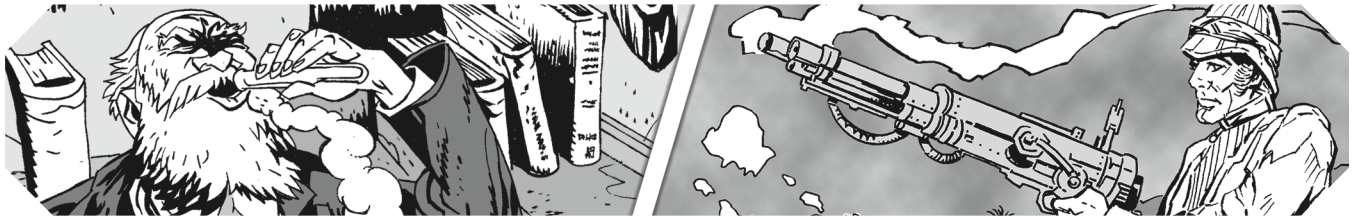


GURPS[®]

Fourth Edition

STEAMPUNK 2

Steam and Shellfire[™]



Written by **PHIL MASTERS** • Edited by **NIKOLA VRTIS**

Illustrated by **PETER BERGTING, PAUL DALY,
DAVID DAY, and ZACH HOWARD**

Additional Material by **JAMES L. CAMBIAS, S.A. FISHER,
KENNETH HITE, MICHAEL HURST, WILLIAM H. STODDARD,
HANS-CHRISTIAN VORTISCH, and THOMAS WEIGEL**

GURPS System Design ■ **STEVE JACKSON**

GURPS Line Editor ■ **SEAN PUNCH**

GURPS Project Manager ■ **STEVEN MARSH**

Executive Editor ■ **MIRANDA HORNER**

Production Artist and Indexer ■ **NIKOLA VRTIS**

GURPS FAQ Maintainer ■ **VICKY "MOLOKH" KOLENKO**

Chief Executive Officer ■ **PHILIP REED**

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Chief Operating Officer ■ **SUSAN BUENO**

Director of Sales ■ **ROSS JEPSON**

Page Design ■ **PHIL REED** and **JUSTIN DE WITT**

Art Direction and Prepress Checker ■ **NIKOLA VRTIS**

Lead Playtester: Roger Burton West

Playtesters: Frederick Brackin, John Dallman, S.A. Fisher, Martin Heidemann,
Kelly Pedersen, Christopher R. Rice, William H. Stoddard, and Jeffery Wilson

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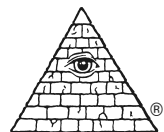
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P. 19: “The Progress of the Century – The Lightning Steam Press. The Electric Telegraph. The Locomotive. The Steamboat.” by Currier & Ives. Bequest of Adele S. Colgate, 1962, the Metropolitan Museum of Art, New York, metmuseum.org.

P. 23: “A Lady in a Hunting Costume with a Lady in Walking Costume on a Mountain Path from La Mode Illustrée,” by Adèle-Anais Toudouze. From the Elisha Whittelsey Collection, The Elisha Whittelsey Fund, 1953, the Metropolitan Museum of Art, New York, metmuseum.org.

INTRODUCTION

This is the second volume of the *GURPS Steampunk* series, which builds on and updates (but does not supersede) the original *GURPS Steampunk* for Third Edition. It is a catalog and collection of steampunk gadgets, equipment, and *stuff*, suitable for use in a range of campaigns (some of them not necessarily labeled as “steampunk”). It can stand alone, but it *is* part of a series. Gamers may find that they get the most out of it if they read it in conjunction with *GURPS Steampunk 1: Settings and Style*. That volume discusses what “steampunk” actually means, and how to replicate the tropes in roleplaying games.

Steampunk as a genre is about *stuff* as much as it’s about anything. Interesting, weird, somewhat cumbersome stuff, with gears on it, as often as not, but even those who are into steampunk for the style express that style through costumes and props. So, a book of stuff is an important element in this series – and can be used to add a touch of steampunk to many other games.

This volume is actually the *third* supplement for Fourth Edition with “Steampunk” in the title. One important category of equipment rated its own publication – *GURPS Vehicles: Steampunk Conveyances*. That is complimentary to this supplement, covering just the gear that moves people around.

PUBLICATION HISTORY

This is the first edition of *GURPS Steampunk 2: Steam and Shellfire*. However, some of the material in here is adapted from other *GURPS* supplements, albeit often with revisions to fit the new edition or the genre. Specific sources

include *GURPS Steampunk*, *GURPS Steam-Tech*, and *GURPS Castle Falkenstein* for *GURPS Third Edition*, and *GURPS High-Tech*, *GURPS Horror*, *GURPS Ultra-Tech*, and *GURPS Infinite Worlds: Britannica-6* for *GURPS Fourth Edition*. The *Calculating Machines* rules in Chapter 1 borrow some ideas from the article “Thinking Machines,” by Thomas Weigel, in *Pyramid* #3/37: *Tech and Toys II*.

Steampunk as a genre is about stuff as much as it’s about anything. Interesting, weird, somewhat cumbersome stuff, with gears on it . . .

ABOUT THE AUTHOR

Phil Masters is a *GURPS* author of very long standing, and the author of *GURPS Steampunk 1: Settings and Style* and *GURPS Vehicles: Steampunk Conveyances*, among many other books for the game. A roleplaying game of his own creation, *The Small Folk*, is also available through Warehouse 23. He communicates with his publishers from across the ocean using the most sophisticated telegraphic apparatus (which is directly connected to advanced calculating machinery), favors rational styles of costume, and in general affects the mannerisms of a dubious sophisticate.

ABOUT GURPS

Steve Jackson Games is committed to full support of *GURPS* players. We can be reached by email: info@sjgames.com. Our address is SJ Games, P.O. Box 18957, Austin, TX 78760. Resources include:

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with #GURPShook on Twitter. Or explore that hashtag for ideas to add to your own game! The web page for *GURPS Steampunk 2: Steam and Shellfire* can be found at gurps.sjgames.com/steampunk2.

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Errata. Everyone makes mistakes, including us – but we do our best to fix our errors. Errata pages for *GURPS* releases are available at sjgames.com/errata/gurps.

Rules and statistics in this book are specifically for the *GURPS Basic Set, Fourth Edition*. Page references that begin with B refer to that book, not this one.

POWER SUPPLIES AND STORAGE

The Industrial Revolution was brought about largely by the availability of power on a scale undreamed of by the workshops and cottage industries of previous ages. New industries exploited traditional power sources such as animals and water mills on a larger scale than ever before, but they also took enthusiastically to new sources – notably, of course, steam.

Detailed treatments of historical power systems can be found in the original *GURPS Steampunk*, pp. 69-72, and in *GURPS High-Tech*, pp. 13-16. The following is a brief run-through of various types of power system.

SOURCES OF POWER

The basic source of energy for most of human history was *muscle power* – either from humans or domestic animals. A human being can provide a small fraction of a kilowatt over extended periods, or a bit less than a kilowatt in short bursts of a minute or two – enough to wind up a clockwork gadget or a light medieval siege engine, or propel a bicycle or keep a well-made desk-sized machine running steadily at a uniform cost in FP. A horse or ox can pull a carriage or cart or run a small mill. The Steam Age really got underway when alternative sources of power far surpassed this.

Older alternatives, only useful for large machines, were *water and wind power*, which have the virtue of being free (though not always reliable) once the machinery to exploit them is built. Sail-powered ships traversed the globe, and wind or water mills kept civilization fed. A traditional cottage-sized mill can generate a couple of kilowatts – enough to run some household gadgets, a workshop, or a modest TL(5+1) mechanical computing device. Cinematic treatments may play fast and loose with the power levels generated, but often emphasize the cumbersome unreliability of millwork. If they're important to the plot, you just *know* that somebody is going to have to dodge big clanking mechanisms while trying to keep them running.

The defining technology of steampunk is *steam* – water heated to boiling, creating pressure that drives a system of pistons (or, in later periods, turbines). The boiler may be physically separate from the engine (or multiple engines), though the two units should be close enough to minimize loss of heat and pressure in the linking pipes. Early TL5 “beam engines” were towering, inefficient contraptions, only useful for tasks such as pumping water out of mines. By the end of the 18th century, the technology had advanced to the point where many different factories used them. A quarter-ton engine, the size of a piece of furniture, could produce as much power as a water-mill, while a ton of engine could produce 15 kW or so – enough to move a small boat around at respectable speeds, or to run one of Charles Babbage’s hypothetical mechanical computers.

This made steam-powered vehicles a distinct possibility, although it took the development of railways in the 1820s for steam to be really competitive; old-fashioned roads were just too bumpy for steam carriages and their passengers. (See *GURPS Vehicles: Steampunk Conveyances* for some examples.)

More efficient “forced draft” engines powered the mid-century “Second Industrial Revolution.” These had around 75% of the weight of earlier engines with the same power output, and required only two-thirds of the fuel and water consumption. By the end of the century, ships and factories were using expensive but even more efficient multi-cylinder “compound” engines. These, though, involved increasing complexity.

In the 20th century, they were replaced by steam turbines, at least in applications such as maritime propulsion and electricity generation. Steam turbines require TL6 materials and engineering precision, but repay this with power; a one-ton turbine could produce around 60 kW while consuming a quarter as much fuel as a mid-century engine with the same output. However, steampunk worlds are rarely afraid of mechanical complexity, and may feature intricate sextuple-expansion compound engines in places of turbines.

PRICES

Costs given in this book are often suggestions or best guesses. After all, many of these items are imaginary or hypothetical, or are based on underdocumented historical products, while any historical prices that *are* known have to be converted to *GURPS* dollars (below). Anything using superscience can by definition cost whatever the GM thinks is appropriate.

The GURPS Dollar

In any event, all costs are given in “*GURPS* \$,” an arbitrary unit of value. To convert these, at least for the years 1850-1915, divide the *GURPS* \$ price by 22 to get historical U.S. dollar prices, or multiply dollar prices from historical sources by 22 to get *GURPS* \$ values. For historical U.K. pound sterling values, divide or multiply

by 110 instead. (See *GURPS Steampunk*, pp. 48-49, for information on U.K. currency; briefly, a pound is equal to 20 shillings, and a shilling is 12 pennies.) So, for example, something listed here as costing \$500 would probably have cost about \$22.70 or £4 10s historically.

Cost Factor (CF)

In some places where variations may modify the cost of items in this supplement, the cost factor rules are used. Each such modification has an associated “CF” value; multiply the normal cost of the item by (1 plus the sum of all applicable CF values) to get the modified cost. For example, an item with base cost \$20, with added decorations that give CF +2 and technical improvements that give CF +0.5, costs $\$20 \times (1+2+0.5) = \70 .

PERIOD CLOTHING AND GAME EFFECTS

The following optional rules may be appropriate in a game with Steam Age-style clothing. With some of them in force, Fashion Sense might almost seem like a liability. However, it can be used when constructing costumes that are socially acceptable without being quite so cumbersome or inconvenient; see *Fashion Sense* (*Steampunk 1*, p. 43).

Corseting: Corsets are commonly worn as part of *layered* or *structured* outfits (see pp. 22-23). While worn, a historically accurate tight corset moves the wearer one or two steps down the fitness scale defined by Very Fit, Fit, average, Unfit, and Very Unfit, thus penalizing HT rolls and limiting FP. The tightest corsets might inflict *three* shifts! If this takes the wearer past Very Unfit, the GM may require periodic HT rolls to avoid *permanent* loss of levels of fitness or HT. Tight corsets may be mandated by some combination of fashion and a Compulsive Behavior or other disadvantages

Cumbersome Garb: Crinolines and other bulky garb inflict from -1 to -5 (occasionally worse!) on any DX or DX-based skill rolls requiring rapid or precise leg movement, including all uses of Acrobatics skill. If clothing weights are increased as discussed on pp. 22-23, encumbrance (p. B17) can also sting; a moderately built lady with ST 8, wearing 37 lbs. of clothing, as may sometimes be considered respectable, may well be operating at Medium encumbrance.

Goggles (see p. 25): These provide Nictitating Membrane 1, but if their DR is penetrated, this may mean serious trouble from glass in the eyes, at the GM's option. Goggles may be *tinted*, at no extra cost, providing from +1 to +5 to HT rolls to resist dazzling effects, flash bombs, etc., but for every such +1, they also give -1 to all Vision rolls. Pushing goggles up onto your forehead or pulling them back over your eyes requires a free hand, a Ready maneuver, and a roll against DX+2; a critical failure either drops the goggles altogether or leaves the person effectively blind until he makes a successful attempt.

Goggle Accessories: Steampunks sometimes like accessorizing their goggles. There's little historical precedent for this, but it looks cool. If the GM permits it, goggles can have attachments such as fold-down tinted panels (giving the effects of tinted lenses, as above) for \$10, or a monocular (p. 38) or a miniature microscope (p. 45) for the cost of the item plus \$10. Bringing any of these into action or folding them back requires a free hand, a Ready maneuver, and a roll against DX+3; if a person tries to use vision for normal purposes with a telescope or microscope in place for use, he effectively has One Eye (p. B147).

Hobble Skirts: Anyone wearing a hobble skirt, as was briefly fashionable early in the 20th century, has -3 to Dodge. Multiply Move (*after* encumbrance) by 0.4, rounding down; e.g., Move 6 becomes Move 2.

Veils: A veil may give -1 to Vision rolls to resolve fine detail, at the GM's option, but rolls to identify, depict, or describe the face of someone who was seen wearing a veil are at -2 or worse.

Vehicles and Eye Protection

Someone driving or riding in a fast-moving open vehicle with no functional windscreen should wear eye protection such as goggles, or suffer a penalty. Divide the vehicle's speed in mph by 10, drop all fractions, find the equivalent measurement in yards on the *Size and Speed/Range Table* (p. B550), and apply the corresponding Speed/Range penalty to Vision rolls. So, for example, traveling at 150 mph gives -5. A veil provides partial protection, negating up to -2 in Vision penalties. For example, someone riding at 70 mph with unprotected eyes would normally suffer -3 to Vision rolls; a veil reduces that to -1."

(All of these weights are minima; actually, most outfits had more structuring and some embellishment, increasing the weight differences significantly.) Later "bloomers" were intended more as athletic outfits with an acceptable degree of respectability; represent them simply by light or moderate layering but with the removal of the necessity for a respectable garment to be floor length.

Example 2: Late in the 19th century, the Rational Dress Society campaigned for the weight of a fashionable woman's costume to be reduced from 37 lbs. to 7 lbs. In game terms, the full fashionable outfit might be medium weight and TL6, with heavy layering, heavy structuring, and heavy embellishment, weighing 36 lbs. (with cost multiplied by three even before any increases for stylishness). The sort of costumes which the radical progressives of the Society favored would be either simple TL6 medium-weight outfits weighing 6 lbs., or quasi-medieval "artistic" gowns – TL6 ordinary outfits, but floor length and with light layering, weighing about the same. (The floor-length feature averts many reaction penalties for the lack of other stuff.) Add 1 lb. for lightweight shoes and the numbers are correct.

It is, of course, notable that most of these issues and examples involve female costumes. Male garb was rarely so extreme, but was still subject to shifts in fashion and stern rules of etiquette about what should be worn when and where. A gentleman might have to wear a frock coat when out and about, even in summer, making his regular garb medium weight, and might conceivably be wearing a discrete corset under that as well as a substantial top hat on his head, adding up to light structuring.

ADDITIONAL CLOTHING ITEMS

A few pieces of clothing may be worn in addition to standard outfits.

Long Coats

Most winter outfits incorporate some kind of coat, but this is something more extensive – a classic "duster" or long overcoat that falls to at least the knees and possibly the ankles. It is warm (worn with boots and ordinary clothes, it's as good as winter clothes) and versatile.

Flintlock Pistol

One-shot pistols were relatively handy sidearms for Napoleonic-period officers. These guns also saw frequent use in crowded naval boarding actions. This is a well-made duelist's weapon from the late 18th century, and hence would be sold as one of a pair in a fancy wooden case. Taking double time for careful loading gives +1 Acc.

Pepperbox Pistol

The predecessor of the revolver was the "pepperbox," a weapon with a rather steampunk appearance. Instead of having several chambers feeding a single barrel, pepperboxes have multiple barrels in a revolving arrangement. They were popular from the 1830s to the 1850s and still seen occasionally for years after that. This is a smoothbore caplock weapon, often carried as a pocket gun by civilians.

Tranter Man-Stopper

A real-world example of steampunk-style excess, this break-open double-action-only revolver was chambered for a huge .577 cartridge – known at the time as 24-bore – to *guarantee* man-stopping in close combat. It had only a 4" barrel, but the voluminous cylinder made it rather bulky. Only a few hundred were made.

In order to reload, the shooter had to remove the cylinder and take off the recoil shield before punching out each case individually. Removing and reassembling the cylinder takes 15 seconds.

Automatic Revolver

The term "automatic revolver" is normally considered meaningless; pistols can be automatics *or* revolvers. This is the one weapon that managed to be both. The Webley-Fosbery Automatic was a revolver that used the recoil of a shot to cock its hammer and revolve the cylinder for the next shot. This reduced the felt recoil, but the precision-engineered mechanism caused some problems. Steampunks are unlikely to be deterred by that.

LeMat Revolver

Another weapon to appeal to gadget-loving steampunks, the LeMat is an outsize revolver in which the cylinder revolves around a 5", 18-gauge shotgun barrel. Switching the hammer between pistol and shotgun modes is a free action unless the user is not yet familiar with the weapon (see p. B169); in that case, it requires a Ready maneuver. The details here are for a later variant using pinfire cartridges, rather than the early muzzle-loader version. However, the shotgun barrel is still loaded the old way and is fired using Guns (Shotgun) skill; firing shot, it has Dmg 1d(0.5) pi-, Acc 1, Range 30/600, RoF 1x11, Shots 1(20), and Rcl 1. It might in principle be loaded with a lead slug, giving it Dmg 4d pi++ and RoF 1, or other interesting loads.

Cane Rifle

Historically, a number of gunsmiths concealed various sorts of long arms inside walking sticks, as a gentleman's protection against stray dogs and ruffians. This is an early TL6 volume-produced type. It has a cork muzzle plug that can simply be blown out when it is fired. The plug then needs replacing before the disguise is complete or the cane can

really be used as such again; it's better if the user removes it before firing.

Anti-Tank Rifle

Faced with the sudden appearance of armored fighting vehicles, TL6 armies would surely hasten to produce infantry weapons capable of punching through them – such as this, the Mauser Tank-Gewehr 18, created by the Germans when faced with WWI British tanks. It thus comes from 1918, just outside the Steam Age, but it's not hard to imagine gunsmiths coming up with something similar a little earlier if necessary. It is a huge, single-shot, bolt-action rifle that would also give good results against "lost world" creatures: 5.5' long, loaded with armor-piercing bullets, and fired prone from its integral bipod. Its recoil is *horrendous*; critical failures, especially by users with less than the minimum ST, could have results up to and including shattered collarbones, and many users reported headaches and nausea after taking a few shots. But when nothing else will do the job . . .

DRILLINGS

A "drilling" is a type of hunting gun, usually made in Central Europe at TL6. The name means "triplet" in German, and a drilling is a gun with three barrels – usually two shotgun barrels for small game, and a single rifle barrel in case the hunter encounters something more formidable. However, all sorts of combinations are possible. Steampunk gunsmiths might come up with *really* odd triplets.

For a plausible drilling, take a standard double-barreled shotgun, then assume a third barrel that is a single-shot version – Shots 1(3i) – of a rifle of the same TL; add one-third of the weight and half the price of the rifle to that of the shotgun, and set the Bulk to whichever is worse of the two guns. Switching barrels is a free action unless the user is not yet familiar with the drilling (see p. B169). In this case, it requires a Ready maneuver.

FICTIONAL STEAMPUNK FIREARMS

Strictly speaking, some of these aren't *firearms*, as they use alternative forms of propulsion. Some of them appeared originally on pp. 14-16 of *Steam-Tech*.

To create more steampunk-style firearms, see the notes on *Quick and Dirty Steam-Tech* in *Steampunk 1*, pp. 27-29, and particularly the section on weapons on pp. 28-29. Applying those rules to a selection of modern firearms would provide a broad array of weapons.

Very Heavy Revolver

If a steampunk enthusiasm for big, powerful handguns progressed to the extreme (and seized upon the newfangled smokeless powder), this six-shot double-action revolver could be the result. It is ridiculously heavy, has serious stopping power, and requires frequent maintenance. Low production numbers set the price disproportionately high.

Ghosts or demons that wish to cross the light barrier must win a Quick Contest of Will vs. the barrier's DR – and a standard 40-tube pentacle, with batteries good for eight hours of continuous operation, generates a DR 30 barrier. However, some spirits may have the ability to circumvent or even overpower the barrier; Carnacki backed it up with a lot of more traditional occult protections, and was still very cautious about very powerful manifestations.

The pentacle only guards against ghosts and their abilities, but even fully materialized spirits or possessed humans cannot cross it, and the DR protects the tubes from anything they throw. However, any critical failure on a physical skill by someone inside the pentacle or close to a tube is likely to break a tube, and hence the barrier, with a misplaced foot or fist. A 40-tube electric pentacle is 10.5' in diameter (33' in circumference), and has enough room in the central, protected pentagon for one person, who sits on the battery pack. More tubes allow larger pentacles, but DR can only increase with more or more-efficient batteries, induction coils, or transformers. \$2,500, 20 lbs.

Electrolabe (TL(5+1)^)

This navigation aid, all polished brass and iron and strange materials in glass capsules, uses the “etheric wind” and Earth's magnetic field to determine location. It gives +1 to Navigation skill and accurately determines latitude on a successful roll. It also doubles any bonuses given by a marine chronometer (p. 37). Combined with a chronometer, it eliminates penalties due to bad weather and unfamiliar currents, and permits Navigation skill to be used underwater without penalty. \$450, 10 lbs.

Mesmeric Wand (TL(5+1)^)

Early theories suggested that hypnotism (“mesmerism”) exploited a psychic force called “animal magnetism”; this equipment assumes that that's true. The mesmeric wand, a 2' rod of metal and crystal, amplifies and focuses that force. It requires Hypnotism skill to function, giving +3 to normal uses of the skill.

It can also be used to place opponents into a light trance at range. Each attempt takes 1d seconds of concentration (taking 3d seconds gives +1 to skill), and the roll takes standard

N-RAYS

In 1895, the German physicist Wilhelm Conrad Röntgen discovered a mysterious new form of radiation, *X-rays*; the find earned him the first Nobel Prize in physics. In 1903, while trying to produce polarized X-rays, the French physicist René Blondlot believed that he had discovered another new and even more mysterious form, which he named *N-radiation*. N-rays were emitted spontaneously by all materials except green wood and metal treated with an anesthetic such as ether, were refracted by aluminum, and caused fluorescence in threads coated with calcium sulfide. This “discovery” was widely accepted in France, but proved hard to replicate, and was eventually shown to be the result of wishful thinking.

The significant point here for games, though, is that radiated energy was poorly understood in the Age of Steam. New rays with mysterious properties were used to justify a variety of marvels in works of fiction. They could be explained as products of new elements, with radium as a precedent, or simply hand-waved away. They are a classic instance of period superscience and potentially useful in games – and after all, the fascination with exotic rays survived well into the next era, becoming a cornerstone of raygun Gothic.

range modifiers (p. B550). The victim resists with Will; victory means the target is dazed (p. B428) for a number of minutes equal to the margin of victory. During that time, the victim gets *no* roll to resist ordinary hypnotism attempts by anyone using the same wand.

The wand incorporates a 1-lb. electrical battery, which must be replaced, at the cost of \$5, after every 15 minutes of use; changing batteries takes one minute. It is certain to be LC3 if publicly known to work, and may well become LC2 if incidents of criminal misuse are reported. \$1,300, 2 lbs. For additional background details, see *Steam-Tech*, p. 18.

X-Ray Goggles (TL(6+1)^)

Through the wonders of X-rays, this large pair of goggles grants Penetrating Vision 1 with the Blockable (Lead) limitation (p. B74). A battery worn on a belt powers it. When the power is off, the lenses become completely opaque. The battery has to be replaced at a cost of \$30 after every two hours of use. The goggles give DR 1 to the wearer's eyes, but have fragile components; any kind of hard impact has a 4 in 6 chance of making them useless (and opaque) until repaired. Once this technology becomes widely known, such goggles will become LC4 at the very minimum, and may become LC2 or even LC1 if a moral panic blows up over the threat to public decency. \$325, 0.2 lb.; the battery weighs 1.2 lbs.



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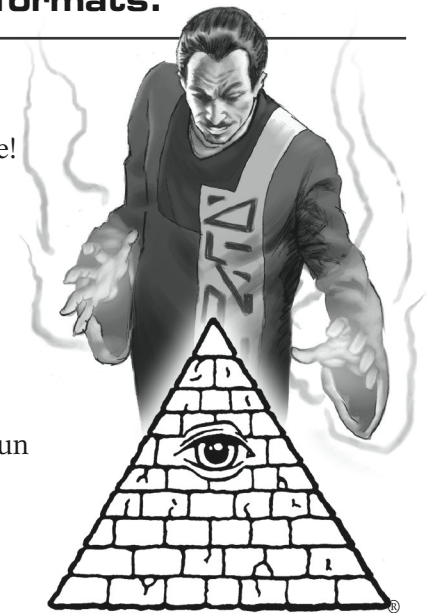
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