



#### by William H. Stoddard

## Art by Alan Gutierrez

The 19th century is an ideal setting for science-fictional adventures: science and technology had achieved amazing things and could be expected to achieve even more, but enough remained unknown so that there were few limits to a writer's invention. Steampunk campaigns look back to that sense of possibility. *GURPS Steampunk* offers a catalog of Victorian marvelous inventions. Unfortunately, there wasn't space to fit in all the ingenious suggestions that came up during the playtest; in fact, several sections of the original text needed to be cut for space. Here then are some of these unexplored possibilities.

# **Further Looks at TL(5+1)**

The age's main power source was coal-fired steam engines. But coal has serious inconveniences, especially in requiring stokers to move it from storage compartments to combustion chambers.

Phil Masters suggested that one solution to this problem, well within the range of Victorian technology, would be grinding coal into a fine powder that could be pumped like a liquid. Fluidized coal power plants require half as many tenders as standard steam engines (divide kW by 500, take the square root of the quotient, and round down). The coal still weighs 50 lbs. per cf, but costs 25% more, \$0.10 per cf or \$3.30 per ton. However, it cannot be stored in a bunker. Instead, it requires a fuel tank. A cubic foot of coal fills a 6.66-gallon tank, either standard or light (see p. VE89), and has a fire number of 9 in a standard tank or 10 in a light tank (see p. VE90). Under normal circumstances fluidized coal will simply burn, but like flour, it can form an explosive mixture with air in a confined space.



Another plausible variant fuel was noted by Jim MacLean: alcohol. Statistics for this are already provided on p. VE90. Either wood or grain alcohol weighs 5.8 lbs. per gallon, costs \$0.025 per gallon, and has a fire number of 11 in a standard tank or 12 in a light tank. Reduce engine power to 85% of normal after conversion from fuel oil to alcohol.

Another playtester, M.A. Lloyd, noted that several 19th-century inventors attempted to develop a coal-gas fuel cell. Such a cell, including the gasification apparatus, might have the following performance statistics: weight 90 lbs. per kW if under 5 kW, or 225 lbs. + 45 lbs. per kW for higher power outputs; volume 1 cf per 50 lbs.; cost \$5 per pound, with a minimum of \$50. Fuel consumption per kW would be 0.015 cf of coal and 0.125 gallons of water per hour. For example, an 8-kW fuel cell would weigh 585 lbs., take up 11.7 cf, cost \$2,925, and use up 0.12 cf of coal (6 lbs.) and 1 gallon of water (8.5 lbs.) per hour.

The inventive Mr. Masters also suggested that a world with steam-powered mechanical computers might be able to build vehicles with TL(5+1) computerized controls. Such controls could allow one crewman to operate multiple vehicle systems from one station. The interface would be a mechanical analog of a computer terminal, weighing 200 lbs. and occupying 10 cf in addition to the space for the crew station. Cost for the system would be \$1,000. Operating a vehicle with such a system would be at -1 to all skills per added function, owing to the complexity of the controls; in addition, anyone not previously experienced with such a control system would face unfamiliarity penalties.

(All statistics for these devices are my own treatments, based when possible on *GURPS Vehicles*. The proposers are not responsible for my versions of their ideas.)

Many steampunk campaigns are going to involve inventors and their novel devices. The operation of such devices will pose certain challenges. Operating a newly invented device requires gaining at least a new familiarity, often a new required specialization (for example, Shiphandling: Submersible), and sometimes a completely new skill (for example, Piloting). The invention of a new device is typically followed by a period of experimentation, when many devices are prototypes or home-built and there is little standardization. In effect, every new device requires a new familiarity. (See p. B43 for the relevant rules.)

If a device invented during play needs a new skill or required specialization, no teacher can be available. The use of the device must be self-taught, taking double the normal time (see p. B83). Once an adventurer has taught himself Pilot: Ethership or Shiphandling: Submersible, of course, he may be able to go into business as an instructor in the new skill.

# Zeppelin

Among the vehicles that had to be cut from the published version of *GURPS Steampunk* was the L.3, a zeppelin built for the German navy. This airship has a crew of 15: two watches of pilot, bombardier, mechanic, and gas cell riggers, and a captain, navigator, and top gunner. Seats are available for half a dozen men who are off duty, but the L.3 is not really designed for long occupancy; on flights lasting more than a day the crew will become fatigued. Weekly costs of operation include \$2,782.50 for hydrogen and \$1,200 for fuel oil. The L.3 has an operational radius of up to 1,200 miles, sufficient to threaten warships, troop transports, or cities even in the British isles. Armaments are high explosive and incendiary bombs on a hardpoint on the undercarriage and a top-mounted 7.62-mm machine gun.

Subassemblies: Body +10, bottom Substructure +4. Power & Propulsion: 3 x 156-kW high performance Diesel engine with aerial propeller. Fuel: 2,000-gal., fuel oil (11), light, 95 hours. Occupancy: See above Cargo: none Armor: Bo: 1/1, Su: 2/4
Weaponry: 5 x 110-lb. HE bomb [Su] +2. 20 x 6.5-lb. incendiary bomb [Su] +2. 7.62-mm machine gun (200 Solid)
Equipment: Su: Improved optical bombsight; Precision navigational instruments, +4.
Dim.: 490' x 20' x 20' Payload: 15,700 lbs. Lwt.: 52,700 lbs.
Volume: 796,000 cf. SizeMod: +10 Price: \$33,750
HT: 12. HP: Bo: 8,963, Su: 80.
aSpeed: 25 mph. aAccel: 0.4 mph/s. aDecel: 0.5 mph/s. aMR: 0.125 mph/s. aSR: 4.
Lift: 53,700 lbs. Stall Speed 0. Climbing Speed 20 mph.

The L.3's high explosive and incendiary bombs have the statistics given in GURPS Vehicles. For a convenient summary, the high explosive bomb causes 6d x 160 concussion damage and 12d fragmentation damage; the incendiary bomb has a bursting radius of 40 yd. and inflicts fire damage of 3d on anyone caught by the burst. Both types of bomb fail only on a critical failure.

# **Other Skills**

Many characters in Victorian fiction are able to talk to animals. This isn't a magical effect -- neither The Jungle Book nor The Story of Dr. Doolittle is fantasy as it's now understood -- or even a psionic one. In some fictional worlds animals have languages that a few human beings are able to learn. This commonly requires an Unusual Background. The relevant skills are as follows:

#### Language (Animal) (difficulty varies) Prerequisite: Mimicry (Animal Sounds or Bird Calls)

Animal languages are either Mental/Hard (for languages of land vertebrates) or Mental/Very Hard (for languages of more exotic species). Typically each species has a separate language, but this will depend on the setting; in some settings related species, or all animals, may share a language, while in others a single species may have different dialects or languages. This skill is only available with GM permission. Note that it does not apply to the language of a surviving tribe of primitive hominids, which would be treated as a Mental/Easy human language.

#### Linguistics (Animal) (Mental/Very Hard) No default Prerequisite: Language (Animal)

This skill is a required specialization of Linguistics. It confers the same benefits for animal languages that the usual form of Linguistics confers for human languages: +1/10 of skill added to any animal language you know. This skill is only available with GM permission.

This same treatment can work the other way, of course. For example, Dr. John Doolittle started out by teaching his African gray parrot, Polynesia, to understand English; she then returned the favor by teaching him animal languages. In *GURPS* terms the first step would involve the parrot's gaining Mimicry: Human Speech, followed by English as a Mental/Hard skill.

# **The Lost Princess**

Due to space limitations, it was not possible to include example NPCs for all of the campaign worlds in *GURPS Steampunk*. Iron had John Bauer, Qabala had Rebekah Schwartzberg, and Providence had Father Carlos Javier, but none was provided for Etheria. Here is the missing character, specifically designed to get PCs in as much trouble as possible:

## **Pandhori Viron**

100 points

Age 17; 5'5"; 130 lbs. A strikingly beautiful young woman with curly dark hair and pouting lips.

**ST** 8 [-15]; **DX** 11 [10]; **IQ** 12 [20]; **HT** 12 [20] Speed 5.75; Move 5. Dodge 5.

Advantages: Beautiful [15]; Charisma +1 [5]; Patron (Greek government, 9 or less) [25]; Status 7 [30]; Strong Will +1 [4]; Wealthy [20].
Disadvantages: Charitable [-15]; Curious [-5]; Overconfidence [-10]; Social Stigma (Woman) [-5]; Stubborn [-5].
Quirks: Admires Byron and Swinburne; Adventurous; Susceptible to handsome or charming men; Tries to write poetry; Wishes to see the Elgin Marbles returned to Greece. [-5]
Skills: Acting-11 [1]; Appreciate Beauty (The Male Figure)-8/13 [1]; Bard-12 [1]; Dancing-10 [1]; Guns/TL5 (Pistol)-12 [1/2]; Holdout-11 [1]; Literature-10 [1]; Riding (Horse)-10 [1]; Savoir-Faire-14 [0]; Sex Appeal-11 [1]; Stealth-10 [1].
Languages: English-11 [1]; French-10 [1/2]; Greek (Native)-12 [0].

Named for the mythical heroine Pandora, Lord Byron's granddaughter inherited not only his physical beauty but his passionate, rebellious spirit. She discovered his poetry at 13 and was inspired by it to learn English better than she might have otherwise; she even dreams of writing poetry, though her work so far is amateurish, even in Greek. Her father wants to make a good dynastic match for her and prays to avoid scandal until then; Princess Pandhori has other plans.

In a campaign based in the British isles, adventurers with an aristocratic background may meet Princess Pandhori at court, as a guest of the Queen. Adventurers with other backgrounds may run across "Miss Dora Gordon," an educated young lady with a curious foreign accent always accompanied by a man whose civilian clothing fails to conceal his military bearing.

As a member of the Greek royal family, Princess Pandhori can act as a Patron for the adventure seed *The Lost City*. She may even demand to join the expedition!

Article publication date: November 17, 2000

230 *Pyramid* subscribers rated this article **3.65** on a scale of 1 to 5. Visit the <u>ratings page</u> for more info.

Copyright © 2000 by <u>Steve Jackson Games</u>. All rights reserved. Pyramid subscribers are permitted to read this article online, or download it and print out a single hardcopy for personal use. Copying this text to any other online system or BBS, or making more than one hardcopy, is *strictly prohibited*. So please don't. And if you encounter copies of this article elsewhere on the web, please report it to <u>webmaster@sjgames.com</u>.

