores and minerals which are rather uncommon elsewhere on Mercury. Opponents argue that such an object would probably have been completely destroyed by the impact and that its remains should not show the same smoothness as the rest of the area.

What could have caused this suspected cosmic catastrophe is completely unknown at this time. An expedition from Princess Christiana Station which was tasked with finding answers to these questions vanished without a trace. The expedition's first goal was one of the innumerable cave entrances which pointed to an extensive subterranean tunnel system. A rather unusual indication of the existence of such a cave system is provided by the Hot Side's constant winds, which elicit a rather wondrous melody from the mountain. Some scientists believe they are about to unlock words and even messages in gramophone recordings of the melody.

Hot Side

Furthermore, Mercury's flora and fauna otherwise victim to the relentless sun could have found a true sanctuary within the Moon Mountain. Whether this means a living paradise or a true hell has to be established by future research.

The Black Mirror

Meteoroid craters are not uncommon on Mercury, however some of these craters are of special interest to researchers because of their particular features. One such example is a so far unknown crater in the Forbidding Desert. The impact must have been on a massive scale, large enough to rip open the planet's crust and allow large amounts of magma to spill out. The liquid rock filled the crater and eventually cooled off, despite the relentless heat. Over millions of years the volcanic rock has been polished by Mercury's erosive forces into smooth, black obsidian. The material is not harder than glass, but is barely workable with known methods because it is very brittle. The effort might be well worth it, since this volcanic glass has spectacular light refracting characteristics. Binoculars and telescopes of unprecedented power are just the beginning of what could be made with it (see p. 114).

The Long Shadow of Venus

Dr. Basileus von Eilends is no dark horse to modern astronomy, however his reputation is not one full of praise. On the contrary, this peculiar chap has started arguments with all of his colleagues, accusing them of being oblivious to objective facts, while most accuse him right back of the same obliviousness. He is even quite controversial in his German homeland. Because of his substantial financial means—as well as his impressive title of nobility—which have been bequeathed to him by his late wife—who died under mysterious circumstances—he can freely focus on proving one of his most belittled theories. According to him, Mercury is nothing less than Venus's escaped moon. Which would also explain why both planets have no satellite.

As such, von Eilends already possesses an extensive collection of curiosities which he has purchased from some more or less reputable Mercury explorers, or so they claim. Rumor has it that among them are glacial erosions, findings of bones and fossil plants, which suggest a certain vegetation and population of saurians which have so far only been attributed to Venus. However, even if his findings are authentic and his hypothesis is true, not many would be willing to trust his credibility as astronomer and part-time paleontologist. He is rather well known for having 'procured' proof of his hypotheses with rather remarkable craft.

The Silvery Hills

Volcanic eruptions flush out different metals from the depths. Sometimes the pressure is not sufficient for a breakthrough and the magma cools off in reservoirs close to the planet's surface. In some places, where wind has slowly blown away the rock and sand, strange, even bizarre geological formations have surfaced. The most impressive is an area where the landscape is dominated by seemingly frozen fountains, which reach out of the ground twisted and swirled, as if they would mock the laws of physics. These are not only of interest to travelers seeking shelter in their shadows. At least just as promising is the high silver content of most of these formations, which has just to be hewn off and picked up, so to speak.

The sandy winds act as abrasives and ensure that their surfaces never tarnish or blacken. The Silvery Hills are located in a transitional region between the Tin and Lead Zones, right in the middle of a large plain without any shadow. For this reason, the Silvery Hills have caught men's longing glances, but remain out of reach so far.

The Reflecting Pyramids (p. 118)

An ether flyer's captain who would manage to approach Mercury's sun-facing pole would make an amazing discovery: Within a radius of 300 miles, or 500 kilometers, from the hottest place on the planet, circular light reflections flash up at regular intervals. Because of their symmetrical appearance, these can hardly be of natural origin, or so would agree most daring researchers once they learned of the phenomenon. Unfortunately, the temperatures in this area are so extreme that humans cannot venture there. For this very reason it would require immense effort and well-disposed sponsors as well as more than one technological advance to ever research this extraordinary phenomenon.

The Dust Sea

Through the ceaseless work of Mercurian winds, the sandy regions of the Hot Side are made up of different types and sizes of sand and as such are traversable with variable degrees of effort. Even more deadly than quicksand on Earth is a dust-like substance, filling at least one whole valley on Mercury, which cannot be clearly distinguished from its surroundings. The whirling particles are nearly weightless and float in the valley's basin and, because of their loose consistency, offer no resistance to a wanderer's step. These 'particles' are nothing less than micro-organisms which have multiplied within the cooler basin and are now completely filling it. They occasionally form strange vortices, intensified by the onset of the 'dance' of these tiny lifeforms, while they are scuffling for nutrients that are blown into their territory.

Once the air stands still, these micro-organisms become a fatal threat. Woe to those who accidentally wander right into the Dust Sea on a solid-looking land bridge. One single misstep could mean sinking to the valley's floor.

The Penal Colony

Within the blazing desert heat of Mercury's sun-facing side, hand-picked convicts—all sentenced to death—from the United Kingdom have opted to volunteer for medical research in exchange for an eventual pardon. Medical doctor *Sir Jasper Bligh* is testing the limits of body and soul in the extreme heat on a handful of people. It is quite debatable whether the test subjects have done themselves a favor by volunteering, since water and shadow are strictly rationed. In a small desert fortress within a remote valley, the British gentleman has every intent to explore the very limits of the possible. Last but not least, his experiments serve as proper preparation for further expeditions into the Hot Side. His merciless efforts could provide the decisive advantage for the Empire. However, it is doubtful whether the convicts will endure their overseer's increasing sadism without protest.

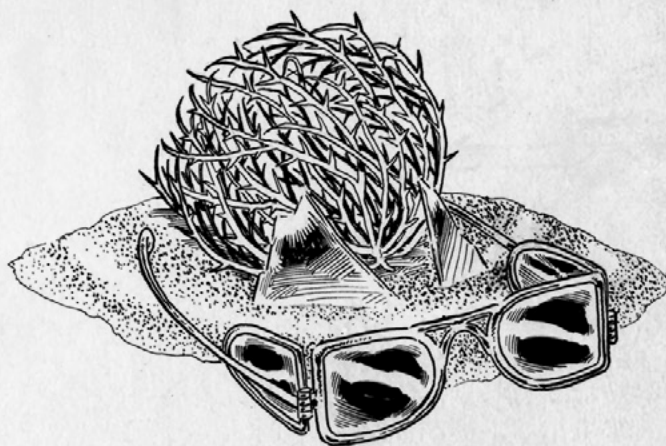
The Underworld

Explorers of different nations rack their brains to find ways of crossing the blazing heat of Mercury's Hot Side. However, there exists one more promising possibility of travel that has not received exhaustive consideration: subterranean travel. The planet is home to a fascinating underworld which stays out of reach of the most extreme temperatures. Unsurprisingly, the underground is also home to its own set of dangers. A considerable part of it is made up of expansive networks of worm tunnels, created by creatures that ate their way through solid rock. These caverns are

usually large enough that a human can almost stand upright in them. Unfortunately, these tunnels do not follow a clear heading, but seemingly wind their way aimlessly, curving up and down. Crossings and cavern nodes reduce subterranean journeys to a game of pure chance, since the human sense of direction fails in these terribly cramped tunnels. Compass needles are also rather useless in the metal-bearing surroundings. Extensive surveying has yet to be undertaken; although laborious, it seems very promising. A journey through these caves leads an explorer through different rock and metal layers. Apart from toxic lead corridors and areas in danger of a cave-in, the biggest threat would be to run into one of the creatures that dwell in the underworld.

Another good option to penetrate deep into the Hot Side is offered by the grand canyons, which were created by seismic activity. Their shadows sometimes offer protection from the sun and make traveling much more bearable. However, making progress can become a problem once the canyon does not run in the right direction, since they rarely branch off. Even for experienced mountaineers it is quite a challenge to scale the steep and rough gorge walls. As if that weren't hazardous enough, the canyon floors are often home to rivers of molten metal or lava.

In some regions, seas of volcanic origin serve as a curious sights. Their surfaces having cooled off in contact with the atmosphere and solidified into a hard crust, over time the once liquid metal inside slowly trickled away into fathomless crevices. What remains are dark caves with reinforced ceilings, shielding from even the harshest solar radiation. However, these rare shelters are, with a high probability, already home to some dwellers. Furthermore, the danger of a supposedly solid surface collapsing under the weight of a heavily loaded traveler or transport vehicle is ever present.



Journey on the World River

An Adventure by Dominic Hladek

With thanks to Bjorn Beckert, Jonathan Friebe, Martin John,
Tobias Rafael Junge, Stefan Küppers, Uli Lindner, and Jules Verne.

Introduction

Foreword

The following adventure is designed to enable your party of players to circumnavigate Mercury during a race, and voyage into areas which have been presented in this book, tap resources, test artifacts, and meet new people. A danger threatening the planet's equilibrium has to be prevented in the course of the race. The characters' journey will take them primarily through the area inside the Twilight Zone, but they will also visit both the Hot and Dark Sides. To avoid double entries—and since all necessary information is presented to you in this book—multiple page references are made for descriptions and places mentioned in previous chapters. We recommend reading the book point by point, so you can run and play the adventure in the best way possible.

Prologue

Research in the Perpetual Ice

In his secret laboratory on the Dark Side of Mercury, the scientist *Fyodor Akhmatov* (see page 52) conducts extensive research on the planet's geothermal activities. His scientific curiosity got the ball rolling on planetary activities he has no further control over: The underground tunnels which Akhmatov expanded artificially resulted in a connection between a dry ice field on the Dark Side and the Moon Mountain (see page 67) on the Hot Side. The underground part of the Moon Mountain, however, is still a huge hemisphere, under which lie gigantic hollows. Now, Akhmatov's machines are pumping massive amounts of dry ice from the Dark Side field into the caverns under the Moon Mountain. These are slowly filling, pushing the former moon upwards while the dry ice field is subsiding. In the long run, this could move enough mass from the Dark to the Hot Side to shift the planet and disturb its *nutational effect* (see page 7) slightly. Though Mercury remains on a stable and fixed orbit, even this minimal disturbance of the planet's delicate equilibrium could expose Princess Christiana Station to destructive storms.

Lost in the Desert

Lieutenant *Charles Arthur Sandford*, an officer of the Royal Marines Light Infantry, stationed on Mercury as a member of the colonial protection force and a keen astronomy buff, took part in a Moon Mountain expedition which is now considered

lost. Using the silicon sun cream (see page 114), the researchers eventually reached the vicinity of the Moon Mountain. Yet, the temperatures were so high that they all continued walking heatwards and towards their death, influenced by the silicon lifeform. Only Sandford had a strong enough will to escape the 'maddening Sun' into the Moon Mountain instead, by which time the effect of the sun cream wore off a bit. He is still under its influence, however, and roams the tunnels beneath the Moon Mountain, doubting his own mind and always struggling against the desire to go out into the glaring light of the Sun and walk heatwards. He still knows that this would certainly kill him, but it is questionable how long his mind will withstand the pressure.

Beneath the moon, he also came across one of the cyclopean caverns and saw with his own eyes how it was filling up with dry ice. With this last clear thought in his mind, he realized the gravity of the situation and has been clinging to the idea that he has to deliver the news to Princess Christiana Station and that he needs to survive until rescued. He deems it impossible to return on his own and without any equipment through the heat of the desert, particularly since he is right in assuming that beneath the Sun his inner desire would become strong enough to drive him heatwards like it happened to the other members of the expedition. At the station, the expedition is believed to have disappeared without a trace; only Sandford's lover, the scientist *Florence Miller*, still hopes that he has survived, but she can do little on her own.

Favorable Constellations

Nothing about this is known on Earth. What is known by newspaper accounts, though, is the fact that in a short time Mercury will again reach inferior conjunction, its closest possible position in relation to Earth. There will not be another opportunity to travel so quickly to the young planet for quite a while. Thus, people talk quite avidly about the planet which, until now, had been mainly ignored by public perception. Not only does it move nearer to Earth, but it also moves more and more into the focus of media reports.

Summary of the Adventure

Starting the Adventure

The characters become witnesses to a wager caused by a newspaper article about Mercury. The two gentlemen *Cyril Montgomery Fitzgerald, Esq.*, and *Major General Friedrich von Bomsdorff* each wagered they would be the first to completely circumnavigate Mercury on the World River. They want to put their money where their mouths are, and thus the characters are recruited by both racers according to their respective fields of expertise. It is

up to you and your party to decide by whom the characters are hired (see **The Competitors** on page 73).

At Princess Christiana Station

After they have completed their travel preparations and have arrived on Mercury, the characters spend some days at Princess Christiana Station. While the conditions and rules for the race are being discussed with the officials of the British government acting as referees, the characters can make further preparations. *Florence Miller* will ask them to look for her lover during the race.

The Race

To ensure the planet is circumnavigated by both opponents, it is agreed upon that the competitors have to reach certain checkpoints and need to produce evidence that they have indeed reached them. After the starting shot, the journey begins with vehicles, ways, and means which the characters can influence due to their groundwork and their decisions. The duration and the winner of the race are left open. Everything follows the characters' decisions and abilities. To this end, we have included systems for **Racing Rules** with which the gamemaster can determine how fast the characters' and the other group's party make progress. Numerous obstacles and dangers have to be overcome in the course of the journey. The respective events always take into account if the characters reach them first, or if the members of the other party, who are in the lead at that moment, have already been there and how successful they were in overcoming the obstacle.

What about Cooperation?

During the adventure, this race between two gentlemen may result in challenges for the players which go beyond merely defeating the opponent. This adventure assumes that the player characters overcome these hazards on their own, be it because the members of the other group have no knowledge of the events or because they are very keen on achieving victory. With these choices, the players may have chosen the honorable way, but also lost a lot of time.

It is also possible that the two groups will cooperate for a while and journey together during the two stages called **Off the Road** in particular. This is about a greater threat, after all, and cooperating is considered proper Victorian sportsmanship. In this case, the gamemaster will have to take care that both groups meet each other and that von Bomsdorff and Fitzgerald suspend the race after a sportsman's handshake, taking it up later on.

During one of the highlights of the race, the characters may come across the lost and severely changed Sandford and probably save him. Sandford will show the characters the dry ice in the caverns and explain to them the possible consequences. He has

found hints of the estimated source of the dry ice on the Dark Side. With or without Sandford (whether he can be rescued or not again depends on the characters' actions and abilities), the journey continues, and in addition to winning the race, the primary goal now is to close the connection between the Dry Ice Zone and the Hot Side. In the end, the players will find Akhmatov's laboratory and hopefully avert a cataclysm by shutting down his machines.

Coda

During the last stage, the characters once again can concentrate on winning the race. The conclusion is open-ended and again depends on the decisions the characters made and how quick they were in utilizing their abilities and equipment. Back at Princess Christiana Station, they are welcomed with a celebration, and the winner is announced. It is possible that the players bring Florence's lover back and deliver Akhmatov to the British authorities.

Starting the Adventure

In this chapter the characters are hired in the London *Travellers Club* (or in any comparable place) to accompany two gentlemen racing around Mercury. They decide to join one side, run some errands and plan the voyage before flying to Mercury.

A Cigar in the Travellers Club

"A true Englishman doesn't joke when he is talking about so serious a thing as a wager."

— Jules Verne, *Around the World in Eighty Days*

The characters start off at the London *Travellers Club*, 106 Pall Mall, near *Carlton Gardens*. It is one of the most famous gentlemen clubs in the Empire. The building was erected in 1832 and is renowned for its library and its collection of travel literature about Earth and all the other planets. There are 700 select club members joined by their common interest in traveling. Conditions of admission as a full member are:

- one must be a male British citizen;
- one must at least once have traveled 500 miles beyond the British Isles as the crow flies;
- one must be recommended by two members;
- one must be supported by five other members;
- one must pay an admission fee of £42 and an annual fee of £10 and 10S from the second year on.

Distinguished native, foreign and even Martian visitors are gladly invited for an exchange of ideas. Some high-ranking officers of other empires and even women have also been accepted as 'associated members'.



The Player Characters at the Travellers Club

The following list gives you some examples of how the characters could be connected to the Travellers Club and therefore be on the premises:

- They are members of the Travellers Club. Full members have to fulfill the given conditions; associated ones could hail from other nations, or be female.
- They have been invited because of their Rank (3+), or because they have been honored this way due to their success in a previous adventure.
- They are personal friends of a member, for example of one of the competitors (see descriptions on the following pages).
- They are among the club's or a guest's personnel.
- For characters who do not fit into a British gentlemen club, it is suitable that they are only hired after this initial scene, probably because of their special skills.

The Travellers Club maintains chapters in different cities of the world, also on Mars and Venus. You can start the adventure in another place or on another planet, yet still in the same way.

The Wager

When starting the adventure, give your players the opportunity to slip into their roles. How about a little chat with a statesman like *Arthur James Balfour*, the acting Chief Secretary of Ireland, who has just begun his stellar career and could eventually become Prime Minister? Or what about the author *Jules Verne* in person (taking notes later on about what will be done and agreed upon)?

Planet Mercury at a Favorable Distance from Earth

London.

According to information from astronomical circles, the planet Mercury is awaiting a special event which only recurs every 41.5 years: During a period of several weeks, Mercury and Venus will simultaneously be at their closest distance to Earth, thus enabling a fast ether ship to reach Mercury in less than 25 days, benefitting from Venus's slingshot effect.

The British government has already announced that Princess Christiana Station, the only outpost on the planet, can and will be well supplied in the course of this time period. It is planned to expand the Empire's interests on Mercury and to expedite its economic and scientific use. The immense number of supply ships will be doubled, and the personnel consisting of researchers as well as stationed soldiers and officials will be equally expanded, giving their heightened attention to the planet and further advancing its exploitation.

Or what about the numerous diplomats, travelers, and explorers that are members of the Travellers Club? The selection of food and cigars is excellent at that. In addition, the characters might already have read the article in the *Times* stated below.

After a while, the characters catch wind of others who have obviously read the article, too. *Cyril Montgomery Fitzgerald*, a member of the club, and his valued German guest, *Walther Friedrich von Bomsdorff*, have started a hard-to-ignore discussion about the fact that reaching Mercury might be one thing, but exploring the planet would be the true challenge. The characters, like some other gentlemen in the club, are invited to express their opinions as well. During this, you can present to them a summary of what is commonly known about Mercury, while the focus of the discussion is more and more shifting towards the World River, which runs around the whole terminator of the planet. At this moment, it is discussed how long it will take the River to do so (the correct answer is 133 days, which a character knows on a successful *Science (Geology)* Skill roll), and how well it has been charted. (For instance, the two gentlemen argue about whether Throckmorton's or von Asseburg's maps are the best, each man naturally preferring his compatriot.) The whole conversation is characterized by digs and some bantering; it remains on friendly terms, though. A player's character can understand (on a successful *Empathy* Skill roll) that the two men are old friends. Finally, the conversation reaches its climax when both men claim that they surely can circumnavigate Mercury in less than 133 days. The characters see the spark in the eyes of both gentlemen as they are realizing that they are about to make an adventurous wager. Both men shake on it and wager the 'customary sum' of £1 on who will circumnavigate Mercury first. While many other gentlemen applaud, the contestants take their leave and start preparing.

Getting Hired

With pleasure will the contestants-to-be now provide information about their plans. If the characters are interested, they can be hired on the spot right after the wager has been agreed upon. The characters are free to choose which one of the competitors they travel with—however they should do so as a group. The Game-master can point one of them out by having him address the party.

Explorers are born for this adventure, but also officers who are old acquaintances of the contestants, and reporters looking for a story. Inventors and experts on automobiles may shine with their knowledge of vehicles; the same goes for researchers and (pseudo) scientists with their expertise on Mercury. It is conceivable that Martians participate as friends or servants. More upper-class characters are less appropriate, since they would not set foot on a wild planet like Mercury except for some sightseeing.

Alternative Starts

The Travellers Club maintains chapters in different cities of the world, as well as on Mars and Venus. As such, you can start the adventure in a similar way in another place or even on a different planet. Characters who are not suited for a British gentlemen club might not experience the opening scene, but get hired afterwards by one of the contestants. Whether as long-time acquaintances, on recommendation by a former principal, or simply because of their good reputation in their line of work: the appropriate contestant will find his way to them. Every fellow traveler is promised a sum of £1,000, which is doubled on victory.

The Competitors

Walther Friedrich von Bomsdorf,
Prussian Major General, retired



"You may say what you want about the Germans, and I am inclined to call them the harshest names. They are, however, a manly people."

— Paul Ernst

Background

Born 1835, the retired officer, originating from the Saxon-Prussian noble house of von Bomsdorff, spent his life serving in the military. He was always an officer close to his soldiers. He has been retired for a while now, and became an emissary of Germany and shortly afterwards an associated member of the Travellers Club. He is

living in London and maintains friendly relations with numerous politicians and gentlemen. Fitzgerald is a good friend of his.

Roleplaying

Walther is an earnest man with a 'spare tire' and a twirled moustache. He still has some sort of military bearing and represents Prussian virtues in the best sense of the word. Honesty, discipline, diligence, courage, cosmopolitanism, loyalty, frugality, a sense of justice, and a sense of duty are only some of those virtues. He expects the same from his fellow men and becomes disappointed whenever these expectations are not fulfilled, but usually he is inclined to give second chances.

Walther speaks loudly and clearly. He tends to use stout gestures, like a vigorous handshake or a strong, rough clap on the shoulder. He likes to laugh a lot. His attire is military. Most of the time, he wears a Prussian major's uniform and the mandatory monocle on one eye, since his eyesight has weakened.

Archetype: Officer
Style: 5
Motivation: Honor
Health: 10

Primary Attributes

Body: 4
Dexterity: 2
Strength: 4
Charisma: 4
Intelligence: 3
Willpower: 6

Secondary Attributes

Size: 0
Move: 6
Perception: 9
Initiative: 5
Defense: 6
Stun: 6

Skills	Base	Levels	Rating	(Average)
Bureaucracy	3	1	4	(2)
Bureaucracy (Military)	3	2	5	(2+)
Diplomacy	4	4	8	(4)
Drive	2	3	5	(2+)
Drive (Automobile)	2	4	6	(3)
Firearms	6	4	10	(5)
Intimidation	4	4	8	(4)
Intimidation (Orders)	4	5	9	(4+)
Linguistics	3	2	5	(2+)
Melee	4	4	8	(4)
Survival	3	1	4	(2)

Talents

Blunt Strike; Focused Attack (Firearms); Headstrong; Inspire 2; Iron Will

Resources

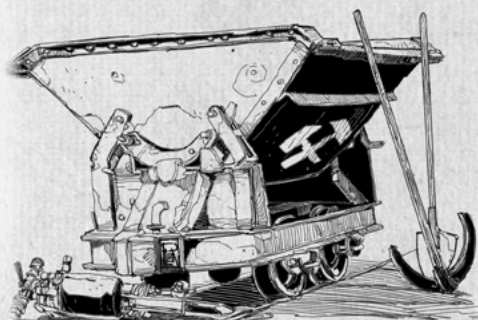
Status 1; Rank 3; Fame 1; Wealth 2; Refuge 1

Flaws

Overconfident

Weapons	Rating	Size	Attack	(Average)
Saber	3 L or N	0	11 L or N	(5+) L or N
0.30-06	3 L	0	13 L	(6+) L

Repeating Rifle



Cyril Montgomery Fitzgerald, Esq., British Gentleman

"In 1889, a certain Cyril Montgomery Fitzgerald, Esq., lived in London. This gentleman was among the most curious and highly-respected members of the London Travellers Club, although he seemed to take it as a duty never to attract any attention."

— Jules Verne

Background

Cyril was born in London in 1852, the son of a gentleman ennobled for his scientific successes. Cyril grew up in sheltered but open-minded circles. He undertook many travels with his father, and early on became a member of the Travellers Club. He has been living as a bachelor but knowing that he is expected to find a wife soon and behave more maturely.

Archetype: Gentleman **Motivation:** Hope
Style: 5 **Health:** 6

Primary Attributes

Body: 3 **Charisma:** 6
Dexterity: 4 **Intelligence:** 4
Strength: 3 **Willpower:** 3

Secondary Attributes

Size: 0 **Initiative:** 8
Move: 7 **Defense:** 7
Perception: 7 **Stun:** 3

Skills	Base	Levels	Rating	(Average)
Diplomacy	6	3	9	(4+)
Diplomacy (Etiquette)	6	4	10	(5)
Drive	4	3	7	(3+)
Drive (Carriage)	4	4	8	(4)
Empathy	4	4	8	(4)
Empathy (Intuition)	4	5	9	(4+)
Firearms	4	2	6	(3)
Melee	6	2	8	(4)
Pilot (Balloon)	4	4	8	(4)
Stealth	4	3	7	(3+)
Survival	4	1	5	(2+)

Talents

Bold Attack (Melee); Charismatic; Flurry 1; Inspire 1; Jack of All Trades 1; Parry

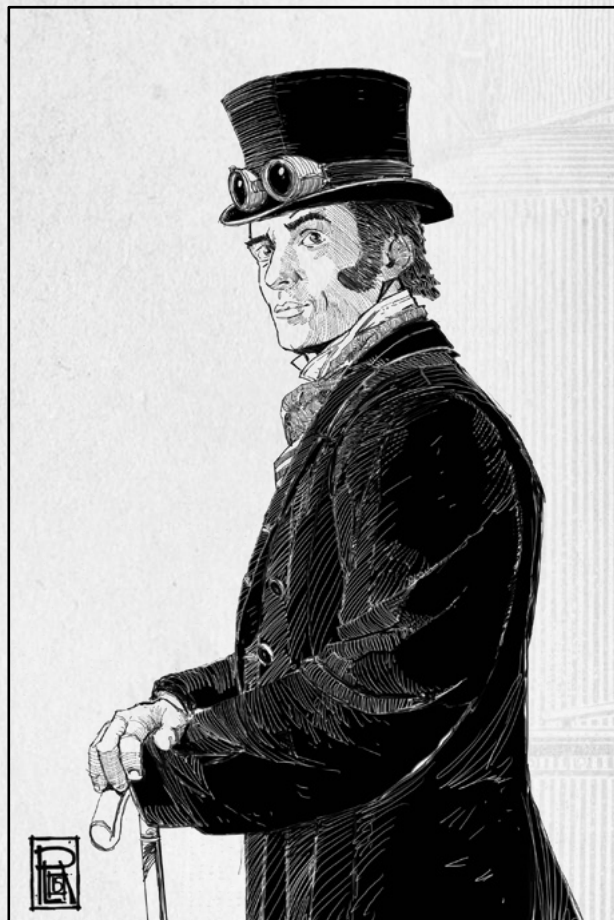
Resources

Status 1; Fame 2; Wealth 3; Refuge 2

Flaws

Shy

Weapons	Rating	Size	Attack	(Average)
Sword Cane	2 L	0	10 L	(5) L
Pocket Revolver	2 L	0	8 L	(4) L



Roleplaying

Cyril is a modest gentleman brimming with a thirst for action and idealism. Friendship and honesty are important to him, and he judges everyone by their deeds and not by the standards of society. He makes new discoveries with childlike glee, he is fascinated by technology and alien cultures, he loves traveling, and he is always looking for new challenges. He assumes that other people always show their best intentions—which is a bit naïve. Whenever he makes an interesting discovery, he is in a very good mood and does not shy away from expressing his delight with shouts of glee. In such moments, the usually shy Cyril is quite more outgoing than others may expect from him.

As a gentleman, he dresses himself properly in suit and coat, wearing more practical clothes while traveling, but they are elegant at all times and with an eye for detail. He keeps his shoes clean and never forgets his umbrella when leaving the house.

1889

Overview: Equipment and Vehicles

Equipment	Capacity	Resources	Notes
Supplies	for 250 days/man	0.5	0
Fuel, 550 lbs. / 250 kg	0.5	0.5	Petroleum / gas / coal / animal feed
Desert and jungle gear	1	0.5	Including tough clothes with sun-protection, tents, mosquito repellents, etc. (+2 points protection against heat, 2 additional dice for appropriate Survival skill rolls)
Arctic gear	1	0.5	Including thick clothes, tents, mountaineering equipment, etc. (+2 points protection against cold, 2 additional dice for appropriate Athletics skill rolls)
Siebe-Gorman's Hydraulic Thermo-Suit (2 pc.)	1	2	See page 114
Throckmorton's Maps of Mercury	0	3	Including complete maps of the Ice Sheath and partial maps of the Twilight Zone
Asseburg's Maps of Mercury	0	3	Including complete maps of the Twilight Zone and partial maps of the Hot Side

Movement*

Bicycles	0.5	0	For the whole group
Horses / Mounts	1	0	For the whole group
Carriage, 1 Axis	1	0	Including a horse
Carriage, 2 Axes	2	0	Including 2 horses
Automobile	2	2	
Balloon	1	1	
Multi Personal Conveyor	1	2	
Big Rowboat / Dugout Canoe	1	0	
Motorboat / Steamboat	1	1	
Sailboat	2	1	
Steam Cutter	3	2	

*) See page 81 for information about speed, fuel consumption and capacity.

Preparations: What about the Competition?

The Other Group's Equipment

The other group decides to take an aircraft, a ground (Fitzgerald) or water vehicle (von Bomsdorff), one set of maps (Fitzgerald takes Throckmorton's, von Bomsdorff takes Asseburg's), food supplies for 500 days per man, about 1,100 pounds, or 500 kilograms, of proper fuel, and a gear package.

The Members of the Other Group

In addition to the competitors, the following persons partake in the journey:

- **Pashpaathu** (Fitzgerald only), a conscientious Martian, who attended the high butler's school and strives to be the best in his field of expertise. By doing so, he is oftentimes refreshingly unconventional, but always polite, friendly, and loyal. He seems to possess the right tool or the fitting skill for any situation. (Same ratings as *Martian Butler* with the *Jack of All Trades Talent*, **Core Rules**, p. 178)

- **Johann Janssen** (von Bomsdorff only), a captain from Northern Germany, who never loses his patience and has coped with many dangers. He is a little bit superstitious and always has a tale to tell. (Stats as the *Steam Engineer*, p. 110.)

- **Dottore Bernardo Tuttone**, bred-in-the-bone Turinese tinkerer of all vehicles known to mankind. Speaks broken English, but curses loudly in Italian while making repairs and modifications. Very outgoing. (Stats like *Automobile Expert*, p. 104.)

- **Jane Pennyside**, Australian big game huntress. She is a woman who keeps calm at any time and has already had every predator bigger than a lion before her gun. She adapted her behavior to that of the rough world of men, in which she survives as a female simply because she is better than her competition. (Stats as *Explorer* with an elephant gun, **Core Rules**, p. 190)

Travel Preparations

The competitors take care of the passage to Mercury themselves. The characters are invited to equip themselves and help the competitor they have chosen with important procurements. Use the following game mechanics for the preparations:

Capacity and Resources

Both competitors have command of:

- **5 Capacity points** on board of the ether flyer. Every point of **Size** of any vehicle uses 1 point of Capacity; the Capacity of other equipment varies depending on weight and bulkiness (rule of thumb: 0.5 points of Capacity for 550 lbs., or 250 kg, of weight each).
- **8 Resource points** (sum of the competitors' Resources) plus the amount of Resources added by the characters (**Core Rules**, pp. 169–174), if any. These points represent the expense of background Resources necessary to acquire the equipment. In addition to regular purchases with money, you may, as a rule of thumb for buying further equipment, assess Resource costs of £250 per point as well as Artifact ratings. In this case, the equipment is only available during the course of the adventure.
- **Further Capacity and Resource points** may be purchased for £250 per point, up to a *total amount* of a maximum of 4 points.

At Princess Christiana Station

In this chapter, the characters arrive on Mercury, make some final preparations on site, and purchase further equipment before

beginning the journey. On this occasion, they are approached by the lover of Lieutenant Sandford to look for him during the journey. In addition, an agent of the resources conglomerate asks them to search for underground connections on both sides of the planet.

Arrival on Mercury and Welcome

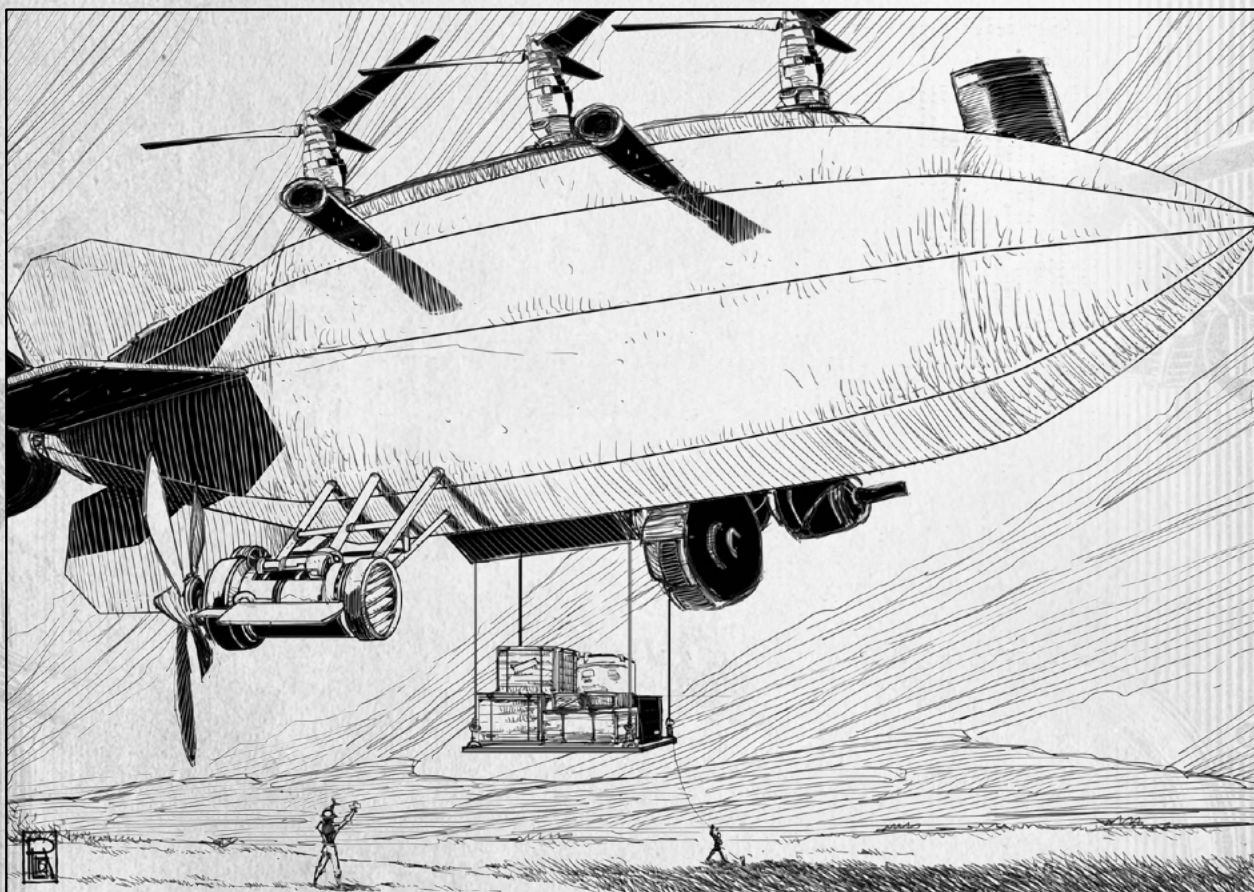
The voyage of 56 million miles, or 90 million kilometers, takes three and a half weeks, and you can flesh it out at will. The landing takes place near Princess Christiana Station.

The representatives of the British government have already arrived to welcome the guests. While the characters are greeted heartily and answer the usual questions about where they come from and where they are going, the boxes with their gear are being unloaded.

To flesh out the one-week preparation time, see page 35 for a detailed description of Princess Christiana Station and its personnel.

Welcoming the Guests

During a dinner at *Sir Arthur Choat's* (see page 36), both parties sit at table together and commence discussing the details of the journey. The station's administrator is more than happy to act as the referee and suggests setting certain stages at whose ends the competitors have to prove they have been to the respective locations. It is agreed upon to set up the exact points during the following days together with the competitors (just the two racers and *Sir Choat*) and to start the race afterwards.



The Statutes

§1 The race takes place between the honorable gentlemen Cyril Montgomery Fitzgerald, Esq., and Walther Friedrich von Bomsdorff, Major General, retired, as well as between their respective recruited associates.

§2 Any vehicle and any equipment may be used which has been brought to the planet via ether flyer by either party, with the exception of any means of traveling through the ether, since the race takes place on the planet and within its atmosphere.

§3 Furthermore, both parties are allowed to use any vehicle, any willing companion, and any resource, equipment, or technology they may find on Mercury. The restrictions of §2 apply as well.

§4 Mercury shall be circumnavigated in the direction of the World River's flow.

§5 The competitors have to present proof that they have visited a total of four way-stations. It is required to present all proofs at the goal to win the wager.

Section 1: Raising of one's own national flag on top of the highest giant tree on the vast High Plateau located about 310 miles, or 500 kilometers, in the flow direction from Princess Christiana Station.

Section 2: Finding a glow crystal of at least the size of a man's head. Both parties are required to inscribe their names on the 'Glow Rock' beforehand. The crystal has to be presented after the race, the inscription of the names will be verified by the same notary.

Section 3: A certification in the form of Sir Jasper Bligh's signature, certifying that the competitors visited his penal colony on the Hot Side of the planet.

Section 4: After the coldwards crossing of the World Spine, the competitors shall acquire an egg from the breeding fields of the Totun ice worms on the Dark Side of the planet as proof.

§6 Payment of the wager shall be an amount negotiated between the honorable gentlemen Fitzgerald and von Bomsdorff.

§7 Winner of the race shall be the first competitor to reach Princess Christiana Station with all proofs according to Article 5, Sections 1 to 4. In case of missing proofs, whoever has acquired the most shall be the winner.

The Route

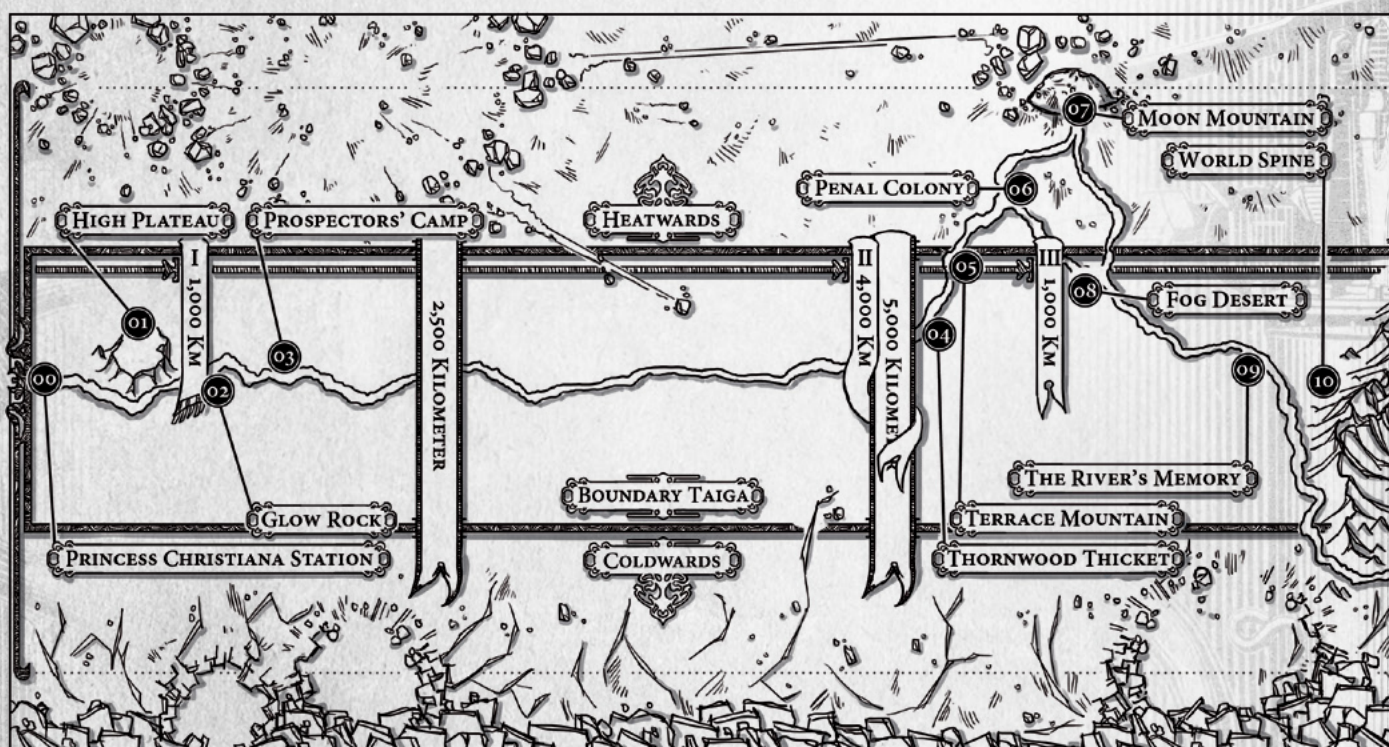
Leg	Distance	From	Via	To	Area	Objective
1	680 miles / 1,100 km	Princess Christiana Station (pages 35/76)	High Plateau (pages 31/84)	Glow Rock	Twilight Zone	Raise the flag of one's nation on the highest giant tree on the plateau
2	2,490 miles / 4,000 km	Glow Rock	World River	Terrace Mountain (in sight)	Twilight Zone	Finding a glow crystal the size of a man's head
3	620 miles / 1,000 km	Terrace Mountain	Penal colony (pages 69/88)	Fog Desert	Hot Side (Forbidden Desert, Boiling Wasteland)	Certification of arrival by Sir Jasper Bligh
Detour 1	+680 miles / +1,100 km	Penal colony (pages 69/88)	The Moon Mountain (pages 67/91)	Fog Desert	Hot Side (Forbidden Desert, Boiling Wasteland)	Finding Sandford
4	2730 miles / 4,400 km	Fog Desert	World Spine (pages 34/94), Lake Plimsell (pages 32/95)	Cyan Lake (pages 51/95)	Twilight Zone, Dark Side (Ice Sheath)	Finding a Jotun ice worm egg
Detour 2	+680 miles / +1,100 km	Jotun nest of eggs	Akhmatov's laboratory (pages 52/97)	Boundary taiga	Dark Side (Ice Sheath, Dry Ice Zone)	Stopping Akhmatov's device
5	3,110 miles / 5,000 km	Jotun nest of eggs	Sky Forest (pages 31/98)	Princess Christiana Station (pages 35/99)	Dark Side (Ice Sheath), Twilight Zone	Reaching Princess Christiana Station first

Florence's Request

Florence Miller (born 1862, brunette, petite, pretty, wearing practical clothes similar to men's attire, dedicated, clever and idealistic, Archetype: Scientist, Motivation: Love) is a scientist who considers it a great honor being able to explore a nearly-unknown planet. From the start, Florence was excited about working on Mercury and was only thinking about her work when she fell in love, head over heels, with Lieutenant Charles Sandford, who has been considered missing as of late.

Thus, she approaches the characters and asks them for a discreet conversation. She explains that the missing Charles is a dear friend of hers (characters sensitive to the subtext and her body language will intuit that their relation goes quite beyond mere friendship). She urgently asks for help and can offer the following information:

- The expedition consisted of 2 scientists and 4 soldiers under Charles Sandford's command.
- Their exact destination was secret, but it clearly led to the Hot Side of the planet.



- The expedition was supposed to return two weeks ago, at the latest.
- Aerial flyers and gliders were sent out to the Hot Side searching all areas, but they found no trace of the expedition.
- The huts of the scientists and soldiers have remained empty since then, but access is denied.
- Sandford is still alive! She is sure of that.

You can read what actually happened in the background story on page 70. Sandford is indeed still alive and has sought shelter inside of the Moon Mountain.

If the characters believably promise to do everything in their power to find Sandford, Florence can supply them with some rare equipment found at Princess Christiana Station:

- Florence lends the characters goggles made of Solar glass (see page 114).
- She provides access to Sandford's hut. There, the characters will find a map of the section leading from Terrace Mountain through the Forbidding Desert to Bligh's penal colony and further to the Moon Mountain, with all known oases on it. The maps count as a *complete* set for this stage of the journey.
- She can forage more food (up to 50 rations) and steal further equipment.

Racing Rules

*"With speed and vigor, one, two, three,
Time is running, and so are we."*

— Wilhelm Busch

This section sets the game mechanics for the journey around the planet and describes random encounters.

Movement

If floating on a piece of wood (and assuming that it will not get stuck anywhere) along the World River, a journey without rest would take 133 days. Since Mercury's circumference is about 9,300 miles, or 15,000 kilometers, the River flows with an average speed of 2.5–3 miles per hour (2 to 2.5 knots), or 4–5 kilometers per hour. Of course, the characters have other means of circumnavigating the planet at their disposal. With the help of the following easy system you can determine how fast they really are. To keep an eye on their progress, you can use the map on these pages and in the Appendix to mark their current position. For every passing day, use the following simple steps:

Step 1 - Determine Random Encounters

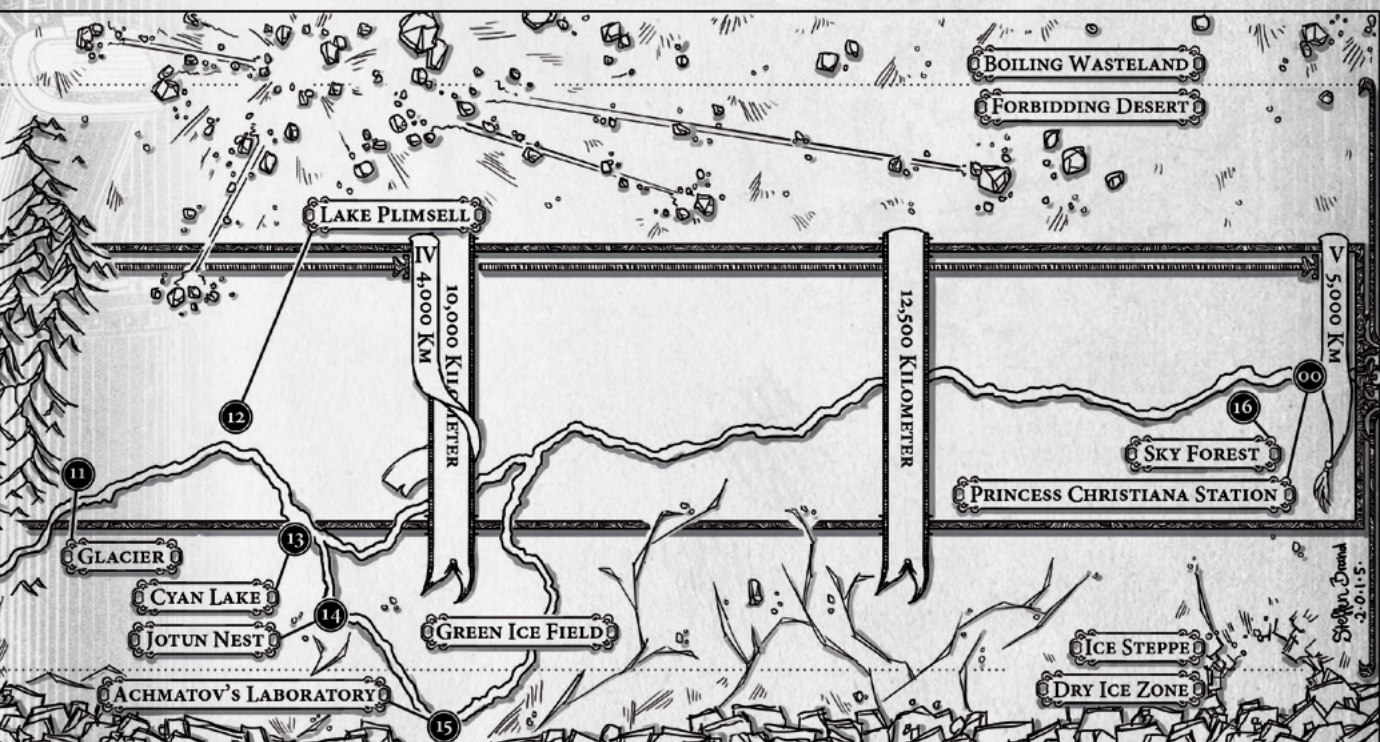
"If by chance this sailback ammonite were the last of its kind, would it not be better, in the interest of science, to spare it?"
"Perhaps, in the interest of my stomach, it would be better to hunt it."

— Jules Verne

For determining whether any event takes place and which one in particular, roll 10 dice on the following table(s). It is up to you to decide when the events take place during a given day. The modifiers given in the table are added to or subtracted from the result of a second roll with 10 dice.

Simple Rules

With the Rule of Taking the Average you can always choose event 5, and no event is triggered.



Adventure

Number of Encounters

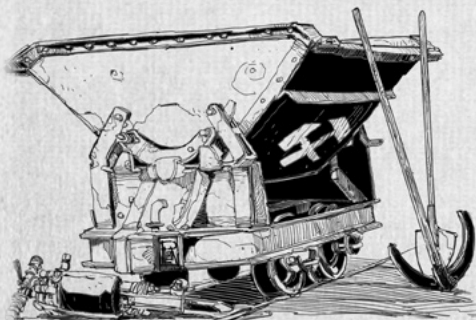
Successes	Number of Encounters	Modifier for 'Encounters' Table
0	3	-2
1	2	-3
2	2	-2
3	1	-1
4	1	+0
5	0	-
6	1	+1
7	1	+2
8	2	+2
9	2	+3
10	3	+2

Step 2 - Determine Basic Speed

The basic speed for the day depends on the vehicle used. The velocity (presented in m/h and km/h) is multiplied by 10, or by 5 for muscle-driven vehicles; the result is the straight-line distance in miles / kilometers of a daily stage (see **Basic Speed** table). Since the characters may travel up to 16 hours per day, deducting rests and including any detours, small obstacles, stops for orienting, and much more, ten to fifteen times the amount of miles/ kilometers per hour is an adequate basis.

Encounters

Successes	Encounter	Exemplary Description
0 or less	Unique Creature	The white worm (p. 118), a huge, silicon-based creature or a giant amphibian; a unique biological and outlandish lifeform, but, first and foremost, a severe threat
1	Dangerous Location	For instance, a spring tide lowland (p. 33) or the Black Waters (see page 32) in the Twilight Zone; maw beasts (p. 63) or a dust sea (p. 68) on the Hot Side; dangerous crystal forests (p. 53) or a caved-in mining tunnel on the Dark Side
2	Pack of Animals	A full horde of dangerous animals like floating jellyfish (p. 29) in the Twilight Zone, or Fenrir worms (p. 46) on the Dark Side
3	Nest/Cave	A creature's lair, including two aggressive animals protecting their brood, and numerous young animals
4	Animal Ambush	A creature attacks from ambush. In the Twilight Zone, this could be an eryops (p. 28), a grass crab (p. 25), or a swamp lurker (p. 27); on the Hot Side, this could be a maw beast or razor vines; and on the Dark Side, it could be a snow spider
5	Animal Attack	An open attack, e.g. by an anomalocaris (p. 27), a gliding snake (p. 29), a black stinger (p. 63), mirror drops (p. 63), a Jotun ice worm (p. 46), or an air swimmer (p. 47)
6	Damage/Injury	The used vehicle is probably Damaged (6), a riding animal receives an injury of 3 L; see the Damages table
7	Useful Location	An oasis on the Hot Side, a shelter from the wind on the Dark Side, a source of food in the Twilight Zone
8	Resource/Gear	Something useful can be found, e.g. the gear left by a prospector or an explorer, maybe food or a weapon. Precious metals, glow crystals or the like are also possible. The value should not exceed £500, an Artifact should not exceed level 1
9	Working Animal	A velvet worm (p. 26), a sapo (p. 26), a bison grub (p. 45), or even a useful colony of glacier ants (p. 45)
10	Special Location	This place could be a cathedral grove (p. 31) or an underground tunnel (p. 69)
11	Remains of an Expedition	The crash site of an ether flyer, the remains of an expedition, or an abandoned resource storage; useful equipment, food, survivors, or even a vehicle (which can be repaired) can be found. The value should not exceed £1,000, an Artifact should not exceed level 3
12	Unique Location	A place described in this book, e.g. the Lost Colony (p. 33) or the Cyan Lake (p. 51)
13	Mysterious Relic	An item created by an ancient alien culture: unexplainable giant desert varnish pictograms, Phaetonian technology, an Artifact of level 4 or higher



Basic Speed

Means of Transport	Type	Skill	Size	Def	STR	Velocity (mph / km/h)	Speed/day	Crew	Team Pass.	Fuel/day	Loadable/ as load*
On foot	Ground	Athletics, Survival	0	—	—	BODY	BODY x 5	+0	1	—	—
Bicycles	Ground	Drive (Bicycle)	0	6	4	STR x 6 / STR x 10	STR x 50	+2	1	0	— As load
Horse	Ground	Ride (Horse)	1	—	—	9 / 15	75	+0	1	1 Food (1 kg)	—
Carriage, 1 axis	Ground	Drive (Carriage)	1	3	5	9 / 15	75	—1	3	1 Food (2 lbs. / 1 kg)	—
Carriage, 2 axes	Ground	Drive (Carriage)	2	4	7	6 / 10	50	—2	1	6 Food (4 lbs. / 2 kg)	Loadable
Automobile	Ground	Drive (Automobile)	2	6	8	12 / 20	200	+2	1	8 Petroleum (110 lbs. / 50 kg)	Loadable
Big Rowboat	Water	Pilot (Boats)	1	4	6	STR	STR x 5	+0	2	4 —	As load
Motor/Steam Boat	Water	Pilot (Boats)	1	5	6	9 / 15	150	+0	1	5 Coal/Petroleum (22 lbs. / 10 kg)	As load
Sailboat	Water	Pilot (Boats)	2	4	8	3 / 5	50	—2	2	6 —	Loadable and as load
Steam cutter	Water	Pilot (Ships)	3	5	10	15 / 25	250	+0	2	8 Coal (175 lbs. / 80 kg)	Loadable
Big Balloon	Air	Pilot (Ships)	1	4	5	12 / 20	200	—2	1	4 Gas (22 lbs. / 10 kg)	As load
Multi Personal Conveyor	Air	Pilot (Personal Conveyor)	1	3	4	STR x 6 / STR x 10	STR x 50	—2	4	2 —	As load
Bonus Vehicles											
Don Watson's Heat Glider	Air	Pilot (Air Ships)	2	5	6	19 / 30	300	—1	1	5 Coal (20 kg)	Loadable
Tin Juggernaut	Ground	Pilot (Track Vehicles)	6	7	10	3 / 5	50	—2	9	20 Sunlight (unlimited on the Hot Side, 48h on the Dark Side)	Loadable
Steam Sled	Ice	Pilot (Sled)	5	6	9	9 / 15	150	—1	1	100 Oil (2,200 lbs. / 1,000 kg)	As load
Balloon Fruit Balloon	Air	Pilot (Balloon)	1	5	4	15 / 25	250	—3	1	4 —	—

*) Loadable means that the total maximum weight of other vehicles/equipment can be loaded on them. As load means that this vehicle can be mounted on another loadable vehicle.

Damage and Repairs

Damage (Rating)

A vehicle can be damaged by the Damage/Injury random event or another event (such as Animal Attack) during the journey. The rating in brackets is the number of 'Attack' dice rolled for this. The owner of the vehicle rolls a number of dice equal to his *Defense* + *Size* rating against the attack. If the successes rolled as Defense are not sufficient to counterbalance the damage, the excess Attack successes are subtracted from the structure. Every point subtracted from the structure reduces the daily movement by 1 die until the damage is repaired. The loss of *all* points (total loss) amounts to a subtraction of —8.

While in operation, damage of the vehicle means damage to the passengers equal to the points subtracted from the structure (usually L).

Repairs

On an extended *Craft (Mechanic)* Skill roll, a character has to accumulate successes equal to 3 + (amount of lost Structure points) in order to repair the vehicle. A Skill roll takes about 2 hours, leading to a modifier of —2 on the movement roll (see below). The difficulty depends on the vehicle. A simple vehicle like a balloon or a bicycle should have a maximum difficulty of 1, while a complex device like the steam sled or the Tin Juggernaut should have a difficulty of up to 5. After a total loss, half of the structure points need to be accumulated through successes in order to remove the —8 Movement penalty.

Simple Rules

Since your characters will not change their means of transportation every day, the basic speed does not need to be determined very often. Temporary attribute modifiers can also be ignored.

Step 3 - Movement Roll

After determining the basic speed, the players can now use their abilities to improve the result. To do so, make the respective Skill roll for *all* team members (Team) minus or plus crew on the table **Basic Speed**. For this, the *Average* of the successes applies. If the speed column shows an Attribute rating, this applies *always* to the *Average* of all team members. The number of dice for all team members is then modified as follows.

Conditions	Number of Dice +/- rating	Notes
Crew		
Use of Style Points	+2	Per point
Complete set of maps	+2	For the mapped area only
Partial set of maps	+1	For the mapped area only
Terrain		
Air	+2	Aerial vehicles only
Water	+1	Water vehicles only
Twilight Zone, normal	+0	
Twilight Zone, flat	+1	
Twilight Zone, swamp	-2	including water vehicles; -3 for wheeled vehicles
Twilight Zone, forest	-1	Vehicles of Size 2 only
Gravel Track	+2	+4 for wheeled vehicles
Forbidding Desert, sand	-1	-2 for wheeled vehicles
Mountains	-2	Subtraction applies to aerial vehicles as well, ground vehicles with Size 1+ cannot be used
Forbidding Desert, gravel	-1	
Forbidding Desert, rocks	-2	-3 for vehicles of Sizes 1-3
Desert Track	+0	+1 for wheeled vehicles
Boiling Wasteland	-2	
Ice Sheath	-1	Sled +1
Dry Ice Zone	-2	Sled +0
Tunnel	-2	Ground vehicles of Size 2 and smaller
Activities during the day		
Searching for food	-2	(-4 on the Hot or Dark Side)
Searching for water	-1	(-4 in the Forbidding Desert, -8 in the Boiling Wasteland)
Repairs	-2	per roll
Damage	-1	Per STR point lost
Total loss	-8	
Random encounter	-1	per encounter
Miscellaneous	-1	per hour of activity

If the number of dice is reduced below 0, every missing die means a subtraction of -10% from the Basic Speed on that day. Otherwise, every success adds 10% to the Speed (based on the Basic Speed). A team member's Skill roll without any success subtracts -10%.

Simple Rules

Use the Average of the modified Movement roll as the number of successes instead of making the Skill roll.

The Journey: What about the Competition?

For the competitors, you can handle the journey in the same way, although you should use the **Simple Rules** (but don't have to). With the help of the position diagram, keep track of the location of the group, the prevalent terrain, and the access to vehicles.

Random Encounters

Always keep in mind whether the other group has a head-start and how large their lead is. If the group has a lead of 60 miles, or 100 kilometers, or less, roll 10 dice every day (-1 for every 6 miles, or 10 kilometers, of the other group's head-start) on the table below, or decide for yourself whether the other group has had the same encounter as the players' team before them.

3 or less	No trace of the other group
4-5	The other group was here, but only partially removed the threat, circumvented it, or searched the place in a hurry. The characters could encounter a wounded animal, find a superficially rummaged location or the like. With a successful Survival (Tracking) skill roll (Difficulty 2) the players discover that the other group was here.
6-7	The other group was here a short while ago and removed the threat, or plundered the place completely. It is possible for the characters to find an animal killed by human hand or the like. The Difficulty for the Survival skill roll is only 1.
8-10	The players' group meets the other group at the location of the random encounter. They can support each other in a fight. On finding something valuable, they have to decide how to handle the situation and who gets which share.

The Competitors at the Gaming Table

During the course of the adventure, the player characters are accompanied by one or more companions. As gamemaster, you can play them out as characters who might give hints and make decisions—after all, the respective competitor is the organizer and leader of the group. However, it should be the player characters who drive the plot. It is your (sometimes demanding) duty to portray the non-player characters. It is important to strike a balance and neither ‘do your own thing’ as one of the competitors, without the players having any say in the matter, neither be too passive (‘Oh right, he’s there, too.’). Here are some tips on how to do it:

Style Points

Put the 5 starting Style Points of the competitors on the table and use them on your players (**Core Rules**, p. 200). You can gain dice for your players, reduce lethal damage, or raise their Talents. In addition, the travel speed can be increased.

Through their *Motivations* (von Bomsdorff’s *Honor* and Fitzgerald’s *Hope*), they receive Style Points for responsible actions or optimism, especially if the characters catch the same feelings, too.

Their *Flaws* might also offer some interesting approaches: whether the oftentimes too brave von Bomsdorff is being *Overconfident*, or the *Shyness* of Fitzgerald prevents him from occupying the center stage.

Using Talents and Skills for the Group

Both competitors possess the Talent *Inspire*, which you can use in those cases in which you do not want the competitors to steal your players’ spotlight. As an action in a fight, they call out orders and warnings, effectively giving the players bonus dice. Fitzgerald may be a less gifted leader, being a Jack of All Trades, but he can improvise skills that might be missing.

endangers the planet’s equilibrium. Two legs later, they arrive in the vicinity of the laboratories of the madman Akhmatov, whose machines are the cause of the phenomenon, and they prevent the cataclysm. In the last leg, the characters can fully concentrate on the race and on making up for any lost time. The finish of the race is kept open. The characters may succeed or fail (though knowing that they have fulfilled a far more important task). For each leg of the journey, the distance is given as well as the area traversed, what either group has to do, and what proof they have to present in order to succeed. Furthermore, *Bonus Vehicles* are described that can make an appearance during certain legs, helping the players’ group advance. The paragraphs titled *How about the Competition?* describe the approaches, decisions taken, and the obstacles tackled by the other group.

First Leg - To the High Plateau!

“Having lost sight of our goals, we double our efforts.”

— Mark Twain

Total Distance: 620 miles / 1,000+ kilometers

Sections:

From Princess Christiana Station to the High Plateau (310 miles / 500 kilometers, Twilight Zone, Air, Water)

From the High Plateau to the Glow Rock (620 miles / 1,000 kilometers, Twilight Zone, Water, Air)

Goal: Putting one’s own nation’s flag at the top of the highest giant tree on the plateau

This stage addresses the first steps of the journey, which are influenced by the spirit of competition. The characters travel through the Twilight Zone along the World River and have to raise their flag on the High Plateau.

The First Miles - Maneuvering and Rushing

At long last! On the day of the departure the two groups gather on the landing meadow of the station. In the run-up, the competitors have plenty of time to prepare the first vehicle of their choice. As soon as all preparations are done, all the station’s scientists come together again. **Sir Arthur Choat** personally fires the starting pistol—and the race is on!

Make your players and yourself familiar with the rules and try them out during the first leg. Run the race in the full sense of a sports competition on the river section called *Departure* and continue running it for a hundred miles or so. The competitors are still near to each other, and it is possible that they will meet more often, particularly if using the same means of transportation. In addition, use the description of the Twilight Zone (p. 17) and random encounters to give your players an understanding of the Twilight Zone and its dangers.

The Race

During the actual race, the characters make a journey around the planet. This chapter describes the seven legs of the journey as well as two detours to get to the bottom of some severe difficulties. After a few stages under the star of sportive competitiveness against the other group, the route leads into the Forbidding Desert for a time, where the characters may search for and find Sandford. After that, the characters realize that an unknown phenomenon

The High Plateau

For details on the High Plateau, see page 31.

Arrival and Exploration

If the characters travel by air, they can land on the plateau. Coming from the River or its banks, though, they will have to climb it first: they will need to accumulate 8 successes with extended *Athletics (Climbing)* skill rolls (each roll takes up 1 hour, meaning a -1 reduction from the Movement roll on this particular day).

At the top, they find a bizarre forest whose transition from heatwards jungle to coldwards mixed forest takes place within a few hundred meters. A very unique and oftentimes surprising flora and fauna has developed, stimulated by the ever-changing micro climate and the low gravity of Mercury. Giant dragonflies with a wing span of 2 feet, or 70 centimeters, buzz around in the forest. A successful *Science (Biology)* skill roll enables a character to discover that this kind of firefly bears a strong resemblance to a fossil of the *Meganeura monyi*, which was found a few years ago in a coal seam in France; the animal went extinct on Earth 300 million years ago. A fat, walrus-like *Moschops* of 13 feet, or 4 meters, length with stumpy feet and a round snout waddles clumsily around the forest, continually eating leaves, while hound-like amphibian predators are hunting small animals. At the beginning of the next century on Earth, findings will be made of similar creatures; both went extinct about 250 million years ago.

The Giant Tree

After arriving at the giant tree, on which a Union Jack flag is already hanging halfway up, the characters realize that its diameter is only about 10 feet, or 3 meters, while its height is almost 400 feet, or 120 meters. Its slightly lopsided frame is similar to a palm tree swaying in the wind, thus it is quite hard to climb it:

Climbing up to the Union Jack, hanging halfway up at 200 feet, or 60 meters, a simple *Athletics (Climbing)* skill roll will do. A short way above it, the tree bends hazardously; the following *Athletics (Climbing)* skill rolls have to be made against Difficulty 2 with 7 successes. If the roll fails, the character falls, causing 8 L damage, unless he makes a successful *Acrobatics* skill roll (each success reduces the damage by 1 L). Next to the flag a strange, possibly unique creature has taken residence; an octopus-like tree dweller has built its nest in a tree hole, snaking its way around the tree and along the branches with its eight meters-long tentacles. It sees tree climbers as prey and attacks them, which is quite dangerous because of its razor-sharp teeth. Attacking in a round demands an *Athletics (Climbing)* skill roll against Difficulty 1, otherwise the character falls (see above). Only if the skill roll exceeds Difficulty 2 can the character attack.

If the characters are able to avoid the animal and set up their flag at the tree top, it will fall to the ground soon enough. Obviously,



the cephalopod does not tolerate that colorful thing near its nest, for reasons only known to the creature. In the end, the only way to make sure the flag remains up there is to kill the animal. In a little pool of rainwater inside the nest lie its young; reflexively, they jump at the face of anything they do not recognize as their mother (*Acrobatics* skill roll to dodge) and cling to their victims while the sprayed-out digestive juices cause severe burns of their victims' faces (3 L damage for the 3 full rounds each creature keeps clinging). A character must make a successful *Brawl* skill roll against Difficulty 2 to get rid of it.

Tree Cephalopod

Animal Companion 2

Archetype: Animal Health: 8

Primary Attributes

Body: 5 Charisma: 0
Dexterity: 4 Intelligence: 1
Strength: 4 Willpower: 4

Secondary Attributes

Size: 0 Initiative: 5
Move: 8 Defense: 9
Perception: 5 Stun: 5

Skills	Base	Levels	Rating	(Average)
Athletics	4	3	7	(4)
Athletics (Climbing)			8	(4)
Brawl	4	3	9	(4+)
Stealth	4	2	6	(3)
Survival	1	3	4	(2)

Talents

Skill Aptitude (+2 Brawl rating)

Weapons	Rating	Size	Attack	(Average)
Bite	2 L	0	11 L	(5) L
Tentacle	0 L	0	9 L	(4+) L

First Leg: What about the Competition?

Start

At the outset of the journey and depending on the speed of both parties, the characters might meet the other group quite often, and they can pass each other.

The High Plateau

If the other group reaches the High Plateau first, their flag has already been hung at the top of the tree. However, this is an advantage for the players: The cephalopod has already been killed by order of von Bomsdorff (the hungry young are still there, though). After Fitzgerald's visit, the creature is still alive (the group cunningly avoided it), but his group has left some pitons in the wood of the tree, adding a +3 bonus to the *Athletics (Climbing)* skill roll. In either case the other group loses 2 days if it reaches the tree first.

Second Leg - Treasures in the Mud

"Science, my boy, is made up of mistakes, but they are mistakes which it is useful to make, because they lead little by little to the truth."

— Jules Verne, *Journey to the Center of the Earth*

Total Distance: 2,490 miles / 4,000 kilometers

Sections:

From Glow Rock to the prospectors' camp (310 miles / 500 kilometers, Twilight Zone: swamp, Water, Air)

From the prospectors' camp until Terrace Mountain is sighted (2,170 miles / 3,500 kilometers, Twilight Zone: all terrains, Water, Air)

Goal: Finding a glow crystal the size of a man's head

A few hundred miles downriver, the World River widens and in some parts takes up the whole width of the Twilight Zone. This area houses some of the strangest and most extraordinary locations along the World River; geological phenomena and rumored traces of ancient, ether-traveling cultures are said to be found there. The long belt, stretching for more than 2,490 miles, or 4,000 kilometers, and called the 'Mercurian Sacramento' by some pioneers in reminiscence of the California Gold Rush of fifty years ago, is the planetary region most frequented by prospectors, since glow crystals can be found there more often than in any other location. It is now the characters' task to find such a glowing stone as proof—and quite an enormous one to boot.

The Way Stone at the Water Stairs

This region opens 'where the water flows uphill'. See the details of this phenomenon on page 34. The first obstacle for the travelers is to traverse this passage by boat; the site resembles a terraced waterfall flowing uphill and is nearly as dangerous. It is possible to get off the boat, but the statutes state that both groups must perpetuate their names on the 'Glow Rock'.

The Glow Rock is a huge stone wall surrounded by trees and standing on a small island on the River at the far end of the Water Stairs. Traditionally, prospectors carve their names into the rock before commencing any search. On returning successfully with their findings, they use the raw materials they found (gold nuggets beaten into foil, silver inlays, small glow crystal shards...) to 'ennoble' their names. The characters have to engrave their names; in order to do so they must go up the Water Stairs or fly over with a flyer and land on the island (with the appropriate *Athletics* or *Pilot* skill rolls). On the island, strange phenomena occur due to the force of the local magnetic field. Metal objects begin to float or become incredibly heavy, guns fire on their own, metal equipment constantly moves or behaves unexpectedly, compasses are useless, and engines are prone to fail. Although there is no wind, water from water skins or bottles (even one's stream while urinating) is drawn upwards like the waters of the Water Stairs.

Among Prospectors

Beyond the Water Stairs the World River widens and flows gently, fed by the glacier tongues from the coldwards side falling into the River. From certain positions on top of the glaciers, the characters can get a view over a single, wide body of water to the swampy mangroves lying heatwards. There, it is possible to meet some prospectors:

- **Bill Burkes** (born 1833, heavily built, many missing teeth replaced by gold ones, stinking, shrewd, devious, and disloyal, Prospector, Motivation: Greed) is the leader of a group of four prospectors and knows his claim very well. During the treasure hunt, their skills as *Prospectors* (see Example Character, p. 106) can be utilized: each of them adds +2 dice to Teamwork (**Core Rules**, p. 151) during the search for glow crystals. Unfortunately, Bill cannot be trusted. After the first findings he will try to sabotage the characters' vehicle (*Damage* (9)) and to make off with his men and the glow stones, using deadly force if necessary.

- The solitary, but good-humored and friendly **Skookum Jim Mason** (born 1855, slightly American Indian appearance, hat, fashionable moustache, happy and friendly, his name meaning 'big, trustworthy Jim Mason' in Chinook, Prospector, Motivation: Justice) is a North-American Tagish Indian from the Yukon river valley. Back home, he was looking for gold, but he was confronted by racism and decided to invest his dollars in some equipment and a voyage to Mercury in the hope of less prejudice and better findings. He is honest and abides by agreements. His stats are that of a *Prospector* (p. 106), and he would be glad to offer his skills for the search.

The Treasure Hunt

The search for a glow crystal that meets the requirements is a matter of luck. The presented helpers can put their abilities to good use. The following conditional rules apply:

Bonus Vehicle: Don Watson's Heat Glider

Don Watson (born 1851, pilot outfit and goggles, cowboy hat, adventurous daredevil, sometimes bragging, Inventor, Motivation: Fame) is excited about the idea of a race and offers his heat glider (p. 112) in return for a fee (amount at the GM's discretion). He will prove to be unreliable after he has dropped the party off on the ground: he is days late for any pick-up, although he always has a plausible explanation for his tardiness. In the end, he should stay away for good or crash near Bates Valley on the Hot Side. After making the repairs, he returns to Princess Christiana Station where the characters might meet him again.

Means of Transportation	Type	Skill	Size
Don Watson's Heat Glider	Air Pilot (Air Ships)	2	2
Defense	STR	Velocity (m/h / km/h)	Speed per Day
5	6	19 / 30	190 / 300
Crew	Team	Pass.	Fuel/Day
-1	1	5	Coal
Loadable/as Load Loadable (45 lbs. / 20 kg)			

- Only water vehicles or walking is allowed during the search, and the basic speed is accordingly limited. Air and ground vehicles can be piloted at walking speed, or they can fly ahead.
- The daily Movement roll is reduced to 5 dice, since the characters roam the traveled areas very slowly.
- The characters can also forego moving on. On such a day, the characters receive a +2 bonus to *Perception* rolls while searching for glow crystals. Since the area has been searched thoroughly, the characters have to move on the next day in order to have any chance of finding something.
- A search party may use the Teamwork rules (**Core Rules**, p. 151) and make a daily *Perception* roll against Difficulty 5, whereas the helpers can assist the leader (the person with the highest *Perception* rating) with their skills. The rules allow a maximum die bonus of +10 (+2 for each prospector), but in a group of 6 or more persons no further bonus is added.
- Five successes on the skill roll on this day mean that the characters have found a glow crystal. Following this, roll three dice: only if the total is even is the size adequate for the competition.

If you do not want to make a roll, you can decide on the outcome for yourself. You can award bonus dice for good ideas from your players.

Inside the Shell of a Giant Ammonite

Sooner or later the characters will find a glow crystal of the appropriate size. In this case, let them make the following discovery:

The World River has spawned some very remarkable creatures, similar to those of the Paleozoic era on Earth. Among these creatures are the very rare giant ammonites, snail-like water dwellers whose shells have a diameter of several meters. At one spot along the World River, an ammonite died and the opening of its shell protrudes about 6 feet, or 2 meters, out of the water surface. Although the soft innards have long rotted away, the snail shell has remained. Looking down on the shell from the air, the shell is hopefully devoid of water. In addition, on a successful *Perception* roll against difficulty 1 the characters might see a weak glow reflected by the shell's nacreous interior, probably emitted by a glow crystal on the inside. If Skookum Jim accompanies the characters, he will probably encourage them to conduct an investigation, since he believes that giant ammonites hold big glow crystals inside them.

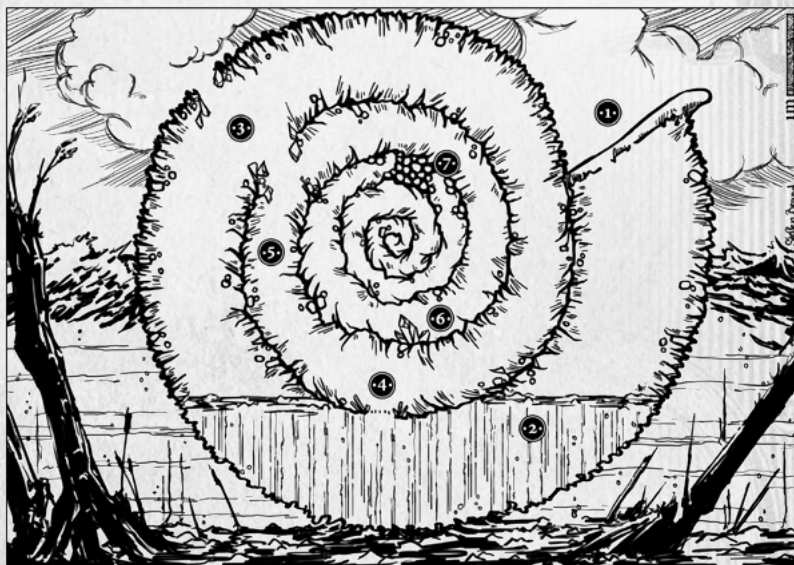
The inside of the giant ammonite is winding as indicated by the map.

Entry point: At this point, the characters can enter the shell with a simple *Athletics (Climbing)* skill roll. Failure causes light injuries (2 L). Since the inside is wet and slippery, a climber can easily slide into the water.

Water: Surprisingly clear rain water has collected here. Characters can dive through with a successful *Athletics (Swimming)* skill roll against Difficulty 1. A failure results again in light, but nonlethal injuries (2 N) and causes the swimmer not daring to dive all the way through, going back instead.

Ascend and Splinters: On the other side of the water siphon, the path rises again. The slick walls are hard to climb (*Athletics (Climbing)* skill roll against Difficulty 3). In addition, the breaks in the shell are very sharp-edged. Only on a successful *Acrobatics (Contortion)* skill roll can the characters get through without being injured; otherwise they suffer 3 L damage. Since the outer shell wall also lies above the surface of the swamp, it is possible to drill a hole into the shell from the outside, thus avoiding the water and the tedious climbing.

Weak Point: If the characters are not careful, the descent is very fast. In addition, the lowest spot of this winding sports a weak point. If the characters do not make an *Acrobatic (Tumbling)* skill roll against Difficulty 2, they break through and fall into the water below.



Narrow Space: At this point the snail shell is getting quite narrow. However, the characters start to feel some comfortable warmth, and they can see a distinct glow in the darkness inside the shell. In this area, all characters of Size 0 or more need to make an extended *Acrobatics (Contortion)* skill roll with 10 successes against a Difficulty equal to their size +1 in order to reach the glow crystal. Each success means 1 meter of progress, and each skill roll takes 5 minutes. The trepidation becomes ever more overwhelming, and you can require the players to make *Willpower* rolls so their characters do not panic due to claustrophobia, thus refusing to crawl any further. Panic-stricken characters suffer from a subtraction of 2 dice from all rolls until they have left the shell.

Glow Crystal: At last they have reached the crystal. Now, the characters can collect the orb, which is the size of a man's head (Artifact, Level 2).

Insect Spawn: From the point of view of any breeding animal that wants to protect its spawn, a hollow, winding shell of a giant ammonite, filled with watery hindrances and an illuminating glow crystal, is the equivalent of a lottery win. So it is no wonder that the winding above the glow crystal houses the spawn of a flesh-eating bug. By removing the light source the hatching is triggered, so the character who tries desperately to get back suddenly feels the spawn of 10 flesh-eating bug larvae on his neck.

Second Leg: What about the Competition?

Glow Rock and Prospectors

On the Glow Rock, the characters can readily see whether the other group has already been there or not. If the answer is yes, they will encounter Bill first. Fitzgerald might benefit from the skills of Bill and his men, but in the end he gets sabotaged and loses 3 days. This does not happen to von Bomsdorff: He works alone and without the prospectors. In any case, for the group arriving second there is still Skookum Jim as an ally.

The Treasure Hunt

In general, the search for the glow crystal takes the other group 18 days (Fitzgerald) or 20 days (von Bomsdorff), or even 26 days (Fitzgerald) or 30 days (von Bomsdorff) if the player characters were the first to arrive and have salvaged a big stone. You can present the treasure hunt by telling or rolling the dice and introduce some tension with a 'race within a race'.

Bug Spawn

Animal Companion 1

Archetype: Insect **Health:** 2

Primary Attributes

Body: 2 **Charisma:** 0
Dexterity: 3 **Intelligence:** 1
Strength: 1 **Willpower:** 2

Secondary Attributes

Size: -2 **Initiative:** 4

Move: 4 **Defense:** 5

Perception: 5 **Stun:** 2

Skills	Base	Levels	Rating	(Average)
Brawl	1	2	3	(1+)
Stealth	3	2	6*	(3)
Survival	1	3	4	(2)
Weapons	Rating	Size	Attack	(Average)
Bite	0 L	+2	1 L	(0+) L

*The Bug Spawn receives a +2 Size bonus to Stealth rolls

Third Leg - To the Penal Colony

"If you want to test a man's character, give him power."

— Abraham Lincoln

Total Distance: 810 miles / 1,300 kilometers

Sections:

From Terrace Mountain (in sight) to the Thornwood Thicket (60 miles / 100 kilometers, Twilight Zone: level terrain, Air)

From the Thornwood Thicket to Terrace Mountain (30 miles / 50 kilometers, Twilight Zone: woodland, Air)

From Terrace Mountain to the penal colony (310 miles / 500 kilometers, Forbidding Desert; sand and gravel, desert track, Air)

From the penal colony to the Fog Desert (400 miles / 650 kilometers, Forbidding Desert sand and gravel, desert track, Air)

Goal: Receiving a certification signed by Sir Jasper Bligh, warden of the colony

After sighting Terrace Mountain, the characters have to leave the Twilight Zone heatwards for the first time. They are supposed to get Sir Jasper Bligh's signature at the penal colony to prove their visit there. It is possible, however, that they do not agree with Dr. Bligh's inhuman methods and may end up clashing violently with him and his men.

Furthermore, on the way to the colony they will find a hint that the lost expedition has passed by the location. This is confirmed at the penal colony where the characters also learn the goal of the expedition: the Moon Mountain, lying even further heatwards. Until the end of the stage, the characters face the question of whether or not they should search for Sandford.

The Thornwood Thicket

The goal of this long leg is a mountain distinctly formed like a terrace near the heatwards region of the Twilight Zone. It is visible from a long distance and thus was chosen as an appropriate final destination for the second leg of the race. In addition, there is a caravan trail that leads from the mountain to the penal colony. In order to reach it, the characters first have to traverse

the Thornwood surrounding the colony at the transition zone to the Forbidding Desert. See page 55 for details on the Thornwood.

Capitaine de Mourier

Belgian by birth, *Capitaine Auguste de Mourier* (born 1835, desert uniform of the French Foreign Legion with imperial insignia from the time *before* the 1871 revolution, wiry and untiring, stern look, proud and arrogant, merciless towards himself and others; stats like an *Officer*, **Core Rules**, p. 186) already did his duty during the Crimean War in 1854 and in much later conflicts in the French Foreign Legion. When, to his misery, France fell to anarchy and communism, he sought asylum in England and since then has been serving as a mercenary. He is in the service of Dr. Bligh.

He is on the road through the Thornwood with 3 soldiers and 8 convicts from the penal colony searching for the raw material for the silicon sun cream, since Dr. Bligh supplies Princess Christiana Station with it. De Mourier does not discuss his mission objectives with strangers, and the convicts as well as the soldiers are under orders not to mention them. Being approached in private or by searching their baskets (*Empathy* or *Investigation* skill roll against Difficulty 2), the characters find out that the group scrapes off a silvery mass from thorny plants. They do not know for what purpose. Their bodies are scratched from the thorns and they seem exhausted, but they are all in tip-top condition, well-fed, and appear to be strong and tough. They are hand-picked criminals who stand out because of their strong resilience. There is even a Martian from the Oenotrian Empire among them.

It is up to the characters how this encounter plays out. It might result in a fight to free the prisoners (who can be considered slaves by all means), in some mere saber-rattling, or in the groups just getting out of each other's way. It is also possible to evoke a mutual understanding, because essentially de Mourier does not seek any confrontation and can inform the characters about the penal colony.

The soldiers' and the prisoners' stats are given on page 89.

Through the Desert

The way to the penal colony is marked by stones stacked up by the prisoners. It leads through a gravel desert which slowly transits into a sand desert. Additionally, Florence's map describes the path in detail and points to many charted oases. If the roll for determining a random encounter is within 2 successes of 7 (Useful Location), you can let them find an oasis. The way over the ground is still long and exhausting. Only a few oases offer the opportunity to replenish the characters' water supplies. If the water is running low, de Mourier, who himself is on his way back to the penal colony, could appear and help out. See page 55 for more information on the desert.

Oases along the Way

- The *Green Rock* is a huge rock on whose shaded side incredible green mosses grow. On the flank facing the coldwards side, the rare, but existing air moisture, carried by the wind from the Twilight Zone, condenses and offers the plant seeds an opportunity to prosper. The characters can at least collect small amounts of water.
- The *Desert Meadow* is a sand dune on whose shaded side some colorful flowers grow. The ground is sandy and thorny, but the colorful petals in the middle of the wasteland represent a downright magical place for travelers. The flowers are plants with a strategy similar to that of the Terrestrial 'Jericho rose': With the help of the low gravity, the desert wind blows the seemingly dried-up tufts deep into the desert where they get stuck, time

and again, in dunes and rocks, blossoming for a short time and spreading their seeds, before they get blown away again. So it is possible that the characters awake after the wind has blown, only to find that the bloom has disappeared altogether.

- The *Corridor of Life* is the easiest part of the way to the penal colony. A huge semisolid and very high dune leads through the last third of the oasis track in the direction of the colony and offers shade for over 25 miles, or 40 kilometers. The strip may be small, and although only a few thorny plants grow within it, in contrast to the hot surroundings, this section of the way is a blessing for any traveler. The sand does not burn one's feet, the Sun does not burn one's head, and bitter, water-gorged bulbs grow every so often on the ground.

- The *Bates Valley* can either be reached from the surface or via the underground river flowing below it and into the crack. See page 66 for details of its properties. The characters can make an interesting discovery in this place. It is a huge, silvery butterfly whose wings show a pattern forming an almost perfect image of the face of Sandford, Florence's lover. In fact, the creature has imitated his face, since he has been the only visitor to the valley—a clue that the expedition passed through here.

Inside the Penal Colony

The colony is similar in design to a desert fort of a colonial power in Africa—defiant walls of bricks that were piled on top of each other through hard work. The fort is square, with four wings surrounding the inner courtyard. Facing outside, there are only a few slits for air circulation of the size of embrasures.

- In the *inner courtyard*, some tough vegetable species are grown.
- The entry gate lies in the *coldwards* wing. A tower rises above it with a landing platform for gliders. This tract houses the public rooms for guests as well as the mess hall.
- The prisoner cells and some washing rooms lie in the *hotwards* wing.
- The living quarters of Dr. Bligh, de Mourier, and the keepers lie in the *upstream* wing, as do some leisure rooms.
- The storage rooms for gear and some food lie in the *upstream* wing, as well as the armory and the storage lockers for the silicon sun cream.
- The cellar storerooms lie *underground* and offer a choice of very expensive wines and foods; a well, the laboratories, and Dr. Bligh's medical station can be found there, too.

See page 69 for further details about the penal colony.

A Dinner among Civilized Men

The medical doctor *Sir Jasper Bligh* (born 1845, well-shaved, groomed, elegant, and civilized, but without any scruples for scientific purposes, Archetype: Scientist, Motivation: Fame) welcomes the characters politely. He maintains his own time reckoning in the fort (in his opinion it is of the utmost importance that everything in such a place must remain ordered and civilized), and according to it, dinner time is one hour after the arrival of the characters. Thus, he invites them to dinner and is more than ready to answer all the questions the characters have, especially if they have met de Mourier beforehand. If de Mourier has already returned to the colony, he partakes of the dinner.

A prisoner with excellent manners and waiter's skills serves expensive wine and delicacies usually expected only in gourmet restaurants. At first, Bligh does some small talk, asking how the characters are and all in all being a polite, civilized host. He remains polite under any circumstances and expects the same from

his guests. He has a lot to report about the expedition Sanford took part in:

- The expedition indeed visited his facility—about 4 weeks ago. They are long overdue by now. In the meantime, gliders have been looking for them here and heatwards, but without any obvious success.
- The expedition team's destination was the Moon Mountain (p. 67). Bligh does not know whether they reached it. He is aware of the rumors regarding the Moon Mountain, but he deems them untrue. In his opinion, it is just a mountain.
- The members of the expedition were in the colony not only to have a rest, but also because they wanted to supply themselves with a huge amount of silicon sun cream (p. 114). He sold it to them. Bligh owns the formula and is familiar with the production process, but he does not know anything about the side effects. If used as stated, the amount should have run out a short while ago.
- He produces the cream in his underground laboratories from substances found in the Thornwood and stores it in the storage room together with some other gear. He still can provide some supplies.

Soon enough, the conversation will turn to his work. He proudly explains that he prizes the scientific fruits of his work above the well-being of his 'lesser' prisoners, whom he exposes to inhuman conditions. In order to compare their individual physical conditions, the prisoners are driven through the heat outside the colony for hours—among many more inhumane treatments.

The characters should keep in mind that they need Bligh's signature in order to certify that they have reached this stage of the race. He takes his time droning on and on, and the characters will have to test their patience not to get angry about his remarks.

The End of the Dinner

It is up to you and your players how this scene ends. There are several possibilities, though:

- The characters burst with anger about Bligh's inhumane methods. He declines to sign, though he will do it if threatened (*Intimidation* skill roll against a Difficulty depending on the form of pressure). Worst case scenario, there is a fight with numerous soldiers who have been positioned as guards, and de Mourier intervenes if he is present. If the characters accompany von Bomsdorff and do not convince him of another action, he will become angry as described; however, he will avoid a fight if possible.
- The characters maintain their composure and finally receive Bligh's signature, giving him a clear piece of their minds afterwards. Best case scenario, the characters leave immediately and Bligh, his pride wounded, stays behind, never to talk to the characters again. Worst case scenario, yet another fight breaks out.
- The characters receive the signature and free the prisoners afterwards and/or they engineer a revolt in the heatwards wing. Since there is no place in the direct vicinity where the prisoners could flee to, the security here is quite easy-going: two soldiers guard the cell wing where the 20 prisoners present sit behind iron bars, two in each cell. The armory is not far away, so the prisoners are able to arm themselves; there, the characters can find the remaining supplies of silicon sun cream (enough for about 3 weeks). If the characters travel with Fitzgerald and do not convince him of another action, he will do just that.
- The characters tolerate the conditions and have no grudge against Bligh, or they hide it. They receive the signature and continue their journey whenever they wish. If they announce that they want to look for Sanford and the expedition, Bligh supplies them with enough doses of the silicon sun cream for 10 days.

Soldiers

Archetype: Soldier		Motivation: Survival		
Style: 1		Health: 8		
Primary Attributes				
Body: 4		Charisma: 1		
Dexterity: 2		Intelligence: 1		
Strength: 3		Willpower: 2		
Secondary Attributes				
Size: 0		Initiative: 3		
Move: 5		Defense: 6		
Perception: 3		Stun: 4		
Skills	Base	Levels	Rating	(Average)
Athletics	3	2	5	(2+)
Firearms	2	3	5	(2+)
Intimidation	1	3	4	(2)
Melee	3	2	5	(2+)
Survival	1	3	4	(2)
Talents				
Robust				
Weapons	Rating	Size	Attack	(Average)
Saber	3 L	0	8 L	(4) L
.30-06 Repeating Rifle	3 L	0	8 L	(4) L

Prisoners

Archetype: Criminal		Motivation: Escape		
Style: 1		Health: 11		
Primary Attributes				
Body: 6		Charisma: 1		
Dexterity: 3		Intelligence: 1		
Strength: 3		Willpower: 3		
Secondary Attributes				
Size: 0		Initiative: 4		
Move: 6		Defense: 9		
Perception: 4		Stun: 6		
Skills	Base	Levels	Rating	(Average)
Athletics	3	3	6	(3)
Brawl	3	2	5	(2+)
Con	1	2	3	(1+)
Firearms	3	1	4	(2)
Intimidation	1	4	5	(2+)
Larceny	3	2	5	(2+)
Melee	3	1	4	(2)
Stealth	3	1	4	(2)
Survival	1	2	3	(1+)
Talents				
Diehard; Robust				
Weapons	Rating	Size	Attack	(Average)
Preyed Club	1 L	0	5 L	(2+) L
Preyed .30-06	3 L	0	7 L	(3+) L
Repeating Rifle				



Third Leg: What about the Competition?

De Mourier

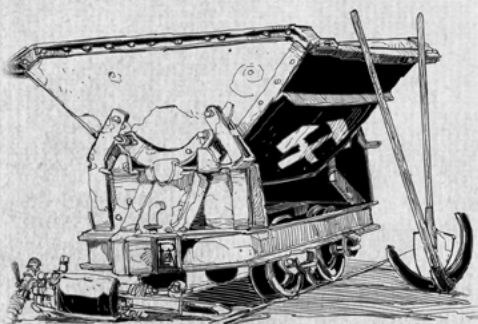
If the other group travels through the Thornwood first, Fitzgerald and his company will protest against the conditions the prisoners suffer from. After the characters' arrival, they are then arrested by force of arms and interrogated which wastes precious time and at worst results in a firefight. If they are arrested and do not cooperate, de Mourier takes them back to the penal colony under guard, which means that they will lose 2 further days to detention.

However, under von Bomsdorff's command there will be a confrontation with de Mourier. The latter loses 2 men, opening fire on the group arriving second, and only stops when he is convinced that they are not in cahoots with von Bomsdorff.

If the player characters arrive first, the second group will *not* encounter de Mourier.

The Penal Colony

If the other group arrived first, they will leave Dr. Bligh, who has obviously been humiliated (by von Bomsdorff). Because of this, he is not very cooperative; he does not tell the characters about Sandford nor is he ready to give his signature. This can be solved by an extended *Diplomacy* skill roll (Difficulty 3, seven successes needed, meaning -4 Movement on this day) and the party distancing themselves from the other group. Under Fitzgerald, the seed of an uprising has been sown among the prisoners, or they have already been freed. A revolt could start while the characters are present (and it is possible for them to get in the line of fire of the prisoners), or they may encounter freed prisoners around the colony, who do not necessarily react in a friendly fashion.



Bonus Vehicle: The Tin Juggernaut

As soon as the characters have traversed the Bates Valley, but more probably on the way to or from the Moon Mountain, they will encounter the giant Tin Juggernaut. You can find more details on this monstrous vehicle on page 113. It offers an opportunity to cross the Hot Side quite fast and unscathed, but the vehicle must be manned with more people than your group probably includes. Thus, it is probably better to let both groups find it together. In addition, keep the scenario *The Burning Desert* (p. 120) in mind, since the vehicle and its designer are a part of it. You can include the scenario in the adventure now, or run the adventure before or after the scenario.

Means of Transportation		Type	Skill	Size
Tin Juggernaut		Land	Pilot (Track Vehicles)	6
Defense	STR	Velocity (m/h / km/h)		Speed per Day
7	10	3 / 5		50
Crew	Team	Pass.	Fuel/Day	Loadable/ as Load
-2	9	20	Sunlight	Loadable
(unlimited on the Hot Side, 48 h on the Dark Side)				

Off the Road - The Search for Sandford

"While there is life, there is hope."

— Jules Verne, *A Journey to the Centre of the Earth*

Total Distance: 680 miles / 1,100 kilometers

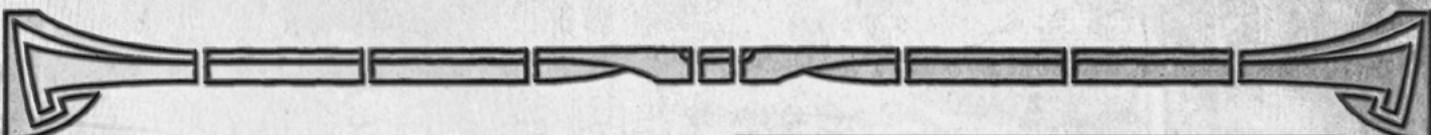
Sections:

From the penal colony to the Moon Mountain (190 miles / 300 kilometers, Forbidding Desert: sand, Air)

From the Moon Mountain to the Fog Desert (500 miles / 800 kilometers, Forbidding Desert: sand and gravel, Air)

Goal: Finding Sandford

It does not matter which expedition leader the characters work for, he is going to look for the officer, even if the characters speak against it. The group is now on its way heatwards to the Moon Mountain. The characters finally find Sandford inside the latter, and they learn that he is the only survivor of the previous expedition and teeters on the edge of madness. He has made an



important finding inside the mountain, though: huge masses of greenish ice are being pumped from the Dark Side through the whole planet into this location. This mass shift could upset the delicate equilibrium of the planet. The characters find a clue about the origin of the ice on the other side, which they can follow with or without Sandford.

The Way to the Moon Mountain

In addition to the use of the silicon sun cream, the way to the Moon Mountain can be traversed while visiting the oases. The respective oases are marked on Sandford's map. By taking this indirect route, the characters accept a detour.

The sun cream protects the characters against heat damage and makes it possible to travel in a straight line without visiting the oases. Keep in mind the disadvantages of the application as described on page 118.

The Moon Mountain

Speculations and information on the Moon Mountain are given on page 67. When the characters finally see the mountain, they stumble upon traces of the expedition: empty silicon cream containers, shreds of clothing, empty bottles, footprints, and so on. If the characters follow their traces (*Survival (Tracking)* skill roll), they soon find the remains of a camp near the mountain. Clearly, huge amounts of equipment were left behind but were later collected in part by Sandford (food in particular is nowhere to be found). A number of blurred footprints lead directly heatwards, slightly away from the Moon Mountain. Following them reveals that there is no one to be found at first. Fewer prints, on the other hand, lead straight to the Moon Mountain. If the characters follow them (*Survival (Tracking)* skill roll), or if they look for the entry point to the Moon Mountain on their own, they come across a crevice.

Attack of the Silicon Soldiers

Following the tracks to the mountain, the characters encounter eight expedition members, who have long since merged with the silicon lifeforms. The faces of the creatures have downright melted, looking like ghastly visages twisted by fear in a puddle of fluid silver. Their limbs stick out at impossible angles, and they have developed pointed spikes and hefty clubs instead of hands; their clothes have merged with their metallic skin or have been torn away entirely. The sight is gruesome, and the creatures attack at once.

Silicon Soldiers

Archetype: Soldier	Motivation: Survival
Style: 2	Health: 12
Primary Attributes	
Body: 6	Charisma: 0
Dexterity: 2	Intelligence: 1
Strength: 4	Willpower: 4
Secondary Attributes	
Size: 0	Initiative: 3
Move: 6	Defense: 8 (10)*
Perception: 5	Stun: 6

Skills	Base	Levels	Rating	(Average)
Athletics	4	2	6	(3)
Brawl	4	2	6	(3)
Stealth	2	2	4	(2)
Survival	1	3	4	(2)

Talents

Robust; Metal Fusion**

Weapons

Punch	1 N	0	7 N	(3+) N
--------------	-----	---	-----	--------

*The Silicon Soldiers have a silicon skin that provides a +2 bonus to their Passive Defense

**The Silicon Soldiers can fuse with large metal surfaces or chunks for a short period as a camouflage.

The Dead Soldier

If the characters follow the trail to the crevice, they will find the body of a soldier; going by Florence's description, this is *not* Sandford. The soldier appears sucked dry and mummified; in fact, a black stinger (p. 63) followed him here and killed him. It is up to you whether the creature is still nearby.

Two discoveries are of interest. First, there are footprints leading into the Moon Mountain; second, there is a cross painted with coal on the dead man's forehead, as if someone wanted to give him the last rites. He no longer has food or guns on him, his eyes are closed, his hands are folded. These are all hints that another person could still be alive.

The Descent

The crevice, sometimes very narrow, sometimes very steep, is several hundred meters long, leading into the mountain and into the depths. After that, everything becomes pitch-black.

The characters have to make three *Athletics* skill rolls each; if they fail, they either fall down or cut themselves on some sharp-edged stone, causing 1 L damage.

On the initially hot, but later cool walls, the characters can discover a strange growth. It seems to be a mixture between an alga, fungus, and a layer of oil, and it shimmers like an opal. Direct light causes it to glow yellowish, in indirect light, however, it is bluish in color.

The Cave Leech and the Mercury Alga

Eventually, the corridor widens into a natural cave with a diameter of about 30 feet, or 10 meters, and with several exits on the other end, allowing a more detailed look at the opal-glowing algae. There is a bizarre creature sitting near the walls of the cave. If the characters come close, it runs away a few steps, and only attacks if driven into a corner. It lives on the Mercury alga and its dust (see below), making the passageway it moves through safe for a while. If the characters drive the creature forward, they can use it to get safely past the Mercurian algae; the latter's defense mechanisms are triggered and the resulting quartz dust is sucked up by the creature.

Cave Leech

Animal Companion 2

Archetype: Plant **Health:** 9

Primary Attributes

Body: 5	Charisma: 0
Dexterity: 1	Intelligence: 1
Strength: 4	Willpower: 3

Secondary Attributes

Size: 1	Initiative: 2
Move: 5	Defense: 6
Perception: 4	Stun: 5

Adventure



Skills	Base	Levels	Rating	(Average)
Brawl	4	3	7	(3+)
Survival	1	3	4	(2)
Weapons	Rating	Size	Attack	(Average)
Tendril	0 L	-1	8 L	(4) L
Suck	2 L	-1	10 L	(5) L

Beyond the cavern where the cave leech dwells, there is a labyrinth of passageways covered in the algae, of which the characters have already found traces at the entrance. They emit an eerie opal glow. If the characters shine a light on one spot for a longer period of time, or if they put a source of heat in the algae's vicinity (for example, one character leaning with his body on a wall), there is a recognizable movement in the mass, extending in the direction of the heat, while at the same time the light is absorbed and fades. Cold sources, on the other hand, make it recoil.

Excess heat triggers a chemical defense mechanism: the mass quickly dissolves into fine dust and disseminates in the air. Whoever breathes it in may contract a form of silicosis similar to the illness that befalls miners, but far more acute.

Acute Silicosis (Black Quartz Lung)

Usually results from long-term exposure to coal dust and is common among miners.

Symptoms: shortness of breath, severe coughing, bloody cough, choking fits

Infection: 1 (as a miner, 3 due to the Mercury alga's defense mechanism)

Recovery: 3 (8 successes from extended rolls)

Further details on diseases, their infection and healing, see **Core Rules**, pp. 213–214.

Although the growth is quite omnipresent, now and again the characters discover spots where it is extremely thin or completely absent. It seems someone purposefully burned holes in the layers with a lamp. Such patches are found at forks or intersections, without exception. These are markings Sandford created for himself (protecting his lungs with a piece of cloth during the process). If the characters follow the markings, they have to collect 10 points from extended *Survival (Tracking)* skill rolls, taking up 1 hour each, in order to finally find Sandford. Any failure may lead to a dangerous situation: Some pathways are unstable and could cave in, some creatures from the Hot Side can be encountered inside the pathways, and the characters in general only 'scratch the surface' of the Moon Mountain. Bizarre lifeforms and hazards may lurk deep inside the mountain.

The Case of Charles Arthur Sandford

Eventually, the characters find Sandford. He is squalid, emaciated, and his skin glitters unhealthily because of the silicon cream. He is not used to human company anymore. Instead, the officer of the Royal Marines Light Infantry lingers on the edge of madness, continuously resisting the heavy influence of the creature in the silicon sun cream. It fights for its survival (it wants to go out into the sunlight), while Sandford resists (he wants to remain sheltered on the inside). He sometimes believes that the sunbeams would

influence him and 'boil his brain'. He thinks that he is only safe down here in the dark. At other times, he is under the impression that he is a dying man in a transitional state between life and death. The light from above, he believes, draws him in (since it is said that dying people shall go into the light). It would be better if he led the characters down to the frozen cave in one of his 'waking' moments, since 'there is something down there I have to show you'.

Sandford's fate lies completely in your hands afterwards. If he is exposed to freezing cold for a couple of hours (in the frozen cave, for instance), his mind clears gradually and he can be restored fully; only heliophobia will remain of the trauma. He could just as well die or stay behind as a madman. The characters possibly take him with them, possibly against his will, and lead him up to the surface. He seems to calm down at first, and the characters might deem this as a good sign at first. Actually, however, the silicon creature now has won over him and will turn heatwards the first chance it gets.

Charles Sandford

Archetype: Soldier **Motivation:** Survival
Style: 3 **Health:** 8

Primary Attributes

Body: 3 **Charisma:** 4
Dexterity: 3 **Intelligence:** 2
Strength: 3 **Willpower:** 5

Secondary Attributes

Size: 0 **Initiative:** 5
Move: 6 **Defense:** 6
Perception: 7 **Stun:** 3

Skills	Base	Levels	Rating	(Average)
Athletics	3	3	6	(3)
Diplomacy	4	2	6	(3)
Firearms	3	4	7	(3+)
Intimidation	4	3	7	(3+)
Investigation	2	2	4	(2)
Melee	3	3	6	(3)
Survival	2	3	5	(2+)

Talents

Attractive; Headstrong; Long Shot

Resources

Rank 1

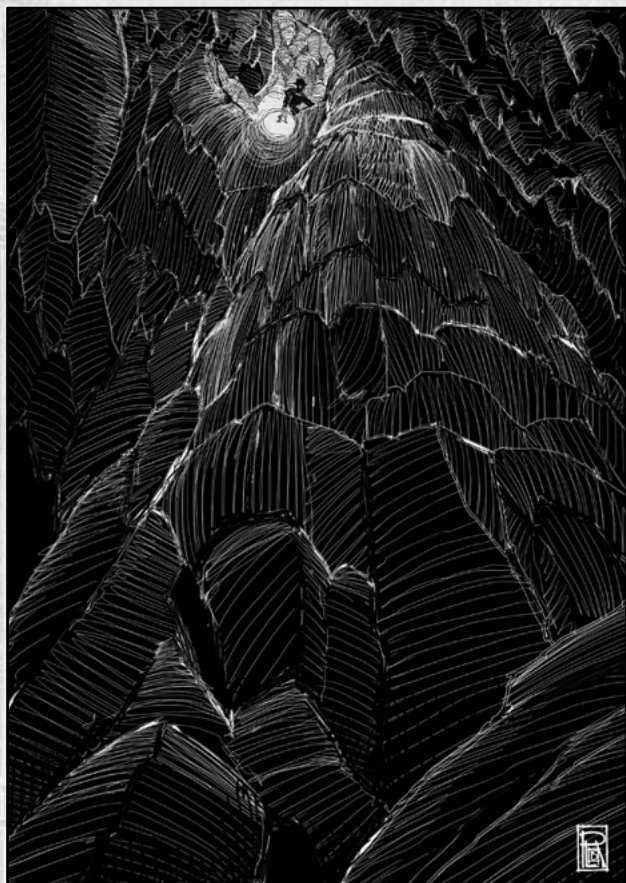
Flaws

Phobia (Sun)

Weapons	Rating	Size	Attack	(Average)
Saber	3 L	0	9 L	(4+) L
.30-06 Repeating Rifle	3 L	0	10 L	(5) L

The Frozen Cave

Sandford eventually leads the characters into a vast cave which is surprisingly cold inside and free of any algae. In the middle of the cave there is a hole in the ground several meters in diameter. Looking down reveals that, after a couple of meters, the hole opens up into a cavern below, the whole ground of which is covered with shimmering, light-blue ice. A breathtaking and mysterious view by itself, it becomes more interesting because—as Sandford points out—the ice sheet is growing larger. Obviously, more of the ice is pushing upwards from below—at least, this is Sandford's interpretation of the crunching noises and the ice which, in parts, rises gradually but sometimes abruptly. There are even slight tremors detectable in the surroundings, because the ice is already pushing against the rock of the Moon Mountain elsewhere.



The Ascent

Sandford interprets the ice rising from the depths as an event threatening the whole planet, and he is not wrong. He rambles on about some calculations, bad storms, equator shifts, and a disaster that will strike Princess Christiana Station. If the characters can calm him down, he composes himself and expresses his assumption: The ice has a unique, greenish glow. He has already seen a similar kind of ice while flying over a frozen field on the Dark Side. He can give the location of the field. Although it is located further coldwards and off the planned route, it is still in the vicinity of the location the characters will have to travel through on the Dark Side anyway.

He asks the characters to search for the cause. The reason why the ice advances to this place must be found near the frozen field. Whether the heroes take Sandford with them or not, and whether he survives or not, is completely up to you and your players. If he goes with them—and survives his silicon creature infestation—he will insist on making the detour to the ice field.

The Search for Sandford: What about the Competition?

The members of the other group do *not* take the detour, unless your party persuades them to do so. See the box **What about Cooperation?** (p. 71) for more information.

Fourth Leg – Across the World Spine and Looking for Eggs

“A man who keeps company with glaciers comes to feel tolerably insignificant by and by.”

— Mark Twain, *A Tramp Abroad*

Total Distance: 2,490 miles / 4,000 kilometers

Sections:

From the Fog Desert to the World River (125 miles / 200 kilometers, Forbidding Desert: gravel, Air)

From the Fog Desert to the foothills of the World Spine (310 miles / 500 kilometers, Twilight Zone: any terrain, Water, Air)

From the foothills of the World Spine to the glacier (60 miles / 100 kilometers of Ice Sheath and mountains, Air)

From the glacier to Lake Plimsell (750 miles / 1,200 kilometers, Ice Sheath, Air)

From Lake Plimsell to Cyan Lake (310 miles / 500 kilometers, Ice Sheath, Air)

From Cyan Lake to the Jotun nest (430 miles / 700 kilometers, Ice Sheath, Air)

From the Jotun nest to the boundary taiga (500 miles / 800 kilometers, Ice Sheath, Air)

Goal: Finding an ice worm egg

Back on the Hot Side, the characters now traverse the Fog Desert and afterwards an area along the World River. Both areas are inhabited by the bacterium *Mercuria smithiensis*, an intelligent swarm with a memory, mimicking the phenomena that influence the World River, namely the ice coming from the Dark Side and flowing below the River—a first reaction of the planet’s denizens to the process the characters learned of at the Moon Mountain.

Beyond the World Spine, the delicate balance of the planet is already shifting, a harbinger of the greater changes to come. Before the characters’ eyes, a vast spring tide lowland extends, flooded ‘off schedule’ because of the upcoming planetary imbalance.

In the end, the characters advance from the glacier into the Dark Side. They are looking for the Jotun worm eggs, which can only be found in the depths of the Ice Sheath. Eventually, they come across a nest at Cyan Lake. They will also find the green frozen fields Sandford mentioned in the Moon Mountain. They really have sunken deeply. Near the field, they encounter Maxim, one of Akhmatov’s assistants, who can lead the way deeper into the Dark Side and to Akhmatov’s laboratory.

The River’s Memory

The return to the Twilight Zone occurs in a desert area shrouded in perpetual mist. There, an interesting phenomenon awaits. Further coldwards lies an area in which the World River flows with moderate speed, a lot of growth on its banks and—because the Hot Side is not very far—high temperatures. These conditions allow the bacterium *Mercuria smithiensis* to spread. Together with the mist that reaches into the desert region, the bacterium also finds its way into the Fog Desert. Further information on its

effects can be found on page 116. The bacterium shows some memory about particularly extraordinary events. The region lies along the stretch between the Moon Mountain and the green ice field, from which the ice is pumped into the Hot Side. This happens underground, but the World River is so deep in some places that the ice has to work its way directly over the river bed or underground, thus cooling down the water. Possessed of alien intelligence, the bacteria sense that their habitat is in danger (they need warm currents to exist), and they 'fight back' the cooling by all available means. Thus, the characters might encounter one of the following phenomena:

In the Fog Desert ...

- The bacteria heat up the fog around them, which becomes boiling hot. It starts slowly (1 L damage per hour for about 3 hours), and becomes gradually more and more aggressive (1 L damage per minute after about 10 hours). Escape is possible by pulling back into the heights, into a protected vehicle, or into one of the oases; a cool cave may be found in the nick of time.
- The bacteria mimic the danger (namely ice blocks). Suddenly, from the fog an iceberg may appear in front of the characters, but without the green tint of the ice under the Moon Mountain. If it appears in front of a vehicle, an accident may occur (speed / 10 L per person, unless someone makes a successful *Drive* skill roll against Difficulty 3).

... and along the World River

- There are more attacks by 'ghost creatures', but from the water this time, and the creatures do not dissolve (except when they die). At this point, even Jotun worms can attack from the water.
- The water suddenly drops into a maelstrom, as if part of the river bed had sunken in. Here, the bacteria mimic what is happening around them, and turn it against the characters who are considered a 'threat from the outside'. If piloting a boat or ship, the characters have to make an extended *Drive* skill roll against Difficulty 2, and they need eight successes within 4 rolls to escape the maelstrom, lest the boat is seized by it. A swimmer needs 10 successes from four *Athletics (Swimming)* skill rolls against Difficulty 3.

Such phenomena occur on a stretch of 90 miles, or 150 kilometers. Interestingly enough, the bacteria understand when they are treated with respect. If the characters knowingly keep their distance from the World River or strive to warm up the water, the bacteria realize their intentions. It is hard to realize this, but during an accidental warming, the journal of *Theodor Ashton Smith* in a waterproof packaging could be washed to the surface as a 'reward' by the bacteria. In it, the characters find the sneered-at research conducted by Smith, and they can draw their own conclusions. For more details, see page 116.

Coldwards around the World Spine

For more information on the World Spine, see page 34.

The Foothills

The huge mountains can be viewed very early on. Their heatwards side is bathed in golden sunshine, and the coldwards side is covered in dark frost. Getting closer, the characters hear the winds howling between the peaks, creating a micro-climate, which again concentrates the already baffling extremes of Mercury in the smallest of spaces. The River becomes more torrential and louder, while the path above the chasm leads along it, then the

River disappears in a thundering waterfall of great magnitude in a dark, giant hole set in the rock of the World Spine. Only beyond the mountains will the River reappear, and any attempt to traverse it on a water vehicle would be suicidal. Shortly beyond this point, the path branches in two directions. One way leads coldwards along the mountain flanks.

Ascending the Glacier

From the rim, the route leads coldwards and up the Ice Sheath towards a massive glacier.

From here on, the way is considered part of the *Ice Sheath* with all associated Movement disadvantages. The first part of the way leads about 30 miles, or 50 kilometers uphill. The glacier extending into the mountains expands from here into Lake Plimsell.

Soon enough, the path along the upstream ridge of the World Spine becomes dangerous and quite steep in places. The region is considered *Ice Sheath* and *Mountains* with the consequent modifiers. You can replace any rolled event by one of the following or let them occur at your discretion:

- An encounter with a creature from the Dark Side.
- A dangerous climbing tour on a steep ice or rock wall: extended *Athletics (Climbing)* skill roll with 5 to 10 successes necessary, difficulty 1 to 4 with a duration of 1 hour per roll (Movement -1).
- Falling into an ice crevice unless a successful *Acrobatics* skill roll is made against difficulty 2 (3 L damage).

Lake Plimsell

Here, the River flows from the World Spine near the coldwards border of the Twilight Zone out of the rock, running through the section called 'Turn'. Over a distance of several hundred miles, the river reaches torrential speeds through very narrow crevices, and it widens only after pouring into the Lake Plimsell springtide lowland. It spreads very wide, so only in a few places is the River deeper than a few meters, usually presenting itself more like flooded meadows, which in turn are fed by the nearby glacier. A range of plants sprout out of the water. For more information on spring tide lowlands, see page 33.

High Tide

Because of the planet's nutation, the lowland is very quickly flooded during certain periods. From time to time the water coming from the World Spine increases many times over, and there appear to be other planetary forces adding to it, which, as a whole, lead to a sudden spring tide—among other things, the nearby glaciers are shone on by the Sun, and they melt with maddening speed for a short period of time. By the end of this process, the lowland disappears completely under several meters of water. Although this is not the appointed date, the planetary changes shift the time-table. And so it happens: as the characters are there, a sudden spring tide occurs. Confront them with abruptly rising water, a tidal wave due to a breaking glacier tongue, and some dangerous animals leaving their lairs in panic.

If the characters move on the ground, the spring tide can have devastating effects: only with enormous effort (3 extended *Drive* skill rolls against Difficulty 4 with at least 8 successes) can the vehicles be saved from the flood. Persons, on the other hand, can save themselves through extended *Athletics (Running)* skill rolls (3 rolls, at least 6 successes against Difficulty 2), or, if they fail, with *Athletics (Swimming)* skill rolls (3 rolls, 7 successes against Difficulty 3). If they fail again, they suffer from damage due to *Drowning (Core Rules, 214)*.

Across the Ice Sheath

The journey across this region must be well-prepared. Food is scarce, especially since this area of the *Turn* is dominated by long lean periods with meager plant growth. The cold afflicts the travelers, and without a fitting vehicle, moving on is a chore. Let the characters decide for the most part which route they want to take. The Cyan Lake (p. 51) lies further coldwards, but traces of the Jotun ice worms could lead the characters on a detour, or they might find other worm nests.

If you want to help the characters out—to make up for some lost time, for example—they could meet Norwegian researcher *Arne Jonny Bakkeveld*. He has some experience exploring Earth's North Pole, and he is about to use it on the Dark Side of Mercury. A passionate skier, he dreams of circumnavigating the Dark Side of Mercury, and he is well-versed about the Ice Sheath, so he can give the characters some information. However, being the upright and honest man he is, he could be impressed by the wager, too, as well as by the prevention of a potential threat to the planet. Thus, it is conceivable that Arne accompanies the characters as long as they travel on the Dark Side.

The Search for the Ice Worm Eggs

For the search for the ice worm eggs you can use the rules for the search for the glow crystals (p. 85); this time, however, the characters must look for traces of Jotun worms, and it differs from the search for the glow crystals in some points:

- 5 successes each mean finding the trace of a Jotun worm.
- After finding such a trace, the characters have to make extended *Survival (Tracking)* skill rolls (1 skill roll per day, 10 successes have to be accumulated, Difficulty 3). Eventually, the characters find an adult Jotun ice worm and also a nest if the next roll results in an even number.

Stealing an Egg

As soon as the characters have found a nest, they need to find a way to steal an egg:

- In general, killing a Jotun worm is the straightforward method of acquiring an egg, but not necessarily the easiest one. The Jotun worm's stats are given on page 47.
- It is possible to first watch the nest and to wait until the worm leaves it, but this runs the risk of being discovered sooner or later. *Stealth* skill rolls against the worm's *Perception* rating may decide whether the surveillance succeeds or a fight breaks out.
- A weakness that can be exploited is the worms' heat vision and their sense of vibration: Only creatures that are warmer than the surrounding area and/or produce strong vibrations while moving are perceived as a threat to the worms. Humans usually are sensed, but it is possible to fool the worm by blocking off the heat around a character and moving very slowly (*Stealth (Sneaking)* skill roll against Difficulty 2).

The Cyan Lake

The characters eventually reach the Cyan Lake. It is easy to find Jotun worm eggs in its surroundings; the number of Jotun worms there is high, too. You can replace any chance encounter by one with a Jotun worm or a bison grub. In relation to the circumstances on the Dark Side, the lake is a primary source of life. For more details, see page 51.

Bonus Vehicle:

Sir Charles Plunkett Drax Morton's Steam Sled

Sir Charles Plunkett Drax Morton (born 1845, goatee, foppish, overbearing demeanor, bad leader, aristocratic sense of self-importance, Archetype: Scientist, Motivation: Truth) is an inventor and currently on a research trip across the icy steppes of Mercury in a steam sled of his invention. A description of his steam sled is given on page 113.

Since he has a tendency for self-staging, he loves to use his sled for 'the greater good' and takes the characters with him. The sled has a range of about 1,860 miles, or 3,000 kilometers, but he must preserve enough fuel left to return to the Twilight Zone.

Means of Transportation	Type	Skill	Size	
Steam Sled	Ice	Pilot (Sled)	5	
Defense	STR	Velocity (m/h / km/h)	Speed per Day	
6	9	9 / 15	90 / 150	
Crew	Team	Pass.	Fuel/Day	Loadable/ as Load
-1	1	10	Oil	Loadable (2,200 lbs. / 1,000 kg)

Fourth Leg: What about the Competition?

The River's Memory

If the groups meet there, you can let them exchange their knowledge about this phenomenon. The two expedition leaders are familiar with Smith's ridiculed research; von Bomsdorff, though, ignores it, while Fitzgerald puts the theories to the test and thus accelerates his travel speed by 10%.

Lake Plimsell

Since the members of the other group arrive at another time, they do *not* become victims of the flood directly and thus do not lose time.

The Search for the Egg

The other group comes across a nest along the Cyan Lake; von Bomsdorff does not lose time, while Fitzgerald arrives there with a delay of 2 days.

Off the Road - Akhmatov's Laboratory

"If men go on inventing machinery, they'll end by being swallowed up by their own machines. I've always thought that the last day will be brought about by some colossal boiler heated to three thousand atmospheres blowing up the world."

— Jules Verne, *Five Weeks in a Balloon*

Total Distance: Detour of 680 miles / 1,100 kilometers

Sections:

From the Jotun nest to the green ice field (60 miles / 100 kilometers, Ice Sheath, Air)

From the green ice field to Akhmatov's laboratory (190 miles / 300 kilometers, Ice Sheath, Water, Air)

From Akhmatov's laboratory to the boundary taiga (430 miles / 700 kilometers, Ice Sheath, Air)

Goal: Stopping Akhmatov's machinery

In this part, which you can embellish with descriptions of the Dark Side's fauna at will, the characters confront Akhmatov in his laboratory.

The Green Ice Fields

The green ice fields, as described by Sandford, are found in the vicinity of the Cyan Lake. Only a few miles coldwards, the characters discover a huge crater which did not result from any meteor impact, but rather from the caving-in of tons and tons of ice. Accordingly, the inside of the crater is a scene of devastation sinking even deeper in parts and posing a perpetual threat. (You can distribute 3 L damage to the characters climbing around the crater if they do not make successful *Acrobatic* skill rolls.)

Meeting Maxim

On this field, the characters come across a person who is visible from afar: *Maxim*, Akhmatov's assistant (see page 52). He is on site both to get some food from the Cyan Lake and to investigate the effects Akhmatov's machines have on the surroundings. As soon as he notices the characters, he tries to escape. The scene could play out as follows:

- Maxim is hunted down and killed because he resists the characters. He can give them no further information about Akhmatov and his assignment. His footprints, however, lead to Akhmatov's laboratory.
- He escapes. If he is successful, the characters can again follow his footprints to the laboratory.
- He is caught by the characters or he surrenders. He tells them all he knows about Akhmatov and leads them to the laboratory. He has no idea that Akhmatov's research and machines threaten the planet's equilibrium. He is only an assistant worried about his boss and could be convinced that Akhmatov must be stirred from his tests. Maxim believes that Akhmatov might listen to him (he is wrong, though).
- The characters ignore Maxim or they lose sight of him. In addition to the footprints, which they find nonetheless, they sense several small tremors after that. By searching for the origin of the tremors, they come across some caved-in passageways of Akhmatov's laboratory tunnel network lying under the snow.

The movement of the ice has caused the cave-ins. This way the characters reach the laboratory itself.

Maxim

Archetype: Servant

Motivation: Survival

Style: 2

Health: 5

Primary Attributes

Body: 4

Charisma: 1

Dexterity: 4

Intelligence: 2

Strength: 3

Willpower: 1

Secondary Attributes

Size: 0

Initiative: 6

Move: 7

Defense: 8

Perception: 3

Stun: 4

Skills	Base	Levels	Rating	(Average)
Brawl	4	4	8	(4)
Con	1	3	4	(2)
Craft (Mechanics)	4	4	8	(4)
Firearms	4	2	6	(3)
Intimidation	1	2	3	(1+)
Stealth	4	3	7	(3+)

Talents

Guardian; Tinker

Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	8 N	(4) N
Wheley MK I Revolver	3 L	0	9 L	(4+) L

Akhmatov's Laboratory

Akhmatov's laboratory lies under the frozen surface and consists of a vast complex of hallways, conduits, machines, and laboratory rooms. He has expanded it over the years. Everything appears to be improvised. Akhmatov is not able to surveil the whole area, and he does not expect any enemies coming from the perpetual frost, so intrusion is easy.

The Outer Hallways

A hidden bulkhead on the ice field is the main entrance. Despite it being camouflaged, the entrance can be discovered with a *Perception* roll (Difficulty 2) or with Maxim's help (no roll necessary). In addition, some hallways have caved in, offering a way inside. Only at second glance (*Perception* roll, Difficulty 4), or again with Maxim's help, will the characters notice that metal tubes protrude from the frozen debris.

Inside is a confusing maze of hallways below the ice. They have been made artificially by purposeful melting. In many places, metal conduits run along the walls and the ceiling and create a tangle whose complexity only Akhmatov can understand. Akhmatov took the tubes from his ether flyer, and among other things the tubing provides heat and water for the laboratory, but also fuels the machines. Maxim can lead the characters through the labyrinth. Without him, the characters lose about one day instead.

The Machinery

Again and again there are rooms along the outer hallways containing machines Akhmatov has built himself, taken from his ether ship or, more rarely, found on Mercury. Some stand, seemingly frozen, in the ice, others can be found inside of large ice caves, others in turn are located above gorges leading into the depths of Mercury. Great heat prevails around some of these machines, since they pump up magma from the deep. It is these machines that are causing the ice to cave in several hundred miles away



and to be pushed through wide ducts to the other side of Mercury. A player character who investigates the machines and makes a successful *Science (Geology)* or *Science (Engineering)* skill roll against Difficulty 4 finds out that the machines obviously serve the purpose of causing seismic activity. Maxim, too, can provide this information, and he is scared about what consequences his and Akhmatov's work could have for the planet.

Akhmatov has no clue about how his machines affect the planet, but he has been tracking the massive upheaval beneath its surface, fueling his hope that one day, and with the help of his machines, he will form Mercury's surface after his own image.

The 'Ant Queen'

After a while, the characters encounter some glacier ants (p. 45) in the tunnels. They are the source of an eerie green light and move back and forth between the periphery of the outer tunnels and the inner laboratory. They are not aggressive, but seem to follow an inner programming they cannot be distracted from.

Akhmatov actually managed to decode the ants' light signal communications and built a number of lamps which 'program' the ants via a light reflection pattern. Thus, through variations of reflected light, he can use them as slaves burrowing new tunnels into the ice. If the characters follow the ants, they will sooner or later come across either one of the 'construction sites' at the end of a tunnel, or they will discover the room Akhmatov named 'Queen', which he engraved on a plaque with Cyrillic letters in the Russian language (царица). Inside, the characters find the light machine which gives the ants their orders via light pulses. The characters can use this device to their advantage and have the ants dig tunnels for them. Maxim knows its mechanics and the 'language' of the light pulses.

The Inner Laboratory

Particularly by following the conduits or the ants in the direction of the Queen room, the characters reach the vicinity of the actual inner laboratory which also serves as Akhmatov's and Maxim's living quarters. A handful of bulkheads lead into this area which is mostly furnished with metallic floor plates, wooden planks, and furniture Akhmatov either brought with him from Earth or knocked together himself. Some rooms are downright cozy, and warm

blankets as well as heating tubes allow for some comfortable living. Other rooms exclusively serve as work space and contain mostly measuring instruments for machines on the outside. A needle, jumping up and down, is permanently measuring seismic activity, while gauges on vats, in which a tangle of pipes run together, display temperatures and pressures.

Only here can Akhmatov's machines be destroyed or shut down. To shut them down properly, a successful *Science (Engineering)* skill roll against Difficulty 3 is needed, but it takes up 1 hour. Maxim can shut them down without any delay.

On the other hand, the characters can sabotage the machines by means of force, explosions or suchlike, which again requires

them to know how the machines work. Let your players make the appropriate rolls (*Demolitions*, *Investigation*, etc.), or have them describe their actions. If the machines are sabotaged, Akhmatov will find out about it quickly and will look for the causes himself. Maxim, if he accompanies them, can fob him off and give the characters some time.

The Finale

The characters will eventually encounter Akhmatov and probably Maxim again. How this meeting is played out very much depends on the player characters. Akhmatov is a paranoid and nihilistic man. Whenever somebody he does not know infiltrates his facility, he assumes immediately that the *okhrana*, the Russian intelligence agency, is behind it. Akhmatov will fight the characters accordingly, and he always has a new type of electric gun at hand.

He will pick up on a conversation as long as he thinks he is safe (behind cover or with a gun aimed at the characters). Even if they can assure him believably that they have nothing to do with the *okhrana* and explain the situation, he will still assume that they are potential saboteurs come to destroy his machines—now, of all times, when he stands on the edge of a breakthrough of being able to form a planet according to his own will. If Maxim accompanies the characters, he will vouch for them, but Akhmatov will not let anyone stop him or walk out of his laboratory knowing about it. Play out the almost inevitable confrontation as a furious finale with the following elements:

- Machines explode, steam jets, vats burst, and power cables fall into melt water. This happens because firearms are used, because the characters have sabotaged the machines beforehand, or because the movement of the ice overloads the pumps.
- The fight takes place in multiple rooms. Akhmatov uses the steam from the damaged machines and his knowledge of the laboratory's layout to pull back again and again and to ambush the characters. He hides behind his machines and in the maze of hallways.
- Akhmatov has prepared an emergency program against intruders in his Queen room. If he reaches it, any glacier ant, coming to this chamber while following its 'construction program' (about one ant per minute, occasionally small groups), takes up the new programming and attacks any creature except Akhmatov, Maxim,

and other ants. Of course, the program could have a 'bug' (literally), so the ants will attack themselves or Akhmatov. For stats, see page 45.

- Because of the fight, hallways cave in and sharp icicles fall to the ground. The laboratory is turning into a deathtrap, exits are about to collapse, etc. Eventually the characters must flee if in a pinch. At this point, the machines which cause the ice shifts should be destroyed as well. Whether Akhmatov is killed or captured, or whether his fate remains unknown (with him swearing revenge for the destruction of his life's work) depends on the player characters and their further plans.

Akhmatov

Archetype: Scientist		Motivation: Escape		
Style: 5		Health: 9		
Primary Attributes				
Body: 3		Charisma: 2		
Dexterity: 2		Intelligence: 7		
Strength: 3		Willpower: 6		
Secondary Attributes				
Size: 0		Initiative: 9		
Move: 5		Defense: 5		
Perception: 13		Stun: 3		
Skills	Base	Levels	Rating	(Average)
Brawl	2	2	4	(2)
Con	7	2	9	(4+)
Craft (Electronics)	2	5	7	(3+)
Firearms	7	3	10	(5)
Intimidation	2	3	5	(2+)
Intimidation (Threats)	2	4	6	(3)
Linguistics	7	1	8	(4)
Science	7	6	13	(6+)
Science (Geology)	7	7	14	(7)
Survival	7	2	9	(4+)
Talents				
Calculated Attack (Firearms); Intelligent; Skill Mastery (Science); Tinker				
Resources				
Refuge 2				
Flaw				
Criminal				
Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	4 N	(2) N
Electronic Rifle 40(m) Shot	3 L	0	13 L	(6+) L

Akhmatov's Laboratory: What about the Competition?

The members of the other group do *not* investigate Akhmatov's machinations on their own, lest your party persuades them to do so. Find more information in the box **What about Cooperation?** (p. 71).

Final Leg - The Long Finish!

"The chance which now seems lost may present itself at the last moment."

— Jules Verne, *Around the World in Eighty Days*

The last leg, though long, is again in the spirit of a sportive competition. After the secret finale in Akhmatov's laboratory, it is now vital to reach the goal first after this last stretch. This leg does not present any major hindrances for the characters. Instead, and if the other group is in the lead (which is probable since the characters have made a lot of detours), they get the opportunity to gain ground by the leg's stretch with some assistance. Roll the dice, be fair, and see whether your players' characters 'only' achieve a moral victory, or if they win the competitive race as well.

Total Distance: 3,420 miles / 5,500 kilometers Sections:

From the boundary taiga to the World River (1,860 miles / 3,000 kilometers, Twilight Zone: level terrain, Water, Air)

From the World River to the Sky Forest (750 miles / 1,200 kilometers, Twilight Zone: any terrain, Water, Air)

From the Sky Forest to Princess Christiana Station (430 miles / 700 kilometers, Twilight Zone: forest, Water, Air)

Goal: Reaching Princess Christiana Station first

The Boundary Taiga

After the characters have returned from the perpetual ice, the local flat and cold taiga offers good travel conditions. Here, the characters might be able to gain some leeway again. It is up to you to decide which dangers you want confront them with.

The Sky Forest - Flying Helpers

Traversing the last 1,240 miles, or 2,000 kilometers, the characters come across the beautiful Sky Forest (p. 31). Although they will not have much time to stay, they can use the mysterious balloon fruits as vehicles for the last stretch of their way.

Final Leg: What about the Competition?

The competition is concentrating on the finish, taking the most direct way in the last stage. They ignore the benefit of the balloon fruits.

Bonus Vehicle: Balloon Fruits

With its almost weightless balloon fruits, the Sky Forest offers a quick means of traveling through the air. Bundled together and attached to a pannier of the same make—for example made of wood or built from parts of an old vehicle with an extended *Craft (Carpentry)* skill roll against Difficulty 2, whereby 10 successes have to be accumulated over a period of 2 hours—the balloons provide a fast though easily damaged means of transportation.

Means of Transportation	Type	Skill	Size
Balloon Fruit	Balloon	Pilot (Balloon)	1

Defense	STR	Velocity (m/h / km/h)	Speed per Day
5	4	15 / 25	155 / 250

Crew	Team	Pass.	Fuel/Day	Loadable/as Load
-3	1	4	-	-

Coda

Celebrating the Winner

"I saw Mercury, I beheld bizarre creatures, flew over the Forbidding Desert and through the eternal darkness of the ice. Who cares whether I've lost a wager?"
"I care! I bet 100 pounds on you!"

— Jules Verne

Whether your player characters have won the race or not, after the finish the victor is awarded and celebrated at Princess Christiana Station. The researchers and soldiers of the station form a guard of honor, the characters are toasted and speeches given to praise them. During drinks, the players can tell tales of their adventures. Reporters and representatives of the competitors' countries have arrived for the occasion to hear their reports and to congratulate and thank them. As fair sportsmen, both competitors shake hands, and in the light of the magnesium flashes of the press the smiling loser of the race presents the victor ceremoniously with the agreed-upon sum of £1. The two men remain friends, and the characters have found a friend in the competitor they accompanied.

Of course, everyone is eager to hear the reports about the danger the planet was in. It depends on the characters' account (and, in the best case, that of Sandford) whether the events are written off as delusions or deemed believable in earnest.

Rewards

"I do not sell the future for some momentary profit."

— Werner von Siemens

The characters were able to win friends and contacts. In any case, the players may write down their respective leading competitor as a Mentor. Furthermore, they can allocate 2 points to any Resource (for example *Fame*, *Wealth*, the purchase of one of the *Artifacts* used, even acquiring a *Rank* by ennoblement is possible). In addition, they receive Experience Points as detailed in the **Space: 1889 Core Rules**, p. 202. They receive accordingly...

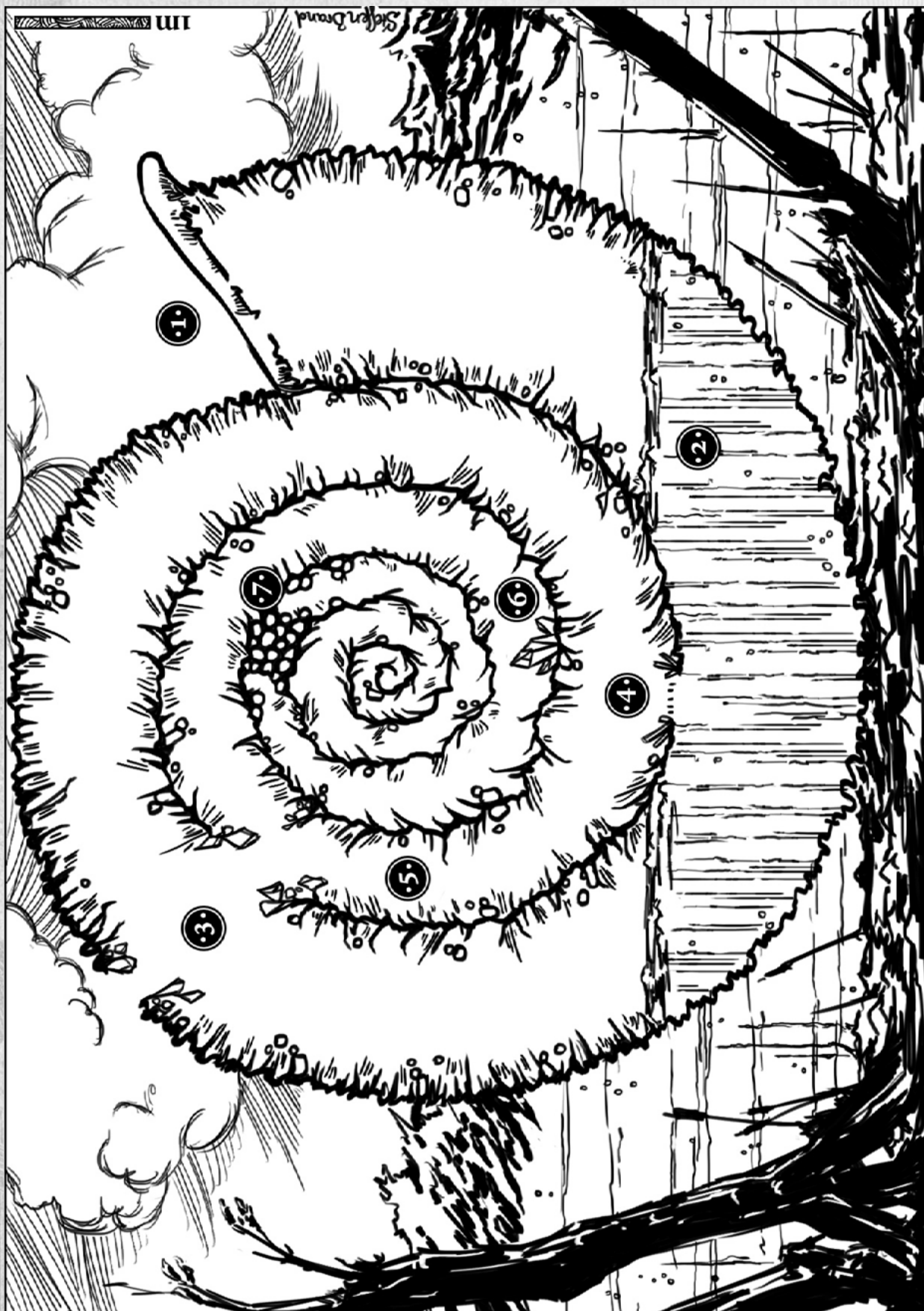
- 3 points for finishing the adventure
- 1 point for reaching all of the regular leg goals first
- 2 points for winning the race
- 2 points for saving Sandford
- 2 points for deactivating Akhmatov's machines
- 1 point for capturing or defeating Akhmatov

You can either present the experience points at the end of the adventure, or in addition to the general experience points at the end of a session, provided the characters have reached the respective partial goals.

Furthermore, their competitor rewards them with the agreed sum of £1,000 per character (£2,000 if they have won) and a bonus of £1,000 for undergoing the adventure.



Appendix: Map





Reconstructed Characters

The Pseudoscientist

Archetype: Scientist		Motivation: Faith		
Style: 3		Health: 5		
Primary Attributes				
Body: 2		Charisma: 4		
Dexterity: 1		Intelligence: 4		
Strength: 2		Willpower: 3		
Secondary Attributes				
Size: 0		Initiative: 5		
Move: 3		Defense: 3		
Perception: 7		Stun: 2		
Skills	Base	Levels	Rating	(Average)
Academics (Philosophy)	4	3	7	(3+)
Con	4	2	6	(3)
Diplomacy	4	3	7	(3+)
Dipl. (Persuasion)	4	4	8	(4)
Firearms	1	1	2	(1)
Investigation	4	2	6	(3)
Linguistics	4	2	6	(3)
Science	4	3	7	(3+)
Talents				
Jack of All Trades; Skill Mastery (Science)				
Resources				
—				
Flaw				
Absent-Minded				
Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	0 N	(0) N
Pocket Revolver	2 L	0	4 L	(2) L



The Pseudoscientist

"As the astrophysicist Karl Friedrich Zöllner wrote in his 1878 hypothesis on the existence of a four-dimensional intelligence ..."

Background

*Ata gibor le-olam Adonai!** What an exhilarating feeling to stand under flawless starry heavens such as these! Who could deny, seeing such a sight, that primal powers are at work in this universe, powers that cannot be defined or explained by our limited science? I am, however, of the opinion that this state of ignorance does not have to be permanent. Who knows what the human mind is capable of if it is given the means and opportunities?

Unfortunately, many of our so-called scientists operate with as much foresight as a blind, lethargic worm. They are still hung up on the archaic notions of physics promulgated by Sir Isaac Newton. Metaphysics are largely rejected, phenomena that cannot be immediately explained by traditional models are, if possible, ignored. Where, I ask you, is this much-lauded progress? When perceiving our world with an open mind, one can experience a plethora of astounding wonders which seem to scoff at our limited definitions of natural science. For example, consider the properties of liftwood—how does it defy gravity? How does the transformation lens convert one form of energy into another? Why is a planet like Mercury teeming with life, although, by any understanding, it ought to be a lifeless desert? Is it so hard to believe that things like telepathy, psychokinesis, or the transcendent continuous existence of the soul after death are real as well? On the other hand, one has to take into consideration that our modern civilization is still young and inexperienced. There were other, wiser civilizations before us. We are merely a new cycle in the endless sequence of death and rebirth. Atlantis, Lemuria, Hyperborea, the empire of the Martian Canal Builders, the cosmic proto-humanoids that spawned humans and Martians alike—all of them were more scientifically advanced than we are today! Therefore, why is it impossible to believe that there is at least some truth in the scriptures and treatises of old civilizations that addressed occurrences that today we call 'magic'? After all, despite their limited knowledge, our ancestors depicted processes that our modern society still struggles to understand. I have been trying to increase awareness of such issues in our society for some time now. When I am not on an expedition, I am at home, working on my books. I believe, at last, that the educated layman is beginning to grasp that there are more things between Heaven and Earth than are dreamt of in philosophy. In any way, my lectures are always well-frequented. Some day, even the most stubborn fellow will have to admit that *I* was right.

Roleplaying

As a bee is drawn to a honeypot, you are drawn to peculiar phenomena. You always had the great ambition of fathoming the unfathomable. That is why you roam the Solar System, searching for the inconceivable. As a scientist you dabble in all scientific realms that offer you a chance to explore mysteries and wonders. Since you are a jack of all trades, there is no scientific field of which you have a deeper understanding. Readers of your books on popular science do not care about that—professional circles, however, do. Among serious scientists, you are a *persona non grata*. Not only because you publish unfounded rubbish—in their opinion—but also because you dip into the occult quite a bit and have an extraordinarily 'creative' approach to facts. It is only because of your charisma and the energy with which you present your crude hypotheses that you developed such a loyal following. Sometimes, however, you do encounter real mysteries on your journeys, but no serious scientist ever believes you.

Pseudoscientist

*Hebrew for, "You, O Lord, are mighty forever!" Often used as a magical invocation.

The Automobile Expert

Archetype: Technician
Style: 3

Motivation: Fame
Health: 5

Primary Attributes

Body: 2

Charisma: 2

Dexterity: 4

Intelligence: 3

Strength: 2

Willpower: 3

Secondary Attributes

Size: 0

Initiative: 7

Move: 6

Defense: 6

Perception: 6

Stun: 2

Skills

	Base	Levels	Rating	(Average)
Bureaucracy	3	2	5	(2+)
Craft (Mechanics)	3	5	8	(4)
Diplomacy	2	1	3	(1+)
Drive	4	4	10	(5)
Drive (Automobile)	4	5	11	(5+)
Firearms	4	1	5	(2+)
Science (Engineering)	3	3	6	(3)

Bureaucracy

3

2

5

(2+)

Craft (Mechanics)

3

5

8

(4)

Diplomacy

2

1

3

(1+)

Drive

4

4

10

(5)

Drive (Automobile)

4

5

11

(5+)

Firearms

4

1

5

(2+)

Science (Engineering)

3

3

6

(3)

Talents

Tinker; Skill Aptitude (Drive)

Resources

Status -1; Wealth 1

Flaw

Underprivileged

Weapons

	Rating	Size	Attack	(Average)
Punch	0 N	0	0 N	(0) N
Derringer, Double	2 L	0	5 L	(2+) L
Shotgun, caliber .12	3 L	0	6 L	(3) L

Punch

0 N

0

0 N

(0) N

Derringer, Double

2 L

0

5 L

(2+) L

Shotgun, caliber .12

3 L

0

6 L

(3) L



The Automobile Expert

"Well then, let's see. Accelerate. Come on! Step on it! Stop! Too much!"

Background

There it is—my pride and joy. The Elephant No. 4! Unlike its three predecessors, it has a closed passenger cabin and can haul up to two tons. The Elephant No. 1 was powered by a steam engine, but it proved too heavy and therefore consumed too much fuel. With No. 2, I tried to install a steam turbine, but it was... well... let's say 'liable to break-down'. The electrical motor that powered the Elephant No. 3 was quite powerful... but, Heavens, the batteries! Their weight alone used up nearly all of the Elephant's cargo capacity and its maximum range was less than 50 miles! Eventually I gave the combustion engine a go and, as you can see, it worked perfectly. It's just too bad that I didn't have this idea before Mr. Benz. At least I can brag about how my automobile is far more powerful than his! Well, it was built for the purpose of traversing the wilderness. The first trial runs in Oregon proved to be quite promising. Neither mud, quagmire nor snow pose any problems for the custom-made steel tires. Neither do shallow rivers and creeks. A grade of more than 20% does prove to be a problem, I must admit. I probably should install a suspension, too. If the Elephant can stand its ground here on Mercury as well, it will have proven suitable for mass production. I'm planning to market it as an all-terrain passenger vehicle. It is true that various governments are interested in my patents, but where war machinery is concerned, I have personal reservations about that. Bad memories from the Civil War, you know? Me and my parents were lucky to be able to leave the Confederate States back then. I can't even imagine what would've happened if they'd been forced to stay. In the northern states, my parents were finally free to work and accumulate some wealth and I was able to get a solid education and become an engineer. That would've been unthinkable down South. Sure—there is prejudice in the North, too. I did have my work cut out for me. However, I'm optimistic that the years of hard work and hardship will be rewarded! And if I'm right, and the automobile will prevail and go into mass production someday, we will finally have overcome another of our problems—the horseshit on our streets.

Roleplaying

Your life's story could have only been written in the US. Your rise from a runaway slave boy to a renowned engineer whose patents are coveted by corporations and governments alike is the epitome of the American dream. You have achieved your goals through study and hard work, and you pursue your projects with an iron will and unflagging determination. In engineering circles you are known as a sociable and fun guy and as a true genius. It's hardly surprising, as you are fascinated by everything that has four tires and emits a buzzing sound. Yes, the harsh world of 1889 creates a special kind of headwind for you, because your skin color happens to be a couple of shades too dark, but you are ready to tackle this problem head-on. You derive a lot of pleasure from the fact that your achievements make racists and other envious people uneasy, as you utterly disprove any and all prejudices.

Automobile Expert

The Prospector

Archetype: Adventurer Motivation: Greed
Style: 3 Health: 6

Primary Attributes

Body: 4 Charisma: 1
Dexterity: 3 Intelligence: 2
Strength: 3 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 5
Move: 6 Defense: 7
Perception: 4 Stun: 4

Skills	Base	Levels	Rating	(Average)
Firearms	3	2	5	(2+)
Gambling	2	3	5	(2+)
Gambling (Cheating)	2	4	6	(3)
Intimidation	1	2	3	(1+)
Melee	3	2	5	(2+)
Streetwise	1	2	3	(1+)
Survival	2	5	7	(3+)

Talents

Diehard; Direction Sense

Resources

—

Flaw

Illiterate

Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	0 N	(0) N
Pickaxe	3 L	0	8 L	(4) L
Shotgun, sawed off	4 L	0	9 L	(4+) L



HK
2015

The Prospector

"Boy o' boy. Look a' them nuggets—I think I see m' pig fly!"

Background

It's kinda funny, if yer think about it. If I ever told someone in California that I'm gonna look for gold on Mercury—they would've laff'd me out of the state. They would've think'd that I was hammered as a sack o' nails. And now look at me, here I am in space, cookin' trollobite soup. Truth b' told, the company's offer was just too good. The fellas was looking for a fine prospector and came to me, 'cause I already did all the prospectin', mappin', and geologin'. And I even never studied this stuff. Learn'd it all by meself.

You'd never believe it, but I ne'er learn'd to read. In Styria, tha's where's I's from, they wern't very particular with the school-goings. Peoples wer' poor, still is. In the old country I watch'd the gold prospectors, 's them washed tiny nuggets from the mountain creeks, day af'er day. And af'er I came to the States, I tried m' hand at goldwashin' meself. I thought to meself, I thought I get stinkin' rich wit this, I was dumb as a bag o' hammers, I was. In th' end, I was as dumb and luckless as all the other idjits. The little I had I spent on drink... or Ethel, a "working" gal in Sacramento. All'n'all them were hard times. If them din't bash them heads in with trowels or shot each other in the back and whatnot, they wer' playin' cards and at each other's throats. If I was a believer, I would've believ'd tha' Satan had made our heads all woozy. I say, it's a miracle tha' I came out of this alive. California din't give me much, except a good portion of life experience and cholera. Sometimes I thinked to meself, maybe I can settle down, marry a good wife. But the wilderness calls to me, the merryin' stuff can come later. Lookin' for suitable campin' sites. The feelin' of bein' alive when youse roam the area and the joy of findin' stuff. Tha's th' life! Even if I croak. Dyin' at nature's bosom is better tha' in a sickhouse. Of course the best way to go is to have yer heart 'splode in a whorehouse! Ther's no bigger and better wildness than Mercury, is it? Maybe Venus, but what should I do with them dinosor eggs, if here, I ca' find nuggets as big as those. A' least I's he'rd that a' Princess Christiana Station...

Roleplaying

Seeing your charmingly rustic manners, your chummy friendliness and your undeniable sense of humor, it is easy to forget that in the course of your life you lived through hell many times over. Not only did you spend your childhood under miserable conditions, you also saw the worst that people can do in the gold prospector settlements in California. This has made you tough—and turned you into someone who can maintain a sense of humor even in dire situations. When it comes to prospecting, you are an expert. You're also a crack shot. Your most important skill, however, is your understanding of human nature. Evil bastards with ulterior motives tend to underestimate you because of your apparent weirdness. They also tend to make this mistake only once.

Prospector

The Independent Military Contractor

Archetype: Soldier

Style: 3

Motivation: Atonement

Health: 6

Primary Attributes

Body: 4

Dexterity: 4

Strength: 3

Charisma: 2

Intelligence: 2

Willpower: 2

Secondary Attributes

Size: 0

Move: 7

Perception: 4

Initiative: 6

Defense: 8

Stun: 4

Skills	Base	Levels	Rating	(Average)
Athletics	3	2	5	(2+)
Brawl	3	1	4	(2)
Demolitions	2	1	3	(1+)
Diplomacy	2	1	3	(1+)
Firearms	4	4	8	(4)
Firearms (Rifle)	4	5	9	(4+)
Gunnery	2	1	3	(1+)
Intimidation	2	2	4	(2)
Melee	3	2	5	(2+)
Stealth	4	1	5	(2+)
Survival	2	1	3	(1+)

Talents

Rapid Shot; Tough

Resources

—

Flaw

Overconfident

Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	4 N	(2) N
Saber	3 L	0	8 L	(4) L
Martini-Henry Breechloader	3 L	0	11 L	(5+) L
Colt Peacemaker	3 L	0	11 L	(5+)



The Independent Military Contractor

"What was it that Vegetius said? If you want peace, prepare for war."

Background

I know you think me a criminal. A merc. A sellsword. We always had a bad reputation, even before Walenstein. You probably think I belong to one of those drunken, pillaging hordes of madmen, setting fire to farms out of spite, defiling bar maids and selling their own grandmothers to the Turks if it brings in shiny shilling. Am I right? Well, as the Romans said: *'Cave quicquam dicas, nisi quod scieris optime.'** This image, however popular, is outdated, and you are two hundred years too late with it. In this day and age, those people that you so disdainfully call 'mercenaries', people like me, are more like, how shall I put it, security personnel. I even follow a strict moral code. At the risk of losing what little respect you have left for me—I began my career as an officer in the AIP. Yes, the *Association internationale des planètes*. As an excellent graduate of one of the most renowned Belgian military academies and an idealist at that, I decided that it was a great idea to serve King and Country in space. Alas, it proved to be a mistake. On Mars, I had a falling out with my employer. Certain practices... I didn't agree with... eventually led me to my decision to leave the service and to look for alternate employment opportunities. Some of my former comrades still think me a traitor. Not only because I left, but probably also because I worked as a military consultant in Yaonis on Mars. I worked for the heiress to the throne; unfortunately she had to take care of some priests who had occupied her palace. The extraction campaign was successful, but I had to leave for Earth for personal reasons. There I had several professional commitments. For example, I helped the Sultan of Sarawak fight the budding piracy in his country, I also escorted caravans in West Africa. None of these missions were even remotely 'morally reprehensible'. Well, to be honest, that is not entirely true. I was forced to partake in some missions in the Congo that were not quite kosher, purely from a legal standpoint that is. Although, seen from a Christian point of view, it was the right thing to do. And now, as you can see, I'm working on the peaceful development of Mercury. I think that working as a freelance military expert lets you make more moral choices than service in a regular army. As a contractor you always have the possibility to terminate your agreement, should you discover that you are working for an insufferable, dangerous psychopath. If you've sworn an oath on a flag, however, and only realized afterwards that you've been on the wrong side all along, things tend to get... complicated. You see, my profession is better than its reputation.

Roleplaying

You practice a profession that has been maligned for centuries, and you are rumored to take any assignment from anyone who pays the right amount of money. To disparage your bad reputation, sometimes you try too hard to behave like an eloquent and educated gentleman. In combination with your rugged mercenary attire, you even seem psychotic at times. In short, you appear to be a dangerous psychopath, at first sight. Someone who doesn't know you personally quickly assumes that you are an opportunist, a vulture of war. Cold and ruthless. When, in reality, you are one of the good guys! Under your veneer of 'a well oiled, latently psychotic gun for hire', you're a real man of honor. You are still traumatized by the fact that, once upon a time, when you were young, you fought on the side of a government that did unthinkable, atrocious things to civilians. Maybe you want to right the wrongs you've committed or maybe you want to stop people like your former employers—whatever the case, you only work for people of whom you can be sure that they are on the right side. That's why you are known for always honoring your contracts.

**Do not talk about things you are not absolutely sure about.*

The Steam Engineer

Archetype: Adventurer Motivation: Hope
Style: 3 Health: 4

Primary Attributes

Body: 2 Charisma: 1
Dexterity: 3 Intelligence: 4
Strength: 3 Willpower: 2

Secondary Attributes

Size: 0 Initiative: 7
Move: 6 Defense: 5
Perception: 6 Stun: 2

Skills	Base	Levels	Rating	(Average)
Brawl	3	2	5	(2+)
Craft	4	5	9	(4+)
Firearms	3	1	4	(2)
Pilot	3	4	7	(3+)
Pilot (Ships)	3	5	8	(4)
Science (Engineering)	4	2	6	(3)
Streetwise	1	2	3	(1+)
Survival	4	3	7	(3+)

Talents

Skill Mastery (Craft), Skill Mastery (Pilot)

Resources

—

Flaw

Impulsive

Weapons	Rating	Size	Attack	(Average)
Punch	0 N	0	5 N	(2+) N
Derringer	2 L	0	6 L	(3) L



The Steam Engineer

"If it's powered by steam, I ca' fix, Mister. I ca' fix it, I ca' make it work, and I ca' make it do all kinds of things you couldn't even imagine. Whatsit worth to you?"

Background

My Da' once said to me, after a couple bo'tles o' gin, he said that somethin' like tha' would be a mistake. 'Son', he said, 'it dun't matter how much you like the mot'rs and all this malarkey. If a guy with tinsel on his shoulder says you what to do, and you smash 'is ugly gob in, it'll be the end of yer epic adventure.' He was right, my Da'. Of course I din't break my head engineer's teeth, I did how'ever let some oth'r guys taste theirs. The Cap'n din't pay much attention to m' alt'rations with the other crew memb'rs, he din't pay much attention to anything, 'cept mayb' to the crabs he got from last night's whore. It seemed like a good idea, at first, t' sign up to work on this leaky bucket. I lern'd alot more abou' steam technology, electricities an' mechanics, than I 'nu befo'! It's a shame they din't let me do the things as they should've been done. I almost dob'led the efficiency o' the motor cap! With the waste heat I kept my priv't distillery running, y'know, fer a bottle or two on the side—my little contribution to save fuel. My modulator circuit would've kept the old lady running at least 15% faster, if the eth'r propeller wouldn't 'ave been such an old piece of crap. And anyway, this little fire did leave the ship stranded in the big noth'ng only for a day or two! Well, this little 'accident' made sure that my days on the ship wer' o'er. I nu' it would. As I met my old friend Mickey at Princess Christiana Station, at a layover on Mercury, I took my chance. I discov'ed a 'hole nu' world, that had a need for experienced eng'neers and no tinsel'd idjits to tell me what to do. Paradise call'd an' I answ'rd! To keep m'self afloat in the beginning, I borrowed some parts from my old ship. I mean, they still o'ed me m' monthly pay. Right? Unfortunat'ly I was the only one to see it that way. To escape problems wit' law an' order, I was decided to go on one of those exp'ditions tha' explor'd the World River an' needed eng'neers. As I return'd from der wilderness, I couldn't believe that a year'd gone by. Sometimes it seem'd shorter, sometimes longer. I mean, we kept a calendar an' stuff—but time feels diff'rent here. During my time on the riv'r, I came to like this filthy little planet and decided tha' I'ma stay 'ere fo' a while. I'm a kind of vet'ran 'ere on the station, no'one knows the river like I do. And no'one knows mot'rs as good as me 'ere on Mercury, 'cept maybe this 'Merican, but he's 'nu 'ere. I should have a beer with him, and find out wha' he knows.

Roleplaying

You can't deny that you stem from a lower class of society. You come from a working-class family and you had to deal with machines, screws, and hard work early on. Work on a spaceship offered you the chance to learn a lot about steam technology—and you didn't even have to go to college! However, your anger issues are a problem sometimes. Not that you're a bad person. Your friends know you as a good and reliable fellow. You're just a little excitable and tend to solve your problems with your fists. Most of all, you have problems with authorities—specifically authorities that don't know a thing about what it is you do and still want to stick their noses where they don't belong. It doesn't help that your understanding of law and order is, well, 'flexible'. Here on Mercury you're finally free of officers and fascist gobshites. Here, you're the master of your own fate! Here, your skills are what matters, not some badge on a uniform. If something goes wrong, whatever! You just pull yourself up by your boot straps and start anew. And for that you love this wild, weird place that lets you make something out of yourself and your talents.

Steam Engineer

Artifacts and Equipment

The Trinitarian Formula (Artifact 1)

"And now, Mademoiselle, open wide your beautiful eyes. The substance which I am going to sprinkle into them was, at the risk of lives, found on a foreign world, transported millions of miles through the cold void between the stars, and finally, by the collected life experience of yours truly, in all modesty the best apothecary in Paris, processed to be a resounding elixir. Attention, mesdames et messieurs. Et voilà : par miracle !"

— heard in a private clinic in Paris

The secret of perfect eyesight: a heated distillate from crab amber, centrifuged with a well-dosed pinch of ammonia in an apparatus of pure sun tin, frozen in a block of dry ice with split-second timing. This potent drug stretches and tautens the cornea, bestows a clear gloss, and has a splendid effect: a patient's shortsightedness will be canceled for the duration of the drug (the patient receives the Talent *Keen Sense*). One dose lasts about a day, the sight defect returns over time. If only there weren't so many ways to spoil the valuable substance!

Application: Applying

Anatomy: Human

Improvement: Talent *Keen Sense* (Sight, +2 Improvements); Duration 1 day (+2 Improvements)

Restriction: —

Total Improvements: 4

Creation Difficulty: 3

Effect Level: 4

Costs: £ 15 for 5 applications

Creation

Step 1: Obtain all 4 **ingredients** (crab amber, ammonia, sun tin, dry ice).

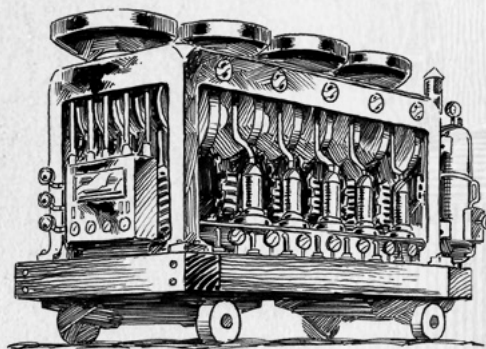
Step 2: *Science (Chemistry)* **skill roll** against Creation difficulty 3. Every roll represents the work of one week. As soon as the successes are equal or higher than the Effect level, you receive 1 load (5 applications).

Optional rule: On a critical failure, the obtained substance might be poisonous and cause chemical burns to the eyes, or have a sour stench that lasts for days. In addition, it can become crumbly and slippery, and thus be unusable.

Step 3: The **price** for one load (5 applications) is £ 40.

The Detector (Artifact 4)

This monster consisting of steel bolts, copper gears, and tubes weighs nearly half a ton, and it is the life's work of the professor emeritus *Johannes von Seelow*, who incorporated into it all the knowledge he gained over the years of working at the Royal Polytechnic University of Charlottenburg. Sand and rock specimens are dropped into the funnel, are pulverized by rattling rollers, and



then distributed to a number of glass tubes with chemical solutions in them. There they are catalyzed, measured, and weighed. An ingenious hydraulic calculator, its gears creaking and groaning, processes the different data and, after an appropriate amount of time, engraves the results onto small metal plates before spitting them out.

The results are phenomenal. The precise analyses allow for some profound assertions about the quality of metal content and enable a targeted search for the treasures of Mercury.

The design, which is mounted on a heavy carriage, has been stolen twice so far, but both times the thieves were overwhelmed by the sheer weight of the machine and had to abandon their loot. The professor is aware of the value of his apparatus, and his work is compensated in gold. Since there are many requests, although the machine's degree of utilization is very high, he has been tending to fool some prospectors with metal plates he inscribes himself. By now, a replica of the machine, based on the professor's notes, has been sold on Earth (without his knowledge). But it cannot match the capacity of the original machine.

The Heat Glider (Artifact 3)

The warm air of the Hot Side of Mercury is perpetually rising. In combination with the planet's low gravity, this allows air ships to lift heavier loads, since the winds give the gas balloons additional buoyancy. After the development of the Wild West, the American pioneer of flight, *Don Watson*, sees the exploration of airspace as the next 'Great Frontier' and has incurred considerable debts with his failed experiments on Earth. Now he is hoping for a breakthrough on Mercury. His heat glider is a massive wood-and-metal construct capable of remaining steady at great heights by a cunning combination of air balloons and wide horizontal sails. Coal-fired boiler jets allow for slow but steady movement in the desired direction.

The airship is able to reach an altitude at which the temperatures fall down to a level comfortable for human beings, although the aircraft lurches dangerously due to the decreasing uplift and suddenly drops on occasion. Thus, areas of the Hot Side which otherwise could not be explored can now be overflown. It is hard to estimate the amount of fuel needed for any given flight. The storms on the Hot Side and the titanic cyclone whirling on the Sun-facing side remain life-threatening. It is important to stay away from the cyclone or its ridges.

Artifact	Size	Def	Str	Speed	Team	Crew	Pass	Misc	Cost	Wgt
Heat Glider	3	4	7	10	-1	1	4	-	£5,000	1 t

The Tin Juggernaut (Artifact 5)

"Escape? But why? Feel free to leave the vehicle any time you want. But please, be careful not to get sunburnt since the outdoor temperature is about 250°C."

— Ignatius Wisniewski, laughing maniacally

About the Inventor

The inventor *Ignatius Wisniewski* is a tragic figure. With his 'Warsaw' project, the internationally renowned Polish metallurgist and chemist designed a massive extraction vehicle intended for Mercury and financed by the British government. After his beloved wife passed away in 1881, he wanted to complete the project as fast as possible and then let it rest. This rush might have led to flaws in the mechanical system, since its first mission on Mercury caused the deaths of its crew and the British governor of the time, *Lord Dundower*. Wisniewski was held accountable by the government, leaving him ruined, discredited, and mentally unstable.

About the Tin Juggernaut

Based on the same principles as the land cruisers, this more than 66 feet, or 20 meters, long and nearly 33 feet, or 10 meters, wide vehicle was constructed to traverse the surface of Mercury. The interior is completely insulated from the outside world, allowing travel deep into the Hot Side, where tin can be extracted from molten pools and transported back to the Twilight Zone. A massive solar mirror is mounted on the top to heat up the boilers of the engine (for the engines to work, they must run at a higher temperature than the outside). Batteries enable an operation time of up to 48 hours without sunlight and are fully recharged by sunlight after 24 hours. Large tanks are designed to hold the ice, which cools the inside via a tube system, for about 20 days.

A machine for extracting tin is mounted on the rear of the vehicle: a vat on a crane is lowered into a tin pool, filled with liquid tin and transported at least 100 miles coldwards where the metal cools enough to solidify. Here it is stored before a new trip starts. The tin disks with a diameter of about 20 feet, or 6 meters, and a weight of 50 tons apiece can be sold for about £ 120 per ton. Selling such high amounts lowers the price of tin, but quickly attracts attention.

Artifact	Size	Def	Str	Speed	Team	Crew	Pass	Cost	Wght
Tin Juggernaut	6	7	11	5	-2	9-14*	5	£35,000	40 t

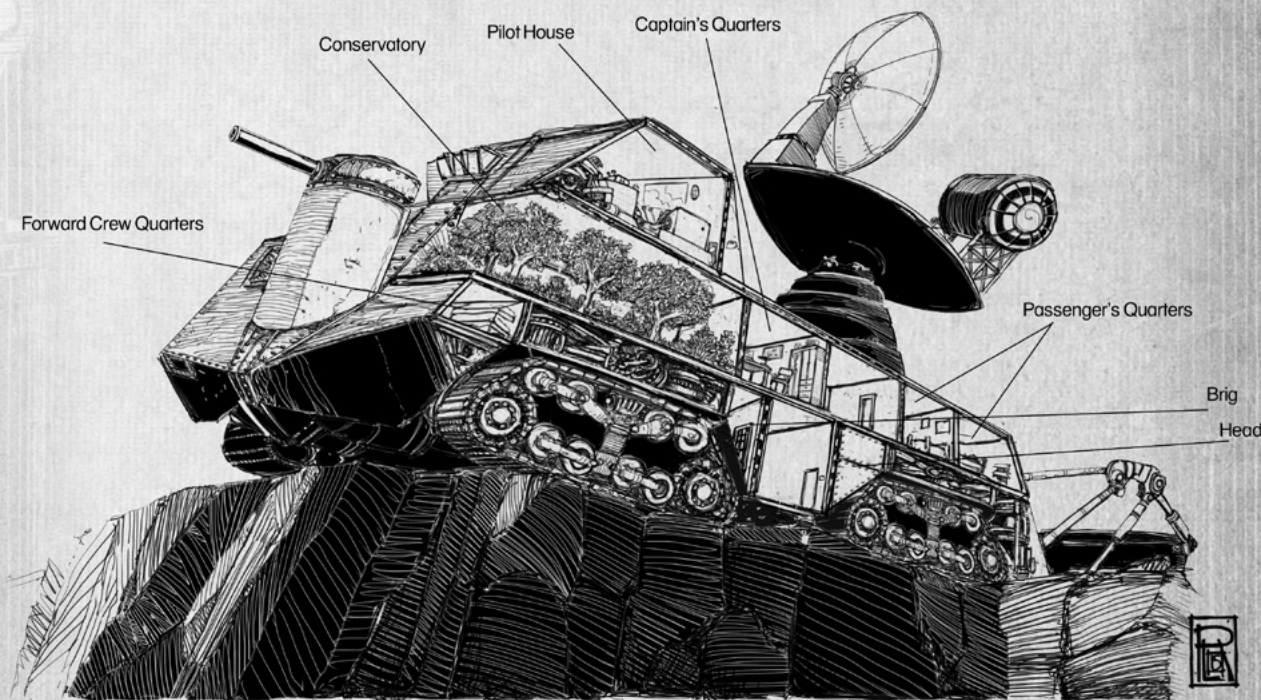
Miscellaneous: 2 gun carriages for heavy weapons

***One pilot, two engineers, and six men for perpetual maintenance are mandatory. In addition, there are rooms and tasks for one captain, two gunners, one fist mate, one steward, and about 5 additional passengers.**

Sir Charles Plunkett Drax Morton's Steam Sled (Artifact 4)

Along with the Tin Juggernaut, the renowned researcher and inventor designed a vehicle for the exploration of the Dark Side, which at the moment is in its testing phase. It is a sled with a closed cabin for 10 persons. A steam engine fueled by petroleum moves the crawlers of a chain drive, while the front part rests on skis. With its range of about 2,000 miles, 3,200 kilometers, it is well qualified to explore the Dark Side of Mercury. There are multiple vacuum suits on board, which protect the wearer against even the cold of the Dry Ice Zone and store enough breathing air for about 7 hours.

Artifact	Size	Def	Str	Speed	Team	Crew	Pass	Misc	Cost	Wght
Steam Sled	5	6	9	15	-1	1	10	-	£20,000	30 t



Siebe-Gorman's Hydraulic Thermo Suit (Artifact 3)

"With our helmeted diving suits we salvaged from the depths of Spithead the cannons from the HMS Royal George, which were used to cast the base of the Nelson monument in Trafalgar Square. We are proud of our achievements and I promise you that our suits will be deployed even on other planets."

— Augustus Siebe, speaking to his personnel

This suit was designed by the company Siebe-Gorman in London, which was founded by the late inventor of the helmeted diving suit, Augustus Siebe. Up until now, the suit is only a prototype, but is said to enable its wearer to withstand temperatures of -240°F to +300°F, or -150°C to +150°C. To achieve this, the engineers draw on technologies based on helmeted diving suits and steam armors, and expand on them.

A screen consisting of asbestos, the Venusian water plant *Venus grass*, rubber, leather, and aluminum protects the wearer. An integrated cooling and heating system, which can be regulated via a turn-switch to adapt to the surrounding temperature, allows for survival even under extreme temperature conditions. In doing so, a patented system of chemical reactions that is based on Mercurian salts and Martian technologies regulates the entering air in order for humans to breathe comfortably. The system cools down or heats up the surrounding air for about one week, driving the hydraulics of the heavy suit as a side effect, before the chemicals need to be replaced. Due to decades of diving experience and following on the 'two-men-principle', the engineers manufactured two copies of the suit.

The higher or lower the surrounding temperature, the higher the failure risk of the suit: At a temperature of 5°F, or -15°C, roll 10 dice and subtract one die for every 10 (F), or 5 (C), degrees below (minimum 1d). At 300°F, or +150°C, or higher, the same principle is applied for every 10, or 5, degrees above. Initially, roll the appropriate number of dice every hour, or every half hour for temperatures above +350°F (175°C) or below -280°F (-175°C). On an unsuccessful roll, the suit fails. A failed suit exposes the wearer to the outside temperatures and only grants its Defense rating as protection. In addition, the hydraulic system fails and the suit becomes immobile. It can be repaired in minutes by someone else than the now-helpless suit wearer if that other person has the *Craft (Mechanic)* or *Science (Engineering)* skill (Difficulty 3). A second person is required to put on and take off the suit.

Artifact	Size	Def	Str	Dex	Move	Cost	Wght
Thermo Suit	+1	+2*	+1	-1	-2	£1,000	250 kg
Miscellaneous: Protection against cold and heat							
*+6 against damage from heat, fire, and cold							

Silicon Sun Cream (Artifact 1)

( p. 118)

The formula of the sun cream, which is gathered from a so-far little researched secretion of an unknown creature living in the Thornwoods (p.55) of the semi-desert, is owned at the moment by Princess Christiana Station. The sun cream is sometimes given as a reward. Otherwise, one application can be bought for £1 at the Station (and be analyzed by clever researchers). The cream has a metallic-silver glint and protects against temperatures of

210°F, or 100°C, per day and application, thus enabling traveling through the *Boiling Wasteland*, provided one has enough supplies and uses a special breathing mask to mitigate the scorching air. In addition, it adds +2 to the defense against heat damage. The skin of the user takes on the cream's silvery glint while it is used.

Self-Heating Pad (Artifact 1-2)

Certain salts from the Hot Side (e.g. sodium acetate) give off heat when they crystallize. This effect can be put to use to manufacture heating pads which are made of rubber, leather, or other sturdy materials filled with the liquid salt and fitted with a trigger. When the trigger is activated by snapping, the salt slowly crystallizes. The bigger the pad, the more heat is radiated, and for a longer period of time. Sizes range from practical hand warmers (Artifact 1) for coat pockets to bigger cushions for vehicle seats or coats (Artifact 2). When the entire heat has worn off after about an hour, the salt has fully crystallized and turns into a granular mass which can be made ready to use again by applying heat to it (e.g. by putting it in boiling water or leaving it in the sun for an extended period of time). The pads give a +2 or +4 Defense bonus against damage from cold conditions for 2-3 hours.

Solar Glass (Artifact 1)

"When I have seen the sun, I will no longer love darkness."

— Saint Augustine of Hippo

It is in the very nature of the Hot Side of Mercury that its treasures are rare but most of all hard to come by. In that regard the discovery sites of the black volcanic glass are no exception (see p. 68).

Mining this glass is very difficult and the extremely brittle material is hard to work, making it more costly in its processed form, since it is already quite expensive when rough and can only be extracted in small quantities. If, however, the glass can be ground without chipping, its special refractive qualities allow for splendid tools that are quite handy in an explorer's life. Modern spectacles, telescopes, and binoculars made with solar glass allow its wearer to look directly into the Sun without missing any details; in daylight, however, they nearly blind him completely.

There are rumors circulating about plans to build an observatory paid by unknown investors, which supposedly does not target the outer planets of the Solar System, but the central star and its secrets.



Metalloid Solar Glass (Artifact 2)

Apart from the solar glass mentioned above, there is another, even rarer version which is interspersed with metallic particles and veins. Adding to the qualities of the regular solar glass, it is conductive and magnetic when powered. Although it can be used the same way as pure solar glass, it is currently being tested as a building material, since it is less brittle.

Jotun Blubber (Artifact 1)

“’Tis a hard winter when one wolf eats another.”

— British proverb

It is almost certain that fascinating secrets and valuable resources await their exploitation on the Dark Side of Mercury. Yet the forbidding conditions, especially the unequaled cold, present an increasingly unsurmountable challenge for men and machines.

A quite accidental discovery born from necessity is the cold-inhibiting effect of the Jotun blubber. It is not fat in the proper sense, but a thin, gelatinous insulating layer beneath the skin of the giant worms. The blubber, used as a superficially applied paste, protects most materials against temperatures below -240°F , or -150°C , by negating the effects of bitter coldness (see the **Core Rulebook**, p. 215). However, it must be applied every 24 hours. The same is true for the human body, although it will suffer from absorption since the Jotun blubber reacts like a level 3 (contact) venom whose damage increases with continuous application.

Day 1:	1 L
Days 2–3:	2 L
Days 4–6:	3 L
Day 7+:	4 L

When the use of the blubber is discontinued, the damage is reduced by 1 L per day. Further side effects are sensory disorder, delusions, disorientation, and miscellaneous psychological restrictions.

An adult Jotun worm carries about 100 doses of the blubber, still making it a very rare substance and thus a very expensive one. One dose protects an individual, or the whole gear worn on the body, or 22 square feet, or 2 square meters, of any surface material. When stored in an airtight room and at temperatures below the freezing point, the Jotun blubber can be preserved for about a year. Under less ideal conditions, it will keep for about a month, but oftentimes less.

Mercurian Mysteries

Coronium

After a green, unidentified emission line was observed in the spectrum of the Sun’s corona during a solar eclipse in 1869, it was the foremost Russian chemist *Dimitri Mendeleev* who theorized that, in addition to ether, a new element prevailed near the Sun, which he called coronium and supposed lighter than hydrogen. Unlike ether, this new element might be able to interact with other substances. In his view, the common Ether turbulences at the hot polar region of Mercury are the result of the presence of this substance, because the permanent orientation towards and vicinity of the Hot Side of the planet to the Sun might favor the existence of coronium.

Coronium has not been researched yet and its existence is disputed, but if you want to include it in your game, it can be detected in the hot pole region, or at least traces of it can. Its qualities are dangerous and unpredictable for ether flyers, since coronium penetrates solid substances and armor. If put to use, it could allow for therapies against any kinds of ailments and be fit for the use for weapons that influence or even change cells and substances.

During his research on Mercury, Mendeleev has recently disappeared under mysterious circumstances.

The Secret Technology of the Cosmosophers (p. 15)

As a matter of fact, the first radio telescope in human history was created by the ingenious *Dr. Takeru Kakuta*! A couple of sectarians on Mercury are experimenting with a new technology that might allow for ‘wireless telegraphy’—which is the reason why the British are so courteous towards this strange little group that they even supply them with resources. Much to the irritation of the ordinary soldiers, though. The curiosity of the British is piqued further by the fact that not only is the physicist who built the facility Japanese, but so are the majority of the project’s investors. *Heringskötter* convinced a small, superstitious but financially strong part of the Japanese aristocracy that the radio telescope would allow them to personally contact *Amaterasu*, the Sun personified and the most important deity of the Shinto belief. With the help of this small spiritualist group, the Japanese gained access to the telescope as well. For now, the Cosmosophers do not care for any of the interests of the major powers. The only thing that matters to them is that they recently received signals which, to their minds, have an intelligent origin. *Amon-Sol* is speaking to them! If only someone knew what he is saying... Only Takeru Kakuta remains secretly skeptical. The rhythmic songs of the spheres appear to originate not at all from the Sun but from the Dark Side of Mercury as etheric echoes! It is in fact an ancestral collective of the Ice Dwellers (p. 117).

1889

Bacteria *Mercuria smithiensis* (p. 30)

Residing at Princess Christiana Station, British researcher *Theodor Ashton-Smith* has been the first (and to date only) one to express the theory of the 'natural mind' of some locations on Mercury. For this, he has been pityingly derided by his colleagues. He postulated the existence of microorganisms he baptized *Bacteria Mercuria smithiensis*.

According to his understanding, their intelligence behaves in proportion to their number, thus creating a swarm with limited intelligence from single life forms without consciousness. Unfortunately, Ashton-Smith could not verify his theory as he drowned while trying to provoke a reaction from the presumed bacteria through electrical stimuli.

In reality, the bacteria react to anything that might endanger the River's equilibrium by causing hazards that are sometimes deadly. They respond to pollution, naval accidents, the plundering of fish, or the redirection of the River's course with sudden shallows, maelstroms, changes of the aggregate phases, or the appearance of creatures that do not belong in that area. A respectful treatment, on the other hand, is rewarded with favorable currents, an abundance of fish, and a secret or two that washes up to the surface.

Hypotheses on the Function of the Needles (p. 32)

The purpose of the constructions known as 'the Needles' is as unknown as is the identity of their creators. In consequence, numerous myths and wild theories are circulating. The astronomer *Erich Böldli* stipulates that the Needles stabilize the planet to the point that it makes life on it possible. Mercury should, by all rights, be a rock without any atmosphere. But it is not. This is why Böldli suspects an alien intelligence is responsible for this phenomenon and has left its traces in the form of the Needles. Böldli's hypothesis is dismissed by the academia as bloody nonsense, but there remains a worrying uncertainty as Böldli's calculations regarding Mercury do not show any flaws whatsoever.

Far more hazy than Böldli's hypothesis is the rumor about reports that allegedly have been found in the central archives of Syrtis Major referring to an expedition on Mercury, said to have taken place in 22,324 BC. Supposedly, the age of the Needles would be much greater than the Earth and Sun's age, estimated to be at most 300 million years by the science of 1889. However, the reports seem to have been stolen by an unknown authority while on their way from Syrtis Major to London.

Furthermore, in the summer of 1888, the scientists of Princess Christiana Station found the grievously injured Norwegian adventurer *Linus Ytterdal*. The Norwegian reported on his deathbed that in 1887 he had found an entryway into a vast system of underground passages beneath the Needles. Trying to validate the report, the British did not find any trace of the entrance.

Whatever secret the Needles hold, it will remain hidden for quite a while.

Findings of the Winter Tombs (p. 43)

Conserved in the ice for all eternity and oftentimes perfectly preserved, mythical creatures, wondrous ships, and baffling devices supposedly tell stories of a long-gone time of prosperity on Mercury. Time will tell if the few exhibits which found their way to Earth have actually been awakened from an eon-long hibernation, or if they rather originate from a curiosity merchant's workshop.

The Secret of Mount Edison (p. 53)

According to *Dr. Le Durieux* it is nearly time for the rare event of the illumination of Mount Edison to repeat itself—and he is desperately trying to find sponsors and thrill-seeking aides who will accompany him and his calculating machine on a journey to Mercury. It is vital for him to make the final calculations and to finally prove, or so the scientist hopes, that Mount Edison was artificially created.

In addition, Dr. Le Durieux is confronted with other problems, because more than a few researchers on Earth have until now sneered at him for his conclusions and publicly proclaimed that it was impossible for him to be right. More than one of those usually honorable gentlemen would be interested in sabotaging the Frenchman's expedition—just to be on the safe side that their reputation will not be affected by it...

If Dr. Le Durieux and his followers were to be successful, they indeed could, in an undetermined year between 1889 and 1894, become witnesses of the event the French scientist predicted: The rays of the Sun shine straight through the canyon, illuminating the peak and causing the ice crust to melt in a matter of minutes. Indeed, the ice reveals black stone slabs on the mountain top, but, on closer examination, those slabs, which look like layered bricks, could be natural cooling crevices in the basaltic rock, similar to the Giant's Causeway in Ireland.

More conspicuous though, some hundred feet or so below the mountain peak there actually *is* an artificial shape: a stone relief of a human or humanoid face gazing over the land. Unfortunately, the natural phenomenon does not last long enough for any examination (as soon as the Sun stops shining on Mount Edison, the water-vapor saturated air starts redepositing its ice on the mountain). Thus, it cannot be determined this time if the eye sockets really are the entryways into the stone like it seemed from a distance. Anyway, Dr. Le Durieux is determined to equip another expedition and at least blast or burn his way through the ice crust—possibly penetrating the mountain itself, if there are any entrances into it—and maybe find the remains of a long-lost spacefaring civilization.



The Ancestral Collective of the Ice Dwellers (p. 47)

The Ancestors

No human being has ever found out what the ancestor stage of the ice dwellers exactly is. The brain does live on in this state and develops 'root strains' that first absorb the nutrients from their own corpse and then begin prodding the ice in order to locate other 'dead' dwellers. The extremely cold environment in which the body is usually put down to rest ensures that parts of the dwellers' biological neural network becomes particularly conductive, and that the ice dweller begins to develop some astounding mental skills. The time an ice dweller's brain can remain in this new, quasi-floral state, is nearly unlimited. Alternatively, it is possible to implant a dying ice dweller into a freshly caught Jotun worm, whereupon the dweller slowly overtakes the Jotun worm's nervous system and thus gains a new body. Since this practice prevents the ice dweller from reaching the ancestor stage, only a few of them choose to do so, for instance to protect the tribal herds or to guard the 'burial grounds' of the ancestors.

The Dreaming Death

As described earlier, the ice dwellers know two kinds of death. The term 'dreaming death' refers to the idea that the level of consciousness the ancestors reach after their metamorphosis is a 'dream world' of some sort. The conserved brains exchange myriads of information and memories via neural pathways, creating a 'dream continuum', whose qualities are completely incomprehensible to living ice dwellers and even more so to foreign species like Earthmen. It is unknown if the ancestors remain separate individuals or if they create a single consciousness which receives new information by continually taking in new 'departed' dwellers.

Contacting the Afterlife

Communication between necromancers and the ancestral collective is difficult since the ancestors think in completely different spheres and time dimensions than the living and perceive reality in a fundamentally different way (i.e. via electromagnetism and etheric waves). In addition, it is difficult for the collective to distinguish between the real world, their memories of it, and their self-created spirit world. This is why information which necromancers receive from the collective—by questioning them or through incredibly realistic dream visions the ancestral collective can send to chosen individuals—can only be called cryptic at best. Technically, the ancestors' brains die, too, after centuries or even millennia, because they break down with age or get otherwise damaged. It is debatable if this leads to the 'death' of the individual which developed in that particular brain, because even after the destruction of its physical form, an ancestor's consciousness may live on in the memories of the other ancestors' brains. The ancestral collective has existed since times unknown. If a mortal were able to penetrate their memories, he would be amazed to discover that the ice dwellers have existed millions of years before any other

sentient species in the known Solar System—and that they did not inhabit Mercury back then. Not only does the collective remember the very origins of the ice dwellers, but also other species that traveled through space before mankind.

In 1889, only the necromancers of Mercury have a chance to contact the ancestral collective. There are, however, technological possibilities of communication with the ancient conglomeration of spirits. Theoretically, it is possible to receive the ancestors' thoughts via (not yet invented) radio! Thereby a humming re-sounds from the speakers like the music of the spheres. In order to make sense of the audible thoughts of the eternal, additional devices would be required to read and translate their 'songs'. A truly titanic task for the scientists of the late 1800s! But maybe other space travelers were able to communicate with the ancestral collective before the arrival of mankind.

Mimicry of the Life Forms in Bates Valley (p. 66)

Some of the life forms dwelling in the remote Bates Valley have an astounding capability for imitation. A visitor to the valley might discover, much to his astonishment, that the wings of the silicon butterfly carry a pattern, which—like mimicry—resembles the face of a previous expedition team member. Other creatures in the valley even copy whole shapes they have seen on other visitors. However, the discovery of a silicon spider with a torso resembling the head of a fellow female researcher instantly turns fascination into pure horror. Most of the creatures, though, are quite peaceful and use their shapeable silicon structure merely to instinctively camouflage themselves: whatever they see they can recreate—within the limits of their body shape, that is.

The Riddle of the Desert Varnish (p. 56)

The greatest riddle of the desert varnish lies in the mysterious and hard-to-find petroglyphs, which were carved or scraped onto the layer. They mainly depict the bizarre lifeforms of Mercury—including some from the Dark Side, like ice dwellers or Jotun ice worms. There is a number of theories about the glyphs' origins: Ice dwellers might once have found their way here or even hail from here; a spacefaring race like the Martians or Phaetonians might have created them; or, more plainly, they could be the work of isolated human researchers and treasure hunters.

The Creature of Caloris Montes (p. 67)

A part of the Caloris Montes is a unique gigantic silicon lifeform with intelligence similar to a plant's. Like corals, it forms a single lifeform but covers an area of several square miles. It 'feeds' on certain minerals in the rocks, leaving brittle, withered-looking stone as a waste product in other places, occasionally causing a mountain range to collapse. The gap inside the mountains is, for the moment, a stable passage—which could change quickly when the creature becomes hungry again.

The Enigma of the Reflecting Pyramids (p. 68)

The reflectors are pyramid-shaped objects made from stone and metal, built by an extraterrestrial race. Their silvery surfaces catch the rays of the Sun and direct them via reflections to the planet's subsolar pole. There, in turn, stands a larger pyramid whose crystal top concentrates the light rays and emits them into space when sufficiently charged.

Since these relics of a time long past are not maintained, they are exposed to the sand and dust storms which randomly either cover or polish the pyramids in question. Due to this it rarely happens that the concentrated energy of the site is actually emitted. The central construction was not adjusted to just reflect the light of the Sun. On the contrary, the slightly angled tip of the great pyramid points to one or another celestial body depending on the constellation of stars and the nodding of Mercury. Discharges of moderate strength or that miss Earth by only a short distance are dismissed as solar winds and do not attract further attention.

Once they were constructed by the Selenite insect people, who followed the enigmatic instructions of their Phaetonian masters, whose tombs can still be found hidden beneath the hot sands. Whether the site was designed to fire a devastating shot at another planet of the Solar System or to provide a powerful energy boost to another station remains to be seen when the stars are right. In theory, it would be easy for a ruthless engineer to align the pyramid's top at will.

The Time Telescope (Artifact 5)

Many an achievement of the ancient peoples rests in the dry ice of the Dark Side. This includes unique artifacts like the Phaetonian time telescope. The physical principle of the device's effects is unknown, but the complex assembly hints at the maker's expansive artisanship and knowledge of the universe.

Depending on the direction the telescope is pointed at, it is possible to see into the future or into the (most probable) future for a couple of minutes or even longer time periods. There are three laws applying: 1) the further away the observation is in time, the more 'vague' it becomes; 2) the observed scene refers only to the place or the person being watched; 3) the watcher has no influence on if or how something is shown.

Yet it is certain that the time telescope has to be used at a temperature of at least 14°F, or -10°C, although it can be used for a short time outside this range. If not, there is a risk of damaging the device, ruining its lenses beyond repair.

The artifact is first and foremost a storytelling device inside the game. The Gamemaster, for example, can unveil events or characters, make epic predictions, or expose an opponent's next action to the players (for 1 Style Point). The possible applications are manifold. Weight: 3 lbs. or 1.5 kg. Price: £ 2,500.

The Truth about the Silicon Sun Cream (p. 114)

No researcher suspects that, in truth, it is not the *secretion* of a creature from the Hot Side that is processed—but the silicon-based plant-like lifeform *itself*. At temperatures in the extreme (but still

endurable) range starting at around 175°F, or 80°C, the cream starts seeping into the body after multiple applications. From then on, the silvery shimmer on the user's body remains forever (and becomes more visible the more often they are exposed to heat), their skin hardens and becomes less sensitive to pain. Although this grants them a +3 defense bonus after multiple applications, not only does their appearance become strange, it changes their nature: Soon they begin feeling the increasing desire to live in the heat, and a vague urge drives them to test the limits of what they can bear. It is, in fact, the processed silicon lifeform which feeds him or her this desire by influencing their nervous system. The creature tries to lure them far enough into the heat that they will either die and set the creature loose, or both will merge permanently into a new lifeform. This process sets off an internal struggle between both the user's and the creature's survival instincts. One possible remedy is to expose the user to a temperature of less than 50°F, or 10°C, thus killing the creature, although this calls for a strong act of will by the user or for the assistance of another person. As of now, the effect—let alone its cause—is completely unknown, and there has not been a correlating case yet. You will find one of the first cases described in the adventure in this book (p. 70).

Scenario Ideas

The Great White One

"From hell's heart I stab at thee; for hate's sake I spit my last breath at thee."

— Captain Ahab, in *Moby Dick*

By their mere strangeness and size the Jotun worms are a tempting prey for trophy hunters of all countries or planets. Still, those giants are only the face of the real danger, because the true enemy is the ice.

Ever since the first rumors about the miraculous effects of the Jotun blubber (p. 115) began circulating, there has been a growing interest in these mysterious creatures. Another expedition, financed and supplied by a pharmaceutical company, is making yet another effort. The company is hoping for a live specimen to establish a breeding farm on Mercury or in Antarctica, if possible, and eventually to synthesize the blubber.

The motley crew of fame-avid gentlemen and avaricious mercenaries is led by Captain *Herman Melville*, a lifelong unsuccessful American author. The septuagenarian man plagued by rheumatism is driven by the furious hatred for an especially great white worm that killed his brother during an earlier expedition. On his brother's old flying clipper, *Meteor*, Melville has been trying to bestow the last honors to his brother and his own posthumous reputation. Of course, he has no interest whatsoever in catching the White One alive.

During this voyage, the characters might learn a lot about the worms and about the Dark Side of Mercury—and about their own.

The Schiaparelli-Lowell Expedition

"The Dark Side of Mercury is a cold hell from which the only escape is death."

— Percival Lowell

Giovanni Schiaparelli, once the brightest star of Italian astronomy, described and named the canals of Mars without ever being on site. In the end, it was his American colleague and once youthful admirer *Percival Lowell* who would persuade him to undertake an expedition on Mercury.

Although the private venture is suffering financially, Schiaparelli is vigorously advancing the preparations. In addition to the two minds, the expedition consists of the decrepit aerial flyer *Romulus and Remus*, which is manned by a crew of shady Sicilians. Since the prerequisites for joining the expedition are quite negligible, the characters should have no problems signing up for the adventure, because driven by Schiaparelli's newly-found ambitions and Lowell's curiosity, the expedition will pick up the work where Throckmorton once stopped.

The characters can discover nearly all of the landmarks and be the first to trace any secrets first (see p. 41), including the Fire Rivers that remind Schiaparelli of the canals of Mars and which lead the expedition far into the Dark Side. In the end, though, the supplies run short, and in contrast to Lowell, Schiaparelli would not dream of turning back. There is an imminent threat of mutiny by the famished crew...

The Disobedient Girl

"Victory awaits him who has everything in order—luck, people call it. Defeat is certain for him who has neglected to take the necessary precautions in time—this is called bad luck."

— **Roald Engelbregt Gravning Amundsen**

Very early in her life, *Gertrude Bell*, a highly talented young historian, daring British lady, and disobedient daughter of one of the most important industrial magnates of the Commonwealth, succumbed to the fascination of space travel. Today, at the age of 21, she has escaped her sheltered upbringing with an ether flyer out of her father's shipyard. After initial steering problems, she promptly crashes in front of the characters, who should not waste this unique opportunity—especially since the stubborn British lady would continue her flight alone and not return unhurt. Ms. Bell's destination is Kelvin's Land (see p. 42) with all its quirks, and it is very fortunate that the stolen ether flyer is a robust prototype designed for deep-space-flight.

As an alternative adventure hook, the characters' interest could be piqued by the impressive sum of £10,000 Gertrude's father, *Thomas Hugh Bell*, is offering as a reward for those who bring back his daughter and—far more importantly—his ship. To this end, he provides the characters with an airship suitable for use in cold temperatures, and some Jotun blubber (see p. 115). Because the British captain of industry does not want to take any risks, he sends out a group of professional space mercenaries (in both cases) to secure the ship. The characters either take the role of prey at Gertrude's side, or they are tasked with removing all obstacles in their way.

A Socialist Field Study

"From each according to his abilities, to each according to his needs."

— **Louis Blanc, repeated by Karl Marx, Critique of the Gotha Program**

The end of the century is nearing quickly, and despite all promises humanity's liberation is still a long way off; even worse—the living conditions of the proletariat become more intolerable with every passing year. Not without reason do some people fear that the desperate party infighting of the labor leaders does more harm than good to the big picture. Because of this, representatives of scientific socialism are trying to free themselves from corrosive theoretical debates by adopting a solid empirical approach. Earth's overflowing markets, however, does not provide clean laboratory conditions.

For this reason, hand-picked experimental subjects will be sent to Mercury with a small capital stock in order to take their luck into their own hands—unburdened by the oppressive concomitants of Earth. The young idealist *Jürgen Schweinfurter* organizes the selection of the adventurers. They are offered the following: Stocked with £5,000, they will be sent to the newly developed planet and are told to multiply their capital within a year by establishing a production company. A bond of debt states that the above-mentioned loan must be paid back to the last penny at the end of the year; they can keep any generated profit, though. The possibilities are endless, since Mercury allures the adventurers with untouched forests and rich metal deposits.

The promoter obfuscates the radically experimental nature of the venture, however. The sponsors are no benefactors: they want applicable results. For this reason, they secretly influence the experiment heavily: shortly after the formation of a company, two more competitors will be installed in the exact same field of business. Workers on Mercury are secretly hired to found a strict labor union. Prices for delivered machinery are subjected to artificial and extreme fluctuations. Whether the hired adventurers are ruined in the end or are made stronger is only interesting from a scientific perspective.

Furthermore, it is in the interest of competing schools of thought to have the project fail, resulting in endless comings and goings of secretly planted controllers, rapporteurs, provocateurs, and saboteurs. In addition, state authorities on Earth get wind of the experiment and in turn try to make a travesty out of the project, for example through lavish Greek gifts. Still having a bone to pick with the socialists, radical European anarchists are very much less restrained.

The Treasure Hunt

Marie Dorothée Valentine von Heckel has a problem: The jeweled necklace that was given to her by her husband, a general of the Imperial German Army, on their wedding day, has disappeared. Not without good reason does she suspect that the necklace fell into the waters of the World River during a stormy flirtation. She and her admirer, a young lieutenant, would be ruined if the affair led to a scandal. Trustworthy help is wanted to inconspicuously recover the treasure.

The player characters face the problem of having to scour a quite significantly wide part of the River near Princess Christiana Station while being suspected by everyone of being enemy spies or rival prospectors since complete covertness is impossible. Wild water creatures eagerly defend their territories, other treasure hunters suppose there are nuggets to be found and disrupt the search with their presence. The unfaithful wife can avoid her husband only for a limited time without rousing suspicion, and as such it is also an important part of the task to distract him.



'Vase with Ice Flowers and Rhemones, 1889'

While in Paris, the master painter *Vincent van Gogh* has learned and come to appreciate the art of Impressionism. The relativity of the imagery, the appreciation of the unseen setting of the picture, the aesthetic approach of reception which valorizes the observer to a significant part of the artwork—all this is revolutionary. *Theo van Gogh*, the painter's well-behaved brother, however, finds himself in a pretty pickle: He has to host the rather complicated painter and his growing flock of admirers in his tiny city apartment, which has shattered his quiet little life completely. To be on the safe side, he puts a bug in his brother's ear not to be inspired by a city but by a whole new planet instead. The idea has quite an impact.

After the passage to Mercury, Vincent van Gogh and his circle of young artists, male and female, do not have two pennies to rub together. Yet, van Gogh is surrounded by an air of genius, inevitably driven by fate to a phenomenal, one-time breakthrough. The player characters may hurry and stick to his heels and try to create so many paintings and artworks of their own in the master's wake that they will become part of a legendary project whose

result will stand the test of time. Poignant debates about the relationship between art and the universe are part of this marvelous expedition as is profane foraging or desperate measures for procuring alcohol to clean the brushes. Above all, there is the danger that the absent-minded master gets eaten by an ice dweller, falls from the edge of a crater into a lake of molten tin, or freezes to death while painting ice flowers.

Untalented impostors among his disciples will quickly find out that the common chaos fosters unscrupulousness. By condemning a talented competitor to one of the above mentioned dooms, one can pass his works off as one's own. Mysterious accidents begin to pile up.

The Great Insurance Heist

With the boom of the *Gründerzeit* in Germany and the rapid growth of savings accounts that are connected to it, insurance companies spring up like mushrooms after the rain and scuffle with each other to secure shares of the big business. The German *Allianz Versicherungs-AG*, newly founded in 1890, has a hard time establishing itself on the highly competitive market and tries its luck between the stars. A secondment of statisticians, accountants, and mathematicians arrives on Mercury, and they begin to subject everything to risk analyses to be able to determine rates and premiums accordingly.

The bankrupt Parisian lady *Louanne Sabatier*, a ravishing beauty and honest-to-God *femme fatale*, is looking for cold-blooded and calculating accomplices to cheat the upright account clerks out of a fortune. She expects her minions to come up with clever devilments that the dutiful bureaucrats will fall for. Louanne sets great store on staying clear of openly criminal actions in order to avoid any investigations. It is her intention to lead the insurance agents to false beliefs about the conditions on Mercury, raking in the profits as a result of their miscalculations. Her accomplices are entrusted with the task of making any dramatics ironclad and to play the necessary roles to support Madame Sabatier in her fraud.

The Burning Desert

Introduction

The characters get involved because of a letter from a friend called *Carrington*, who works at Princess Christiana Station. He provides them with a passage to Mercury and attaches a *Times* article about sharply falling tin prices (from more than £160 to under £120 per ton) due to an excess supply from the Pacific kingdom of *Vanaluva*. Carrington writes that he suspects someone from

the Station's personnel of being criminally involved in this price slump, and asks his friends for help.

Murder on Mercury

On Mercury, the characters are welcomed by the old government official *Sir Arthur Choat* (p. 36), who tells them the bad news of Carrington's death three days ago. He was stabbed with a knife in his sleep. The main suspect is *Claude Brumpford*, a clerk who disappeared in the night after the murder. Among Carrington's affairs, a hidden case binder addressed to the characters can be found, with articles about the dropping tin price, but also with a report about a tragedy back on Earth a couple of years ago involving a tin vehicle (p. 113) in which the crew and the governor, *Lord Dundower*, lost their lives. The engineer *Ignatius Wisniewski* is named as the guilty party. Obviously, Carrington saw a connection and collected evidence against Wisniewski: a letter from a professor of the University of Warsaw describes Wisniewski after his discrediting as a criminal; a hired detective writes about Wisniewski's connection to both the opium trade in South-East Asia and to the kingdom of Vanaluvala. Apparently, Wisniewski had Carrington killed for that.

Prompted by the overwhelming evidence, Arthur Choat suggests searching for Wisniewski. He involves the characters especially because he is too old for a manhunt. He places the airship *Mosquito* and some royal Marines at their disposal.

Airship Search

By searching the Hot Side with an aerial boat (the clue about tin mining suggests trying to skim the tin area) the Tin Juggernaut can be found; however, it puts up heavy resistance with its superior weaponry. If the characters get the opportunity to escape,

there is a new chance of attacking the vehicle at another place and with reinforcements (the Tin Juggernaut has to cross the Twilight Zone repeatedly, loading up ice from the Ice Sheath). It is more likely, though, that the characters' aerial boat is shot down above the Hot Side. In this case, Wisniewski takes the survivors on board, presents himself and his plans in the typical vein of a super villain, shows the characters his Tin Juggernaut (Brumpford is on board, too), and finally pressgangs them into operating the vehicle.

Infiltrating the Tin Juggernaut

After they crashed or by means of infiltration, the characters get on board the Tin Juggernaut and become part of the crew. In order for an infiltration plan to work, the vehicle must be tracked down by following Brumpford's trail leading to Wisniewski's secret tin deposit in the woods. Wisniewski is in need of personnel, so the characters could convince him that they want to sign up with him. Once on board the Tin Juggernaut, the temperatures of the Hot Side prevent any attempt to escape or sabotage the vehicle until it returns to the Twilight Zone. Here, the characters could sabotage the batteries, open a lock while traversing the World River, or some such. The crew is mostly loyal to Wisniewski and they will try to prevent the heroes from putting their sabotage plans into action; some, however, are slave laborers, making it easy to cause a mutiny.

Epilogue

After a final battle against Wisniewski and his crew, the villains can be killed or taken as prisoners. The Tin Juggernaut is handed over to the British government or kept as spoils. Carrington has been avenged, and the tin market is picking up again.



Index

A

Acute Silicosis	92
Afar	17
AGFA	13
Air swimmer	47
Akhmatov, Fjodor	52, 98
Alkali	60
Allianz Versicherungs-AG	120
Aluminum	62
Amaterasu	115
Ammonia	43
Ancestral Collective	117
Anomalocaris	27
Ashton-Smith, Theodor	116
Asseburg, Friedrich von	12
Austria-Hungary	15

B

Bacteria mercuria smithiensis	93, 116
Bakkevold, Arne Jonny	95
Balloon Fruit	99
BASF	13
Bates Valley	66, 88, 117
Bates, Henry Walter	66
Bayer	13
Belgium	15
Bell, Gertrude	119
Bell, Thomas Hugh	119
Bison grub	45
Black Mirror	68
Black stinger	63
Black Waters	32
Blair	38
Blavatsky, Helena	
Bligh, Sir Jasper	88
Boiling Wasteland	57
Bomsdorff, Walther Friedrich von	73
Boundary Taiga	98
Bricks Shallow	33
British Empire	14
British Royal Society	13
Brumford, Claude	36
Brunner Mond	13
Burkes, Bill	85
Burroughs, George Tyler	21

C

Cadmium	61
Caloris Montes	67, 117
Caloris Planitia	66
Carrington, Randolph Forbes	36
Cathedral Groves	31

Cathedrals of the Cold	52
Cave Leech	91
Choat, Sir Arthur	36
Cloud Forest	21
Coal Plague	66
Coldwards	8, 17
Collins, Elmo	34
Coronet lizard	25
Coronium	115
Corridor of Life	88
Cosmosophers	15, 115
Crystal Forest	53
Crystalline lakes	31
Cyan Lake	95

D

Dark Side	39
De Mourier, Auguste	88
Deep-bottom feeder	24
Departure	17
Desert Belt	55
Desert Meadow	88
Desert Varnish	56, 117
Detector	112
Downstream	17
Dreaming Death	117
Dry Ice Zone	41
Dry Ice	44
Dust Sea	68

E

Edison Electric	16
Eilends, Dr. Basileus von	68
Electric Triumphrate	
16	
Empress Wall	52
Endemites	21
Eryops	28
Ever-Lasting Storm	6

F

Fata Morgana	67
Fenrir worm	46
Fire Rivers	41
Fitzgerald, Cyril Montgomery	74
Flapper	63
Flicker rocks	65
Floating jellyfish	29
Fog Desert	55
Forbidding Desert	55
Fournier, Maria	37

G

German Empire.....	14
Giant Ammonite.....	86
Giant quartz.....	65
Giant Tree.....	84
Glacier ant.....	45
Glass Mountains.....	42
Glass root.....	65
Gliding snake.....	29
Glow Crystal.....	23
Gold.....	62
Grass crab.....	25
Green Ice Field.....	96
Green Rock.....	88

H

Heat Glider.....	86, 112
Heath Fringe.....	39
Heath Gold.....	43
Heath, Paul.....	37
Heatwards.....	8, 17
Heckel, Marie Dorothee Valentine von.....	119
Half-Heating Pad.....	114
Heringskötter, Agathe.....	15, 115
High Plateau.....	31, 84
HMS Achilles.....	12
Hot Pole.....	59
Hot Side.....	55

I

Ice Dwellers.....	48, 117
Ice Sheath.....	39
Ice Worm eggs.....	44, 95
Illinois Steel Company.....	13

J

Japan.....	15
Jotun blubber.....	115
Jotun ice worm.....	46

K

Kakuta, Dr. Takero.....	15, 115
Kelvin's Land.....	42
Krupp.....	13

L

Lake Plimsell.....	33, 94
Lake Throckmorton.....	33
Lantern-weed.....	39
Le Durieux, Dr. Jacques.....	54, 116
Lead Zone.....	59

Lead.....	61
Lens floater.....	63
Light Metals.....	62
Living Crater.....	67
Lopez, Juanita.....	38
Lost Colony.....	33
Lowell, Percival.....	119
Luminescent jellyfish.....	25
Lydon.....	38

M

Magic Mercury Mushrooms.....	23
Magmoloch.....	54
Magnetite.....	43
Mangrove Swamps.....	20
Mason, Skookum Jim.....	85
Maw beast.....	63
Maxim.....	52, 96
McCannon, Iris.....	36
Melville, Herman.....	118
Mendeleev, Dimitri.....	15, 115
Mercurian Lead Granulate.....	61
Mercurian teak.....	24
Mercurian titan arum.....	24
Mercurian truffle.....	23
Mercurian velvet worm.....	26
Mercurite.....	44
Mercury Alga.....	92
Mercury Fever.....	6
Mercury Marshes.....	19
Mercury Nacre.....	25
Mercury Table Salt.....	59
Mercury tissue.....	65
Mercuryx.....	54
Metalloids.....	60
Miller, Florence.....	37, 78
Mirrordrop.....	63
Mitsubishi.....	13
Moltke Lake District.....	18
Moon Mountain.....	67, 91
Morton, Sir Charles Plunkett Drax.....	14
Mount Edison.....	53, 116

N

Needles.....	32, 116
Nobel Enterprises.....	13
Noble Metals.....	62
Nodding.....	7
Nugget-filled river sand.....	32
Nutation.....	7

P

Penal Colony.....	69, 88
Percy Shallow.....	33
Phaetonians.....	118
Pike, Dr. Henry.....	66
Princess Christiana Station.....	14, 35, 76

Q

Quicksilver 61

R

Razor vines 62
 Reflecting Pyramids 68, 118
 Return 17
 River's Memory 30, 93
 Running grass 65
 Russian Empire 15

S

Sabatier, Louanne 120
 Sailback Ammonite 28
 Sandford, Charles Arthur 92
 Sapo 26
 Savannas of the Eternal Dawn 55
 Schell, Dr. Richard 38
 Schiaparelli, Giovanni 119
 Schweinfurter, Jürgen 119
 Sculptor mold 65
 Seamore, Finnigan 33
 Seamore's Island 33
 Shallows 33
 Shawbridge, Ernest 37
 Shell gland 24
 Siebe-Gorman's Hydraulic Thermo Suit 114
 Siemens 16
 Sigillaria Cones 23
 Silicon Soldier 91
 Silicon Sun Cream 114, 118
 Silvery Hills 68
 Sir Charles Plunkett Drax Morton's Steam Sled 95, 113
 Sky Forest 31, 98
 Smith, Edward 32
 SMS Odin 12
 Snow spider 46
 Solar Glass 114
 Solar Tin 61
 Sphere tower 65
 Spring tide lowlands 33
 Stairs of the Gods 42
 Sterling Bay 33
 Stoker Hill 54
 Stoker, Benjamin 54
 Swamp lurker 27

T

Thornwood Thicket 87
 Throckmorton, Sir Basil 12
 Throckmorton's First Expedition 12
 Throckmorton's Second Expedition 12
 Throckmorton's Third Expedition 13
 Time Prison 52
 Time Telescope 118
 Tin Juggernaut 90, 113
 Tin Zone 59
 Tin 60
 Tree Cephalopod 84
 Trinitarian Formula 112
 Turn 17
 Twilight rosewood 24
 Twilight Zone 17

U

Upstream 17

V

Van Gogh, Vincent 120
 Von Asseburg Expedition 12

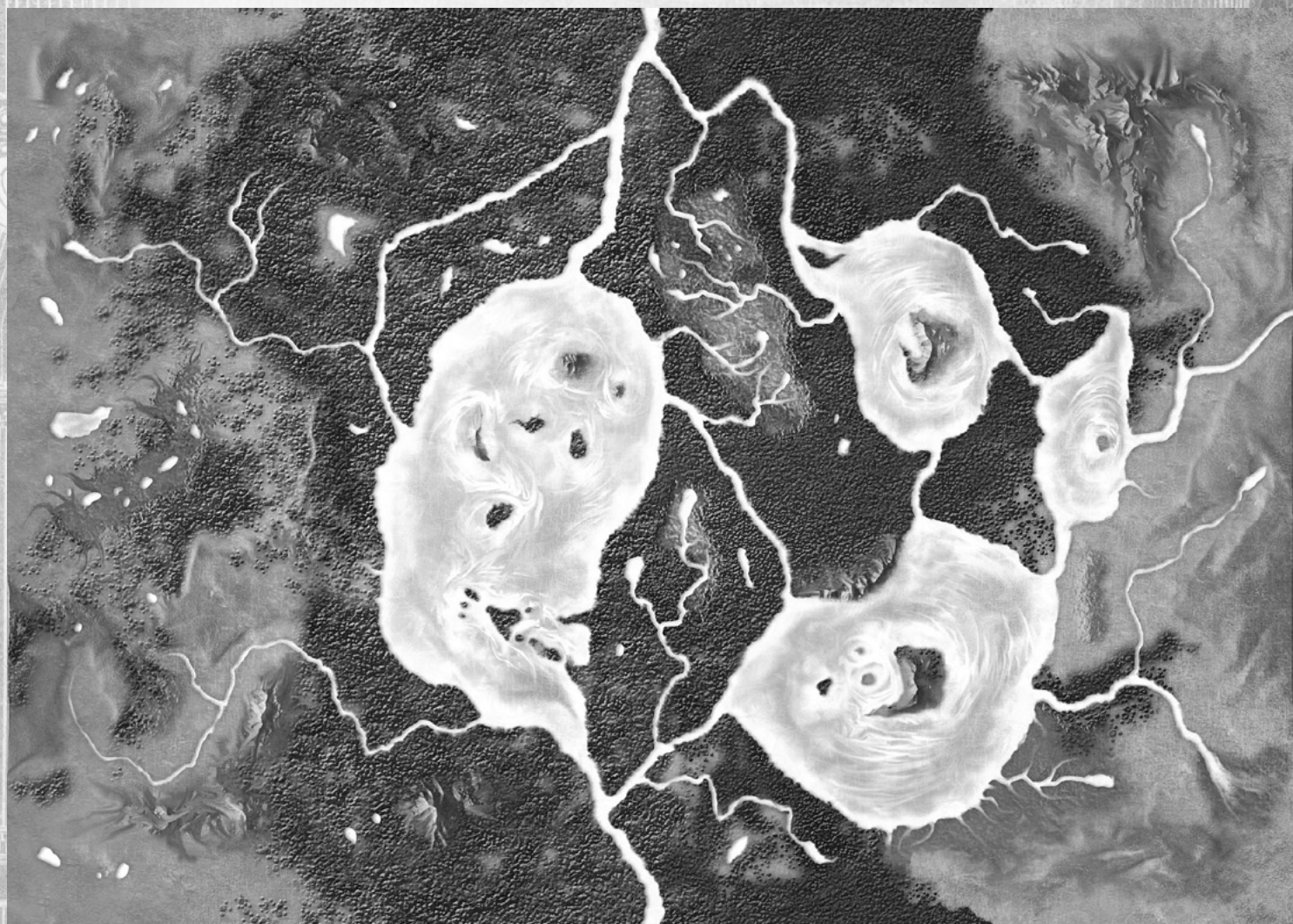
W

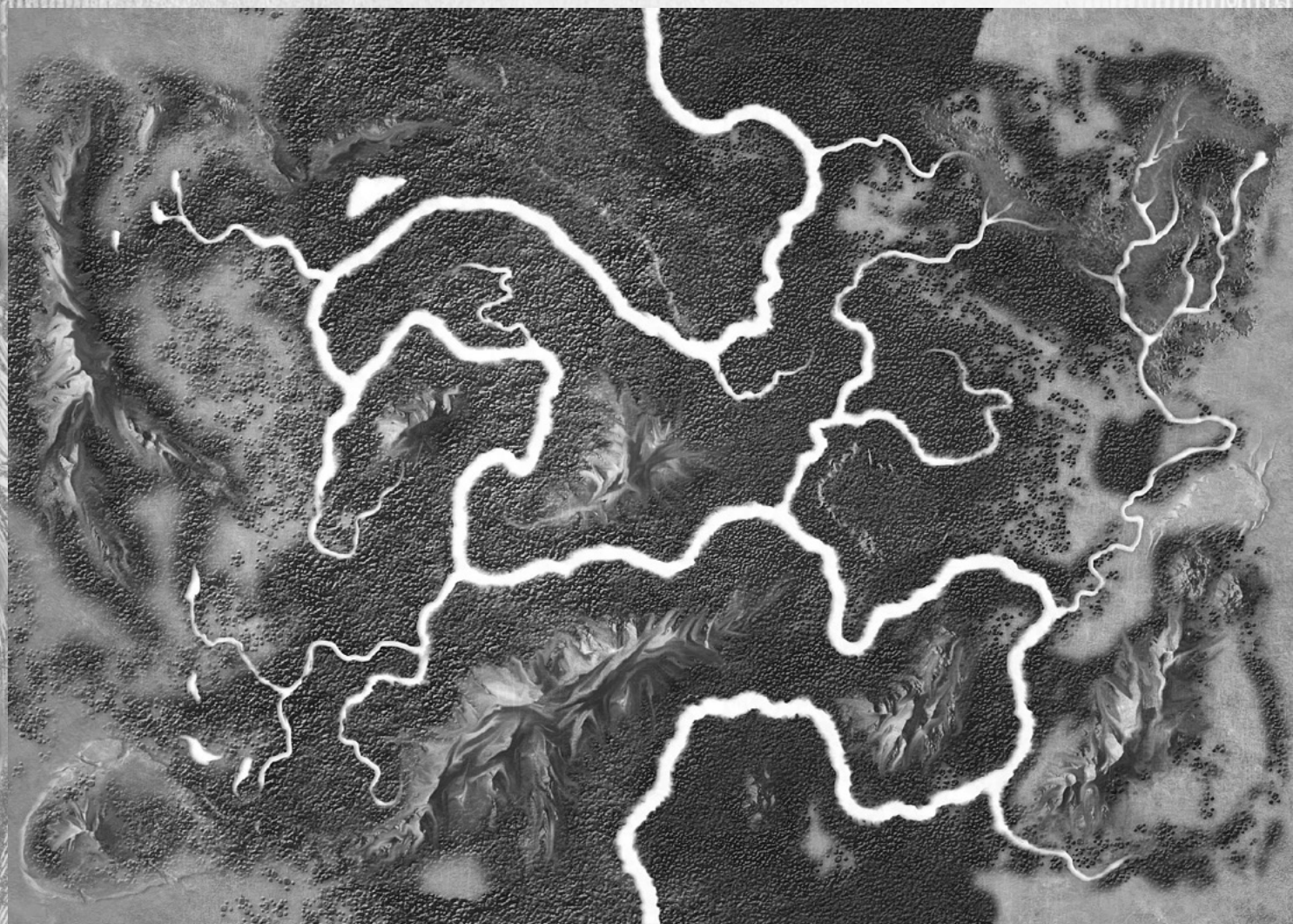
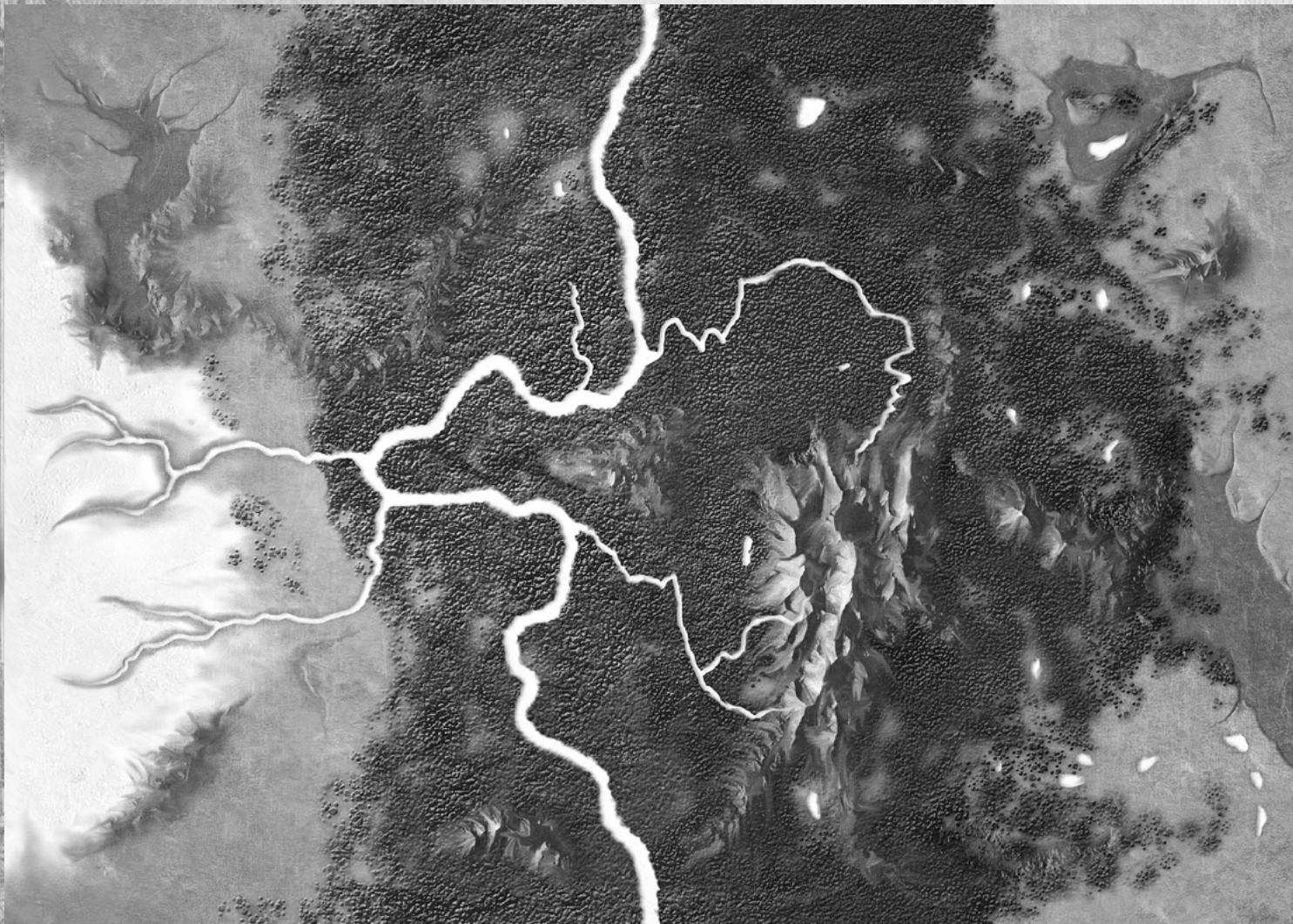
Water Stairs 34, 85
 Watson, Don 86
 Westinghouse 16
 Winter Tombs 43, 116
 Wisniewski, Ignatius 14, 113, 121
 World River 17
 World Spine 34

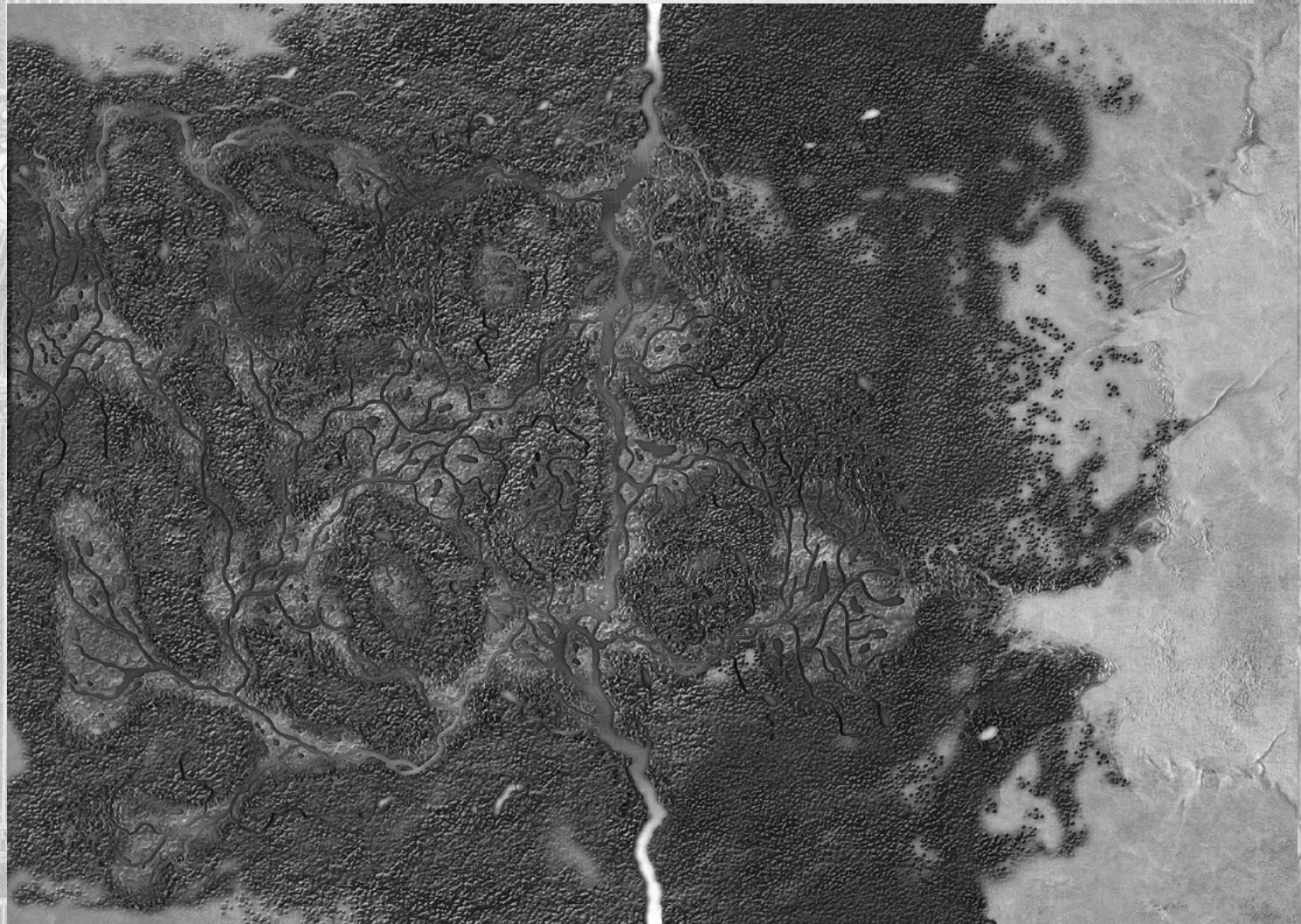
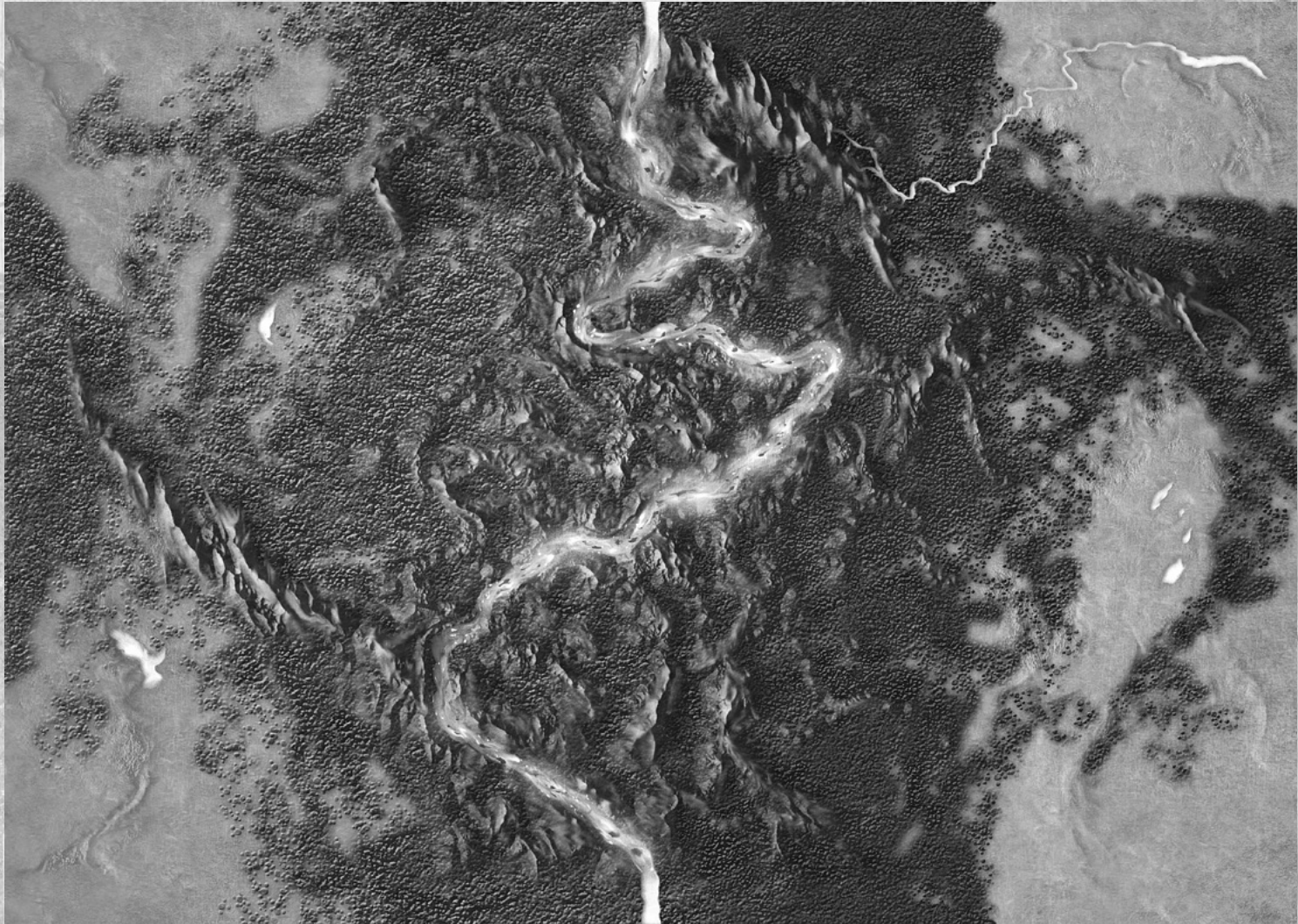
Y

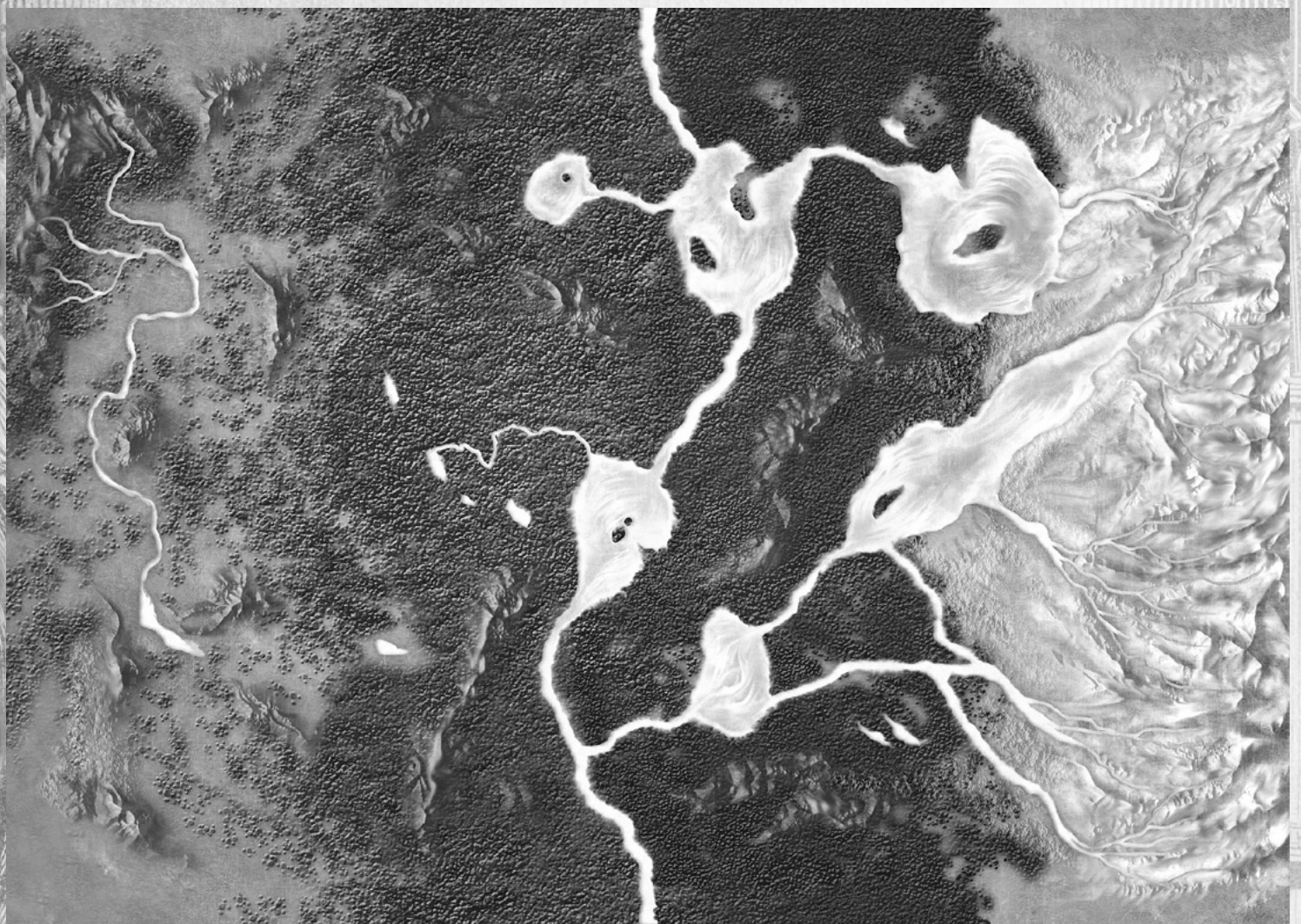
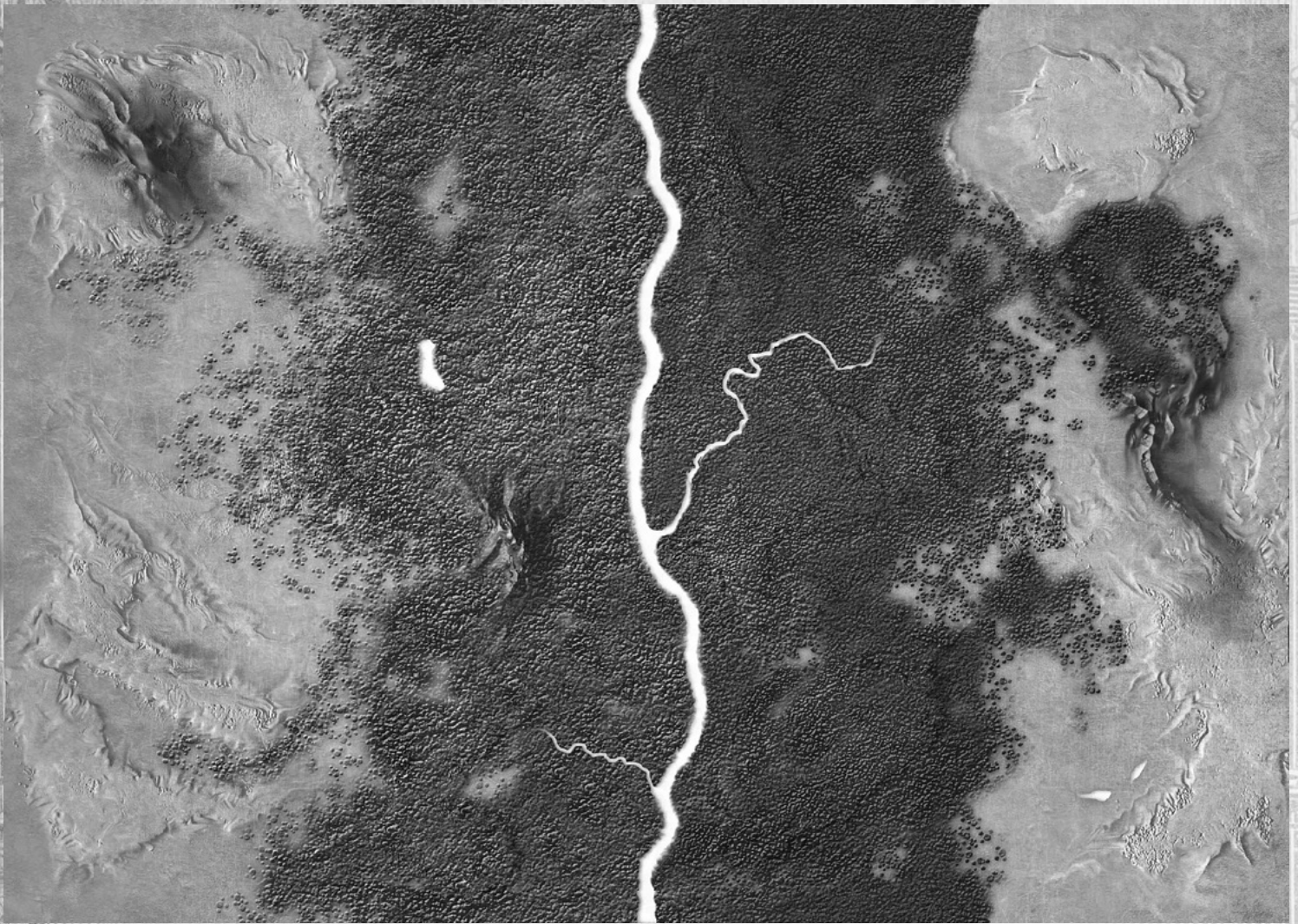
Yitterdal, Linus 116

1889









SPACE

1889

Everything Jules Verne could have written.
Everything H. G. Wells should have written.
Everything Arthur Conan Doyle thought of,
but never published – because it was too fantastic.

Once, no man on Earth thought that life on Mercury was possible since the planet is locked with one side perpetually facing the Sun. Scorching heat on one side and eternal darkness on the other seemed to guarantee that Mercury must be uninhabitable. But when the inhabitants of Earth first started to voyage through the Ether, some daring explorers also turned towards Mercury—and discovered how wrong the previous assumptions about the planet had been.

Because even if the one side of Mercury is dominated by vast hot deserts with lakes filled with molten metals and the other side is a seemingly lifeless waste with its giant glaciers of ice and ammonia, there is still a small strip of land between these two extremes that thrives with life. This zone where the cold and hot sides meet always stays in the same twilight and at the same temperature—this is the realm of the mighty World River, which spans the whole planet and is a lifeline for the primeval fauna and flora on both river banks.

While the few human settlements and bases were all established along the World River, the main focus of the great powers and trading companies remains on the hostile areas of Mercury—because that is where the true riches of the innermost planet of the Solar System lie. Lakes of molten metal await their exploitation on the Hot Side, if only there were a way to mine them. Frozen gases on the Dark Side also promise great profits, despite all risks to life and limb. It is no wonder then that it's not just scientists that come to Mercury, but also salesmen and prospectors, just as some inventors try to construct machines that would function in environments more life-threatening and hostile than anything known on Earth.

This supplement describes everything you need to know to have thrilling adventures on Mercury. Detailed descriptions of the three very different regions, information on inhabitants and visitors of Mercury, interesting locations, or alien (and not always animal) life—this sourcebook offers you a comprehensive survey of the planet.

To help you dive into this exciting world more easily, this book also includes an adventure concerning a race along the World River which lets you and your players explore large parts of Mercury during its course.

**The alien and fascinating world
of Mercury awaits you!**



www.clockwork-publishing.com

