Shape of Graduate,	10 Cc.	Distilled 25 Cc.	i Water. 50 Cc.	100 Cc.	Elix. I. Q. & S. 100 Cc.	Syrup 100 Cc.	Milk of Magnesia 100 Cc.	Castor Oil 100 Cc.
Cyl.	97%	94%	96%	95%	93%	94%	93%	93%
Con.	95%	98%	95%	95%	95%	96%	95%	94%

REFERENCES.

- (1) Andrews, Marvin J., Jour. A. Ph. A., 22, 755 and 838 (1933).
- (2) Andrews, Marvin J., Ibid., 23, 350 and 421 (1934).
- (3) Andrews, Marvin J., Ibid., 23, 1003 (1934).
- (4) Andrews, Marvin J., Ibid., 23, 1117 and 1210 (1934).

UNITED STATES PATENTS GRANTED FOR MEDICINES DURING THE PIONEER YEARS OF THE PATENT OFFICE.*

BY LYMAN F. KEBLER.1

The word "patent" means open, not secret. A patent cannot be granted for a medicine of secret composition. The term "Patent Medicine" applied to a medicine of secret composition is a misnomer. The term in general conveys an erroneous impression. Many think that all proprietaries, foods and drugs, and medicines in package form, are of secret composition and consequently plain frauds. It is true that some outright medical frauds have been and still are perpetrated on the suffering sick. And this is true even in the case of a goodly number of medicines for which patents have been granted. Patenting a product does not preclude telling fairy tales about it. In fact, the therapeutic claims contained in the description of some of the patents for medicines are grossly false and fraudulent, as will be pointed out later.

SOME INTERESTING PHASES IN PATENTING MEDICINES.

Secret medicines with their air of mysticism have held sway for the ages in all lands. The alchemistic era produced some of the most phony ideas in the matter of the philosopher's stone being a universal medicine and panacea. Secret medicines made marked advances during the time of iatrochemistry, when Paracelsus (1493–1541), with his *lapis infernales*, held sway, and John R. Glauber (1610–1770), the distinguished physician-chemist and discoverer of Glauber's salt, played such prominent parts. Glauber not only discovered the salt named after him but ascertained its medicinal virtues and sold it at a handsome profit under the name *sal mirabile*, for many years. It is claimed that he made a living selling secret medicines.

England set a precedent in granting patents to medicines. Among the earliest may be mentioned "Dr. Bateman's Pectoral Drops" (1726), "Dr. James' Fever Powder" (1747), "Ann Pike's Ointment for the Cure of Cutaneous Eruptions" (1760), and "Gale's Spa Elixir" (1782). The Ann Pike Ointment is probably one of the most glaring of frauds. It is a mixture of pomatum, lard, deer suet, calomel, Jesuits' bark, quicksilver, turpeth mineral, tutty powder, flowers of brimstone and "wood sut." The patent alleges that it is a "Grand Antidote for the Itch and All

^{*} Section on Historical Pharmacy, A. Ph. A., Washington meeting, 1934.

¹ Former Chief of Drug Division, Bureau of Chemistry, United States Department of Agriculture.

Scorbutic Humors, a Sovereign and Efficatious Remedy that never fails all Erruptions and Cutaneous Disorders" The manner of use is to rub a quantity the size of a pea, every night for a fortnight in the palms of the hands.

In 1641 the General Court of Massachusetts Bay granted a 10-year patent for a novel method of making salt. The same province granted a patent for life for an invention for warming houses. Maryland issued a patent for a steam carriage in 1787. I have not come across a patent issued in favor of any medicine by any Colonial Government. It should be said, however, that secret medicines were freely sold in the colonies, among them Gov. John Winthrop's "Rubila," "Muirson's Mercurial Ointment" and "Digby's Sympathetic Powder." The latter had the sanction of Harvard College.

The colonists brought with them a demand for the remedies of their home country. The English Patent Medicines were as commonly used as laudanum and castor oil. Their nature and character were generally well known.

THE BEGINNING OF PATENTS IN THE UNITED STATES.

Our National Constitution gives Congress the power to "Promote the progress of science and useful arts by securing, for a limited time, to authors and inventors, the exclusive right to their respective writings and discoveries." The first law under this provision was enacted April 10, 1790. It provided for a board consisting of the Secretaries of State and War, the Attorney-General and the President The Executive power was simply signatory. The first board consisted of Thomas Jefferson, Secretary of State; Henry Knox, Secretary of War; and Edmund Randolph, Attorney-General. The first United States patent granted was issued to Samuel Hopkins, July 31, 1790. It covers a process for the manufacture of "Pot and Pearlash." No copy is available. The earliest patent, of which a copy is available and displayed in the patent office, was issued to Francis Bailey, January 29, 1791. It outlines methods for making punches, for manufacturing letters, and designs for printing. The patent was signed by George Washington, the President; Thomas Jefferson and Edmund Randolph, Attorney-General. No grant for any medicine was issued under the law of 1790.

A new law was passed in 1793. Up to 1802 the clerk in the State Department handled all of the patent office work. It is alleged that patents were granted for apparently trivial and ridiculous inventions. In this connection it is interesting to note that the first United States patent, dealing with therapeutic matters, was issued in 1796 to Elisha Perkins, a physician of Connecticut. Its title reads: "Removing Pain, etc., by Metallic Points." The devices are usually referred to as "Perkins' Tractors," and are ridiculed as the acme of fraud. Yet, some of the leading physicians of the times purchased and used them with apparent satisfaction. There is no copy of this patent available in the United States, the reason being that a disastrous fire in 1836 destroyed the entire office, including the records, patents, drawings and designs. Fortunately, Congress published Indexes from time to time, copies of which were filed elsewhere and were saved. In these documents are preserved the titles of the patents issued.

A patent for these tractors was granted³ in England to Benjamin Douglas Perkins, a son of Elisha Perkins, March 10, 1798, under the title, "Application of

¹ List of Patents Granted by the United States, 1790-1836.

² JOUR. A. PH. A., 22, 1142 (1933). ³ Specifications of Patents, England, No. 2221, 1798.

Galvanism as a curative agent." The basis therefore was galvanism, that held such sway at the time. The tractors most eminently efficacious for removing disease were claimed to be combinations of copper, zinc, with small proportions of iron, silver, gold or platinum. The diseases enumerated, as most readily cured, are rheumatism, gout, pleurisy, inflammation, spasmodic affections and most topical complaints. The patients were alleged to be cured by drawing these tractors over the parts affected, or contiguous thereto.

A patent for "Bilious Pills" was granted in 1796, to Samuel Lee, Jr. Four additional patents were issued, for pills, to four different persons in the nineties. No copies are available. The "Federal Index of Patents, United States Patent Office 1790 to 1873," by M. D. Leggett, Commissioner of Patents, is the most complete and satisfactory, of all consulted.

The year 1836 is an outstanding one for the Patent Office, in a number of respects. A new law was passed. The numbering of patents was begun. The first numbered patent is dated, July 13, 1836. The new law had not been in operation six months when the disastrous fire, referred to above, occurred, December 15, 1836. Congress shortly thereafter made provisions to restore the records as far as possible, and to have suitable quarters built for the work. The old patents actually restored are extremely fragmentary, but they contain practically all of the available data on the subject, excepting that found in the Patent Indexes referred to above.

During the period from 1790 to the new order of things in 1836, about seventy-five patents were granted covering Pills, Medicines, Ointments and Salves. This means less than two patents a year, but the majority were issued during the last half of the period. Most of the drugs were listed simply as medicines, but a fair proportion are more definitely characterized, as is indicated by the following:

Name of Medicine.	Date.	Patentee.	Name of Medicine.	Date.	Patentee.
Removing Pain, Etc., by			Ointment	1816	William Judkins
Metallic Points	1796	Elisha Perkins	Medicine for Toothache	1817	I. Utley
Bilious Pills	1796	Samuel Lee, Jr.	Antibilious Medicine	1817	I. I. Girard
Antibilious Pills	1797	Benjamin Duval			• • • • • • • • • • • • • • • • • • • •
Pills	1798	Samuel Cooley	Elixir of Life	1817	Jules Rucco
Pills	1799	John Hawkes	*Liquid Magnesia Process	1818	J. Cullen
Bilious Pills	1799	Samuel H. P. Lee	Family Pills	1820	David Coit
Bitters, Jaundice	1801	J. Wheaton	Medicine	1820	Lorenzo Dow
Antibilious Pills	1802	Thomas H. Rauson	Anti-dyspeptic Pills	1821	George Smith
Antibilious Cordial	1802	Simon Lazarus	Anti-dysenteric Medicine	1821	John G. Vought
Vegetable Elixir	1803	Samuel Cooley	Medicine	1822	John Prentiss
Antibilious Pills	1803	Thomas H. Rauson	Anti-dyspeptic Pills	1822	C. M. Brockway
Family Pills	1803	Daniel Coit	Medicine	1823	Samuel Thompson
Antiseptic Gas	1803	J. C. M. Picornell	Medicine for Scrofula	1824	Gideon Jaques
Canker Drops	1804	S. Chamberlaine	Consumption Pharma-		
Bilious Cordial	1804	S. Chamberlaine	ceutic	1825	John C. Bay
Rheumatic Pills	1805	George B. Dexter	Tincture for Curing Corns	1826	Elisha Smith
Essence of Tansey	1806	I. Newton	Composition for Scurvy	1827	James U. Armour
Vermifuge Preparation	1807	Jos. Lehman	Liquid for Preventing		
Galvanism for Salivation	1807	William Phoebus	Scurvy	1827	W. Armore
Cure for a Mad Dog Bite	1809	W. Story	Medicine for Dysentery		
Medicine for Scrofula and		•	and Dyspepsia	1828	T. Powell
Cancer	1810	E. Willard	Rheumatic Pills	1828	Ezre Deane
Bilious Pills	1810		Cough Drops	1828	Daniel E. Smith
Consumption Medicine	1812	C. S. Long	Medicine	1828	Fitzgerald Bird
Febrifuge	1812	A. Johnson	Medicine	1828	John Dent
Restorative Elixir	1812	Harvey Frink	Toothache Specific	1829	Samuel Pennington
Fever Medicine	1813	S. Thompson	Chemical Catholicon	1830	I. W. Smith
Bilious Pills	1814	Samuel H. P. Lee	Blister Plaster	1830	Elisha Perkins
Rheumatic Pills	1814	Ezra Deane	Medicine for Dropsy and		
Canker Drops Medicine	1814	David Halbreck	Epilepsy	1831	J. S. Fall
Cancer Medicine	1816	J. Andrus	Medicine for Gout and		
Syphilis Cure	1816	J. Mosher	Rheumatism	1831	A. Parker
Syphilis Cure	1816	C. T. Jackson	Medicine for Cholera	1832	J. Houck
		-			•

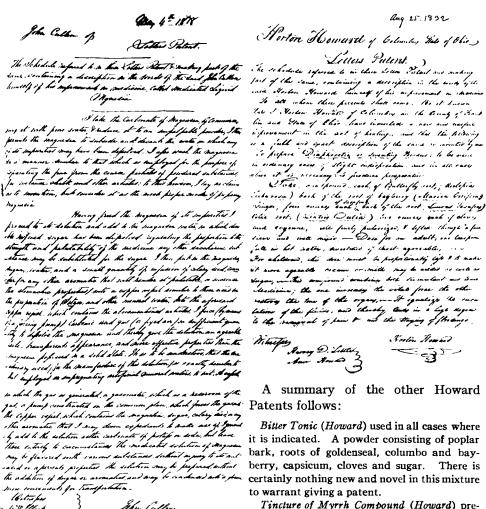
^{*} A copy each of the patents for the medicines starred above, will be found in the "Restored Patent" volumes, in the Patent Office Library. They are all in longhand. The John Cullen process patent, for "Liquid Magnesia," granted May 4, 1818, is the earliest of the patents restored for medicines.

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Name of Medicine.	Date.	Patentee.	Name of Medicine.	Date.	Patentee.
*Daphoretic or Sweating Powder *Bitter Tonic also an As-	1832	H. Howard	*Galvanic Fluid for Cur- ing Disease Vegetable Dentifrice	1834	Daniel Harrington Elijah H. Reid
tringent Tonic		H. Howard	*Ointment for Curing		•
*Antispasmodic Tincture Worm Specific	1833	H. Howard Charles McLane	Many External Diseases *Ointment for the Cure of		•
Cure for Cholera *Chlorine Cosmetic	$\frac{1833}{1833}$	Anthony Hunn D. West	Cancer *Botanic Medicines	1836 1836	E. Gilman Samuel Thomas

It may be of interest to note that the Cullen patent probably contains the first process patent issued by the United States Patent Office for a medicine, that the resulting liquid magnesia resembles in a number of particulars our present solution of magnesium citrate and that magnesium compounds were recognized as possessing aperient properties over one hundred years ago and continues so to date.

The next restored patents were granted to H. Howard, August 25, 1832. There are five of them, the names of which are given above. Submitted herewith is a photostat copy of his "Diaphoretic or Sweating Powder" patent. It reads:



Bitter Tonic (Howard) used in all cases where it is indicated. A powder consisting of poplar bark, roots of goldenseal, columbo and bayberry, capsicum, cloves and sugar. There is certainly nothing new and novel in this mixture to warrant giving a patent. Wetlerd Som Caller Standards Begging Splander 1854

Tincture of Myrrh Compound (Howard) prepared from a mixture of powdered myrrh, capsicum, balsam of fir, and nutmeg, digested in dia 31.1936

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The Schedule seperand to in these obstair Patent and making part of the Same, containing a description in the words of the Sain Elias Telman himself of his improvement in "an outwart for the case of canaci

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brandy, exposed to the sun for ten days with frequent shaking. A powerful antiseptic, used internally in case of worms, pain, stomach colic, headache and all cases of internal mortification.

Anti-spasmodic tincture (Howard), a brandy or alcoholic solution of lobelia seed, cayenne tincture and nervine tincture; the

formula of the latter is given in the patent. Used in cases of fits, spasms and poisonings.

Astringent tincture (Howard) used in all cases of diarrhoea, hemorrhage, cankers, ulcers and fever. Nothing new or wonderful in any of the Howard drugs.

Chlorine Cosmetic, in 1833.—Chlorine is combined with oils, resins, gums and fats in several ways. By mixing or grinding together, with water, chloride of lime or chlorinated soda or water impregnated with chlorine gas, to form a soft ointment or cosmetic. Remove the water by letting it settle. Flavor with bergamot or any other desired perfume.

"The object of the composition is to heal or cure teters, sores, pimple face, itch, salt rheum and cutaneous diseases of every description, either on man or beast." In one formula silver nitrate is added to give the composition additional curative properties.

Ointment for Curing Many External Diseases, 1835.—The patent embodies a method for making the ointment consisting of cottonseed-oil, linseed oil, sweet oil, Canada balsam or oil of fir, mutton suet, beeswax and lead acetate. The ointment is to be applied as often and as regularly as the case demands. The ailments enumerated are white swelling, ulcers of long standing, tumors, eruptions, burns, scalds, glandular swelling, pleurisy, rheumatism, cramp, colic, pain, soreness of the breast, dog bite, snake bite and man bite. In case of snake bite the instructions are to first scarify the bitten part.

Extreme liberality was certainly exercised in the granting of this patent, but such was the practice in the early days of the Patent Office. Ointment for the Cure of Cancer, March 31, 1836.— The patent is submitted herein:

This patent certainly does not embody anything to commend it. The ointment is crude and possesses little virtue. The use of tanner's ooze and a decoction of yellow oak bark with an iron bearing ointment is interesting. The application of a 20 per cent solution of potash to an open wound would certainly bring anything but comfort to a suffering patient.

"Thomson's Improved System of Botanic Practice of Medicine," May 6, 1836.—The patent as written up in the "Restored Patents" volumes covers nearly four pages of foolscap paper, in excellent longhand. It is the last of the unnumbered patents granted for medicines by the United States Patent Office.

Photostat copy of first page herewith. It gives a good picture of the system and the drugs used. The other three pages are of a similar purport and character.

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