COMMITTEE REPORTS

PREAMBLES AND RESOLUTIONS RELATING TO REVISION OF U. S. COPYRIGHT AND PATENT LAWS.*

WHEREAS, The object of the Copyright and Patent Laws, as defined by the Constitution of the United States,[1] is to promote progress in science and useful arts, and

WHEREAS, Copyrights and patents are grants conferring upon authors and inventors the right to prevent others copying their respective writings and discoveries for limited times, and

WHEREAS, The Patent Law requires that inventions to be patentable shall be new and useful, and shall not have been published in this or any foreign country prior to application for patent, and

WHEREAS, The Patent Law also requires that the application for patent shall contain full knowledge of the invention, including a description of the same, and of the manner of preparing and using it, in such clear and concise language as to permit any person skilled in the art to which the invention belongs to produce the same invention, and

WHEREAS, The proper application of the Patent Law requires that the invention shall be provided with a name by which it may alone be recognized and dealt in, and that such name shall be currently employed by those engaged in the manufacture and sale of said invention, and shall become a noun of the common language, to be freely used by all after patent expires, and

WHEREAS, This fact has been recognized by several decisions of the United States Supreme Court, including its decision in the Singer Sewing Machine case in 1895, which reads as follows:

> "The result, then, of the American, the English, and the French doctrine, universally upheld is this, that where, during the life of a monopoly created by a patent, a name, whether it be arbitrary or be that of the inventor, has become, by his consent, either express or tacit, the identifying and generic name of the thing patented, this name passes to the public with the cessation of the monopoly which the patent created. Where another avails himself of this public dedication to make the machine and use the generic designation, he can do so in all forms, with the fullest liberty, by affixing such name to the machines, by referring to it in advertisements and by other means, subject, however, to the condition that the name must be so used as not to deprive others of their rights or to deceive the public, and therefore that the name must be accompanied with such indications that the thing manufactured is the work of the one making it, as will unmistakably inform the public of that fact."

and

WHEREAS, The object of the trade-mark law is to protect the public from the fraudulent substitution of one brand of an article for another brand of the same article, and is not intended

---

* This draft was prepared by Dr. F. E. Stewart, chairman of the Committee on Patents and Trade-marks, A. Ph. A., for Dr. S. Solis Cohen, Chairman of the Committee on Scope, U. S. P. IX. It was also submitted in the report of the Committee on Patents and Trade Marks, of the Merchants' and Manufacturers' Association of Philadelphia, composed of Ernest T. Trigg (President Philadelphia Chamber of Commerce), Charles A. Wagner and Dr. F. E. Stewart, and approved. The matter in italics is suggested for revising the present U. S. Copyright and Patent Laws, and the subject is submitted for study by the members of the American Pharmaceutical Association, preparatory to its discussion at the next annual convention. The Committee received instructions at the last meeting to proceed with the revision, and the Chairman is desirous that the subject be carefully considered from every viewpoint.

The Committee believes that all ambiguity now existing in the law should be removed in the revision. Provision should also be made in the law so that the inventor of a new process can secure a royalty from the original patentee. Attention is again directed that matter in italics embody the suggestions of the Committee for additions to the copyright, patent and trade-mark laws.—EDITOR.

[1] Article I, Section 8, Clause 8.

to create and foster monopoly, but rather to promote competition in the manufacture and sale of articles of commerce, and

WHEREAS, "When an article is made that was theretofore unknown, it must be christened with a name by which it can be recognized and dealt in, and the name thus given it becomes public property, and all who deal in the article have a right to designate it by the name by which it alone is recognizable,"[2] and

WHEREAS, The present system of registration of alleged trade-marks permitted by the United States Patent Office, because of a misunderstanding in regard to the scope and extent of the trade-mark privilege, enables inventors of nothing but names to register the same as trade-marks, and afterwards use them as titles of the articles for which they are registered as trade-marks, and

WHEREAS, This system of registration protects and fosters monopoly in the manufacture and sale of the articles themselves, and enables their manufacturers to obtain privileges far more restrictive in character than permitted by the copyright and trade-mark laws, and thus defeats the object of the same by hindering progress in science and useful arts, and

WHEREAS, This has resulted in an anomalous condition in which we have apparently laws diametrically opposing one another, namely, the patent law which grants the inventor exclusive use of his invention for a limited time, and then only on the publication of exact knowledge of the invention, whereby the public may manufacture it when the patent expires, and the trade-mark law which does not require that the article to be protected shall be a new and useful invention, that permits unlimited monopoly of the manufacture and sale of the protected article, and that does not require that the composition and method of manufacture of the article shall be divulged, therefore, be it

Resolved, That we memorialize Congress, asking for a revision of the United States Patent, Copyright and Trade-mark Laws, whereby these laws shall clearly define the scope and limitations of patent, copyright and trade-mark privileges, to wit:

First, Section 7 of the Copyright Law shall be revised in such a manner as to include the subject matter contained in circular No. 19, issued by the Librarian of Congress, which reads as follows:

> "The Copyright Laws contain no provisions under which protection can be obtained upon a mere name or title. Entry cannot therefore be made in the Copyright Office for coined names; names of articles of manufacture; names of games or puzzles; names of substances, names of products, or names of medicines."

Section 7, as amended, shall read

> That no copyright shall subsist in the original text of any work which is in the public domain, or in any work which was published in this country or any foreign country prior to the going into effect of this Act and has not been already copyrighted in the United States, or in any publication of the United States Government, or any reprint, in whole or in part, thereof: Provided, however, that the publication or republication by the Government, either separately or in a public document, of any material in which copyright is subsisting, shall not be taken to cause any abridgement or annulment of the copyright or to authorize any use or appropriation of such copyright material without the consent of the copyright proprietor.
>
> (2) *That no copyright shall subsist in coined names, names of articles of manufacture, names of games or puzzles, names of substances, names of products, or names of medicines.*

Second, Section 4888 of the Patent Law shall be revised to read as follows:

> Sec. 4888.—Before any inventor or discoverer shall receive a patent for his invention or discovery, he shall make application therefor, in writing, to the Commissioner of Patents, and shall file in the Patent Office a written description of the same, and of the manner and process of making, constructing, compounding, and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which it appertains, or with which it is most nearly connected, to make, construct, compound, and use the same; and in case of a machine, he shall explain the principle thereof, and the best mode in which he has contemplated applying that principle, so as to distinguish it from other inventions; and he shall particularly point out and distinctly claim the part, improvement, or combi-

---

[2] Leclanche Battery Co. *vs.* Western Electric Co., 23 Fed. Rep. 227.

nation which he claims as his invention or discovery; *and in case of a chemical substance, medicine or food, he shall provide the same with a distinctive name which shall afterwards be used by him, his executors, administrators and assigns, as the principal title thereof on all labels, in all advertisements and in all literature relating to the product; and he shall manufacture and continue to produce the product by the patented process during the life of the patent, and by no other process unless he shall apply for a patent for the same, and in case a patent is granted for a new process, he shall announce the fact in at least three prominent medical and pharmaceutical journals, respectively, calling attention to the new process and giving the number and date of the patent thereof.* The specification and claim shall be signed by the inventor and attested by two witnesses.

No patents shall subsist in coined names, names of articles of manufacture, names of games or puzzles, names of substances, names of products or names of medicines.

Third, an addition shall be made to Section 19 of the Trade-mark Law, relating to what may be registered as a trade-mark, which shall read as follows:

(a) No trade-mark will be registered for a new article of manufacture, chemical substance, medicine or food, unless a distinctive name shall accompany the application, for the use of those who would compete in manufacturing and vending the same article and also for the use of the public in purchasing the same.

(b) No trade-mark will be registered for names of articles of manufacture, names of games or puzzles, names of substances, names of products or names of medicines.

WHEREAS, Many foreign countries exclude from patent protection inventions relating to medicines, including Germany, France, Austria-Hungary, Italy, Japan, Denmark, Norway, Sweden, Portugal, Russia, and a number of other countries, therefore, be it

Resolved, That Congress shall be memorialized to so amend the United States Patent Laws as to exclude from patent protection inventions of subjects or citizens of foreign countries, which do not grant similar patent privileges to citizens of the United States; therefore that the United States Patent Law shall contain a similar proviso to that at present contained in the Copyright Law relating to alien inventors, and shall read as follows:

The inventor or discoverer of any invention or discovery made the subject of patent by this Act, or his executors, administrators or assigns shall have patent for such invention or discovery under the conditions and for the terms specified in this Act; provided, however, that the patent right secured by this Act shall extend to the inventor or discoverer who is a citizen or subject of a foreign state or nation, only:

(a) When an alien inventor or discoverer shall be domiciled within the United States at the time when the patent is created, or

(b) When the foreign state or nation of which such inventor or discoverer is a citizen or subject grants, either by treaty, convention, agreement, or law, to citizens of the United States, the benefit of patent on substantially the same basis as to its own citizens, or patent protection substantially equal to the protection secured to such foreign inventor or discoverer under this Act or by treaty, or when such foreign state or nation is a party to an international agreement which provides for reciprocity in the granting of patent, by the terms of which agreement the United States may, at its pleasure, become a party therto. The existence of the reciprocal conditions aforesaid shall be determined by the President of the United States, by proclamations made from time to time, as the purposes of this Act may require.

WHEREAS, The object of this proposed revision is not to curtail the privileges of authors and inventors, but rather to define the same in such manner as to secure the objects for which the Copyright, Patent and Trade-mark Laws were enacted, therefore, be it

Resolved, That these laws shall further define the scope and limitations of copyright, patent and trade-mark privileges by adding to these laws, in appropriate sections, the following definitions and restrictions:

No patent shall subsist for: (a) Inventions, the applications of which are contrary to the laws, to public morals, or to the public health.

(b) Inventions relating to articles of food, or medicines, as also substances prepared by chemical processes in so far as the inventions do not relate to a definite process or apparatus for the preparation thereof.

(c) Coined names, names of articles of manufacture, names of games or puzzles, names of substances, names of products, or names of medicines.

Section.—If the invention relates to a process for the production of a new substance, all substances of the same chemical composition are considered as having been made by the patented process until proof to the contrary is given to the Commissioner of Patents.

and finally,

WHEREAS, Progress in medical science, and in the arts of pharmacy and drug-therapy is dependent upon the practice of educated and trained pharmacists and physicians who alone are competent to pass upon the novelty and usefulness of alleged pharmacal and therapeutical inventions, therefore, be it

Resolved, That we favor an amendment to the patent law requiring the Commissioner of Patents to submit all applications for patents relating to medicines and dietetics to the Committee of Revision of the United States Pharmacopoeia for approval before granting the same.

The U. S. P. Revision Committee being decennially appointed by a Convention representing the professional and educational interests of pharmacy and medicine, as well as the interests of the entire drug trade of the United States, is representative and impartial and excellently organized to exercise judicial functions. To it is entrusted the revision and publication of the Pharmacopoeia which by the Food and Drugs Act of June 30, 1906, has become "the Law of the land." The present Committee consists of fifty-one members.

REPORT OF COMMITTEE ON QUALITY OF MEDICINAL PRODUCTS.*

(Continued from p. 311, March, 1917.)

CHERRY JUICE

Sp. gr. 1.055 Alcohol; 11.72%; Residue 19 %; 10 Cc. = 0.4 Cc. Decinormal KOH.

Sp. gr. 1.007 Alcohol; 23.04%; Residue 8.5%; 10 Cc. = 0.7 Cc. Decinormal KOH.

A variety of products have been offered under this title differing much from the standard of lots offered before the war.

1. Deeper red color, little cherry flavor. Sp. gr. 1.007, 14.8% alcohol, only 6% residue, very acid, 1 Cc. required 1.9 Cc. of decinormal alkali. Usually requires 0.3 to 0.4 Cc.

2. Alcohol 20%. Residue 20.7%. Sp. gr. 1.058. 1 Cc. requires 0.8 Cc. decinormal alkali.

CHERRY JUICE, MALAGA: Sp. gr. 1.058. Alcohol 20%. Residue 20.79%. 1 Cc. = 0.8 Cc. decinormal alkali.

CHERRY JUICE, CALIF.: Sp. gr. 1.058. Alcohol 19.72%. Residue 20.7%. 1 Cc. = 0.9 decinormal alkali. Evidently California Malaga Wine. E. L. PATCH.

CHROMIUM SULPHATE: It is difficult to obtain a product readily soluble in water. Several lots were rejected which were very slowly soluble or almost insoluble. H. ENGELHARDT.

CINCHONA: Of nineteen samples 3 assayed below 4% of ether soluble alkaloids. Three samples of red cinchona all assayed over 5% total alkaloids. H. ENGELHARDT.

The high price and scarcity of Cinchona Bark has this year brought upon the market offers of several spurious articles. One of these is genuine Cinchona, but a very low grade of the pale bark of Equador, which, even at its best, cannot meet the present alkaloidal standard. Another, a very thick woody bark, without bitter taste and entirely wanting in alkaloids. It appears to belong to a genus related to Cinchona. Two others, also of related genera and devoid of quinine, were imported from Columbia. H. H. RUSBY.

Quality has been poor. Of fifteen samples two contained half a percent of ether soluble alkaloids or less, one 0.84%, six between 1% and 2%, two between 2% and 3%, four above 5%, the highest 6.4%. W. L. SCOVILLE.

COCA: Five samples examined, 2 rejected. The three accepted assayed—0.88%, 0.94%, 0.97%. H. ENGELHARDT.

COLCHICUM ROOT: 0.24% instead of U. S. P. standard of 0.35%, 0.26%, 0.35%, 0.36%. Ash 2.2% to 2.8%. E. L. PATCH.

COLCHICUM SEED: Three samples assayed 0.605, 0.445, 0.445, respectively.

H. ENGELHARDT.

* Read before Scientific Section, A. Ph. A., Atlantic City meeting, 1916. Dr. H. H. Rusby stated that a portion of the preliminary part of this report had been taken from that of a like committee of the New York State Pharmaceutical Association, and the Committee desired that due credit be given.

CORIANDER: Great difficulties have been encountered during the year in getting Coriander sufficiently clean. There is a remarkable tendency for this drug to contain not only various weed seeds in considerable amount, but many little hard, stonelike pellets of dirt, adding largely to the ash percentage. H. H. RUSBY.

COTO: A large number of broker's samples of Coto and Para Coto have reached me for an opinion during the year. Not one of them was genuine, although most of them were closely related to the genuine drug. Probably some six or seven different barks were represented in the collection. H. H. RUSBY.

CRAMP BARK: The folly of taking the action that was at one time recommended to the Revision Committee of the Pharmacopoeia of defining this drug as the bark of *Acer spicatum*, on the ground that genuine Cramp Bark could not be obtained, has been demonstrated by the appearance in the market of rather abundant supplies of genuine *Viburnum opulus*.

H. H. RUSBY.

CUBEB: The oleoresin in six samples varied from 14% to 20.52%. H. ENGELHARDT.

CUDBEAR: The scarcity at the present time apparently has induced some dealers to put a drug on the market which is far inferior in coloring power. We also noticed that the color produced by some recent shipments had a decidedly yellowish red tint instead of the dark characteristic bluish red color. H. ENGELHARDT.

CRESYLIC ACID: Much of that in the market is dark in color and deficient in solubility. A fair grade can be secured. W. L. SCOVILLE.

CRESOL: Price greatly advanced and product inferior.

1. Sp. gr. 1.028 (low) not soluble in 60 parts of water.
2. Sp. gr. 1.034 partially soluble in 60 parts of water.
3. Sp. gr. 1.034 partially soluble in 60 parts of water. Not completely soluble in 120 parts of water.
4. Sp. gr. 1.038 partially soluble in 60 parts of water.
5. Sp. gr. 1.038 partially soluble in 60 parts of water.

E. L. PATCH.

CUMMIN SEED: This drug is imported in larger amounts than any other of the umbelliferous fruits. The amount annually imported could hardly be credited by the ordinary pharmacist. It is subject to considerable impurity in the form of sand or earth, and there has been considerable discussion as to what was the proper percentage to be allowed. A decision on this question has not been reached. H. H. RUSBY.

DANDELION ROOT: Three bags, 310 lbs., shipped from Philadelphia to New York consisted substantially of chicory. *Pharmaceutical Era.*

ELM BARK, POWDERED

1. Microscopic examination O. K. Made thick mucilage..... 13% ash.
2. Microscopic examination O. K. Made thick mucilage..... 9% ash.
3. Microscopic examination showed foreign starch..... 15% ash.

E. L. PATCH.

EMULSION COD LIVER OIL: Of seven samples labeled U. S. P. the oil contents varied from 18.2% to 45.6%, the standard being 43% by weight. The oil obtained from the low percentage product was not pure Cod Liver Oil. IND. B. H.

ETHER U. S. P. 1890: Ether may contain peroxides and acetones as impurities.

PHARM. WEEKBLAD P. 3.

FENNEL: A great amount of fennel of very poor quality has arrived during the past year and has mostly found its way into the manufacture of veterinary remedies. It would seem as though large quantities of the drug have been stored up of so poor quality that the market would not take them at ordinary times, and have now been shipped, owing to the fact that there is so great a scarcity that buyers will be glad to get them, a supposition which has been abundantly verified.

H. H. RUSBY.

FLUIDEXTRACT VARIATIONS: Complaint is made that manufacturers add foreign color and inert extractive to fluidextracts to give them a dark appearance and heavy body. Some makers add just so much caramel and so much glucose to every lot of fluidextract. Others take pains to market light colored products only. This explains why N. F. preparations made from different makes of fluidextracts by retail pharmacists vary materially in character.

N. A. R. D. JOURN.

If there is truth in the above assertions it is a serious indictment and should be thoroughly investigated. We cannot believe that any reputable manufacturer so sophisticates his fluidextracts. E. L. PATCH.

GENTIAN ROOT: Most of the Gentian received has been of good quality, but one shipment consisted wholly of the rhizome part, so that it was abnormally fibrous and weak in odor and taste. This shipment was also of a pale gray color, probably due to its not having been thrown into heaps and allowed to ferment, an operation which develops not only the reddish brown color but also the peculiar odor of the drug. H. H. RUSBY.

GINGER, JAMAICA: Several lots tested unusually high. 8%, 9.5%, 7.5%, 10.25%, 7.7%, 6.5%, 7% of alcoholic extract. It often runs as low as 4 to 5%. E. L. PATCH.

GLYCERIN: One lot contained a minute trace of arsenic, one lot had a low sp. gr. 1.247. Usually 1.25. Substitutes for glycerin are being offered which consist principally of invert sugar, a mixture of levulose and dextrose 81.5%, ash 0.025%, water 18.475%. They may give sweetness and density to preparations, but cannot offer the solvent and preservative power of glycerin. E. L. PATCH.

A product is being largely sold as a substitute for glycerin. It is not a true substitute. It does not have the solvent powers or therapeutical action of glycerin. Several lots of glycerin contained glucose. *N. Y. Commercial.*

GUAIAC: Only one out of three samples of guaiac answered the requirements of the pharmacopoeia in regard to alcohol solubility and ash. H. ENGELHARDT.

One sample was worthless, one contained 63.4% of resin soluble in alcohol and four from 80% to 91.25%. W. L. SCOVILLE.

GUARANA: One sample assayed 4.32% Caffeine. W. L. SCOVILLE.

HELLEBORE, AMERICAN: Advantage has been taken of the complication of meanings for this name, to practice jugglery. One set of hellebores belong to the genus Veratrum, another to Helleborus. One of the latter is known as "Christmas Rose." An article is then imported under the last mentioned name, sold as "Hellebore," because it is a synonym, and finally appears as "Veratrum" because Hellebore is one of the synonyms of the latter drug. H. H. RUSBY.

HOREHOUND: Spurious articles have continued to arrive. One of them that has several times been offered is Ballota nigra, often known as "Black Horehound" but which should never be offered as Horehound. H. H. RUSBY.

HYDRASTIS: Five samples contained from 2.23% to 3.7% hydrastine. One 5.5%. W. L. SCOVILLE.

HYDROGEN DIOXIDE: One lot contained excess of residue 0.300 in 100 Cc. Consisted mostly of sodium chloride with traces of silica, sodium sulphate and magnesium sulphate. E. L. PATCH.

HYOSCYAMUS: Lot 1. By U. S. P. process "A" 0.0344. Extracting with alcohol 2 volumes water 1 volume evaporating to extract and proceed in usual way "B" 0.0488%.
Lot 2. "A" 0.0574%. "B" 0.063%.
Lot 3, marked henbane proved to be belladonna.
U. S. P. method only—0.0867%, 0.0402%, 0.062%, 0.0485%, 0.048%, 0.051%, 0.017%. E. L. PATCH.

Of twenty-four samples fifteen were rejected. The other five assayed from 0.08 to 0.12. H. ENGELHARDT.

IPECAC: Of fourteen samples four were deficient, one assaying as low as 0.0875%. H. ENGELHARDT.

2.427% alkaloids, 1.656%, 1.85%, 1.98%, 2.07%. E. L. PATCH.

The sudden demand for emetine showed an influence on this drug. Five samples were offered which contained no alkaloid and one only 0.015%. Ten others yielded from 1.91% total alkaloid with 1.13% emetine to 2.68% total with 1.91% emetine. The proportion of emetine in the total alkaloids of the ten lots ranged from 45% to 85%. W. L. SCOVILLE.

This drug has suffered more sophistication than any other. The only explanation appears to be the excessive demand for it from the war zone. A number of different spurious articles not of the same genus, besides one that is, have been offered. The native Brazilian name of ipecac is "Poaya," but this is also a general name for roots used as emetics. These include several other

species of Cephaelis, several species of Calceolacia (Ionidium) and *Richardia scabra*, all of which have appeared, besides a species of Heteropterys. H. H. RUSBY.

IPOMOEA ORIZABENSIS: The recognition of this root by the B. P. as a legitimate source of scammony resin has led to a complicated state of affairs. There is now a legitimate use for it so that it cannot be excluded when offered under its own name. Once admitted, it is very difficult to know what is done with it, and its appearance as, or mixed with powdered Jalap, is to be expected and has occurred. One of the names under which this is offered is "Raiz de Canaigre" although this name properly belongs to *Rumex hymenosepalus*. H. H. RUSBY.

IRON BY HYDROGEN: One sample contained only 60% iron. W. L. SCOVILLE.

JALAP:	Total resin.....	6.45%	Soluble in ether.....	0.8 %	Ash.
	Total resin.....	6.87%	Soluble in ether.....	0.62%	
	Total resin.....	5.09%	Soluble in ether.....	0.54%	3.4%
	Total resin.....	8.95%	Soluble in ether.....	0.8 %	5.2%
	Total resin.....	9.7 %	Soluble in ether.....	1.25%	4.2%
	Total resin.....	6.04%	Soluble in ether.....	0.59%	
	Total resin.....	6.75%	Soluble in ether.....	0.8 %	

E. L. PATCH.

Lots in 1915 ran poorly but quality improved markedly in 1916. Of 10 samples during last of 1915, five contained less than 6% resin, three between 6% and 7%, one 7.29%, one 10.21%. In 1916 lowest 8.5%, highest 11.05%. W. L. SCOVILLE.

KAMALA: One sample showed 16.43% ash, sufficient for rejection. W. L. SCOVILLE.

KOLA: Of eight samples three assayed below 1.5% caffeine. H. ENGELHARDT. Two samples 1.79% and 1.94% caffeine. W. L. SCOVILLE.

LARD, BENZOINATED: Of seventy-five samples thirty were not standard.

NO. DAKOTA EXP. STATION.

LIME: Commercial may contain 50% of magnesia with iron and other impurities.

JOURNAL A. PH. A.

LIME, CHLORINATED: 23% to 25% available chlorine. 30.07%, 35.7%, 14.6%.

E. L. PATCH.

LUPULIN: Twelve samples were examined. Five were insufficiently soluble in ether.

H. ENGELHARDT.

Fourteen samples gave 8% to 44.8% ash. Three were below 10% and three between 10% and 15%. W. L. SCOVILLE.

MANGANESE OXIDE (BLACK): Several shipments were rejected on account of assaying below the U. S. P. standard. They assayed from 60% to 61% of MnO_2.

H. ENGELHARDT.

MATICO: Although the firm stand of the Department has resulted in the appearance of free supplies of the genuine article, it must be said that the spurious forms have not altogether ceased their appearance. H. H. RUSBY.

MERCURY: Several lots were rejected because they contained a large proportion of amalgams of other metals. H. ENGELHARDT.

METHYLENE BLUE: One sample yielded 49.6% ash and was rejected. It can easily be obtained yielding less than 1% ash. W. L. SCOVILLE.

MOLASSES: Five samples contained from 30% to 44% of glucose.

MASS. S. B. OF H.

MUSTARD: No subject of the year has caused so much difficulty and annoyance as to quality offered, this statement applying to both black and white varieties. Supplies of genuine, of good quality have been so scanty as to have stimulated the export of thousands of tons of related seeds from India and China. The variety has been bewildering, and it has been found utterly impossible to identify the different individuals. Some have a certain amount of pungency while others have none. Under these circumstances samples of all or nearly all of the varieties have been planted and are being identified as rapidly as they flower and fruit. H. H. RUSBY.

MYRRH: The alcohol solubility of six samples varied from 27.4% to 38.6%. Ash from 3.8% to 7.6%. H. ENGELHARDT.

OIL, CASSIA: A lot was rejected because it contained both lead and rosin.

H. ENGELHARDT.

OIL, COD LIVER: Turbid. Disagreeable odor. Refractive index 1.4744 at 23.5° C. Should be 1.4774. Rejected.

Clear. Disagreeable odor. Refractive index 1.4751 at 25.5° C. Should be 1.4767. Rejected.
E. L. PATCH.

It has been difficult to obtain cod liver oil of satisfactory quality. Most samples are dark in color and unpleasant in taste. It is impossible to insist on a high grade oil at the present time and secure supplies. W. L. SCOVILLE.

OIL, ETHEREAL: Considerable trouble was experienced with this preparation. There are products on the market which seem to be nothing but the refuse in the manufacture of ether and are completely devoid of sulphuric acid esters. A test for the presence of the latter should be made by saponifying the oil with caustic alkali under pressure and identifying the alkali sulphate in the product of saponification. It would also be advisable to give directions for keeping the oil. Several shipments were rejected on account of dark color, unfitting it for making Hoffman's Anodyne. H. ENGELHARDT.

OIL OF JUNIPER BERRIES: A shipment consisted largely of oil of turpentine. It is to be regretted that neither the present nor the forthcoming pharmacopoeia have tests to detect any appreciable adulteration of oil of juniper berries with oil of turpentine. H. ENGELHARDT.

OIL, LEMON: Both the natural and concentrated are frequently low in citral contents.
W. L. SCOVILLE.

OIL, LINSEED: Three out of sixteen samples were adulterated. IND. B. OF H.

MINERAL OIL: The situation is confusing. Quite a number of oils on the market do not meet the tests recommended by the forthcoming Pharmacopoeia, because they contain easily carbonizable matter and in some cases sulphuretted compounds. Detailed experiments made in our laboratory showed that with the exception of the California heavy liquid petrolatum no other liquid petrolatum on the market, even that of Russian origin, meets the sulphuric-nitric acid test as proposed recently for adoption in the Pharmacopoeia IX.
H. ENGELHARDT.

Sp. gr. 0.854 at 25° C. fluorescence. With H_2SO_4 very dark.
Sp. gr. 0.850 fluorescence. With H_2SO_4 yellow, reddish and black on heating.
Sp. gr. 0.850, colorless, odorless, tasteless. With H_2SO_4.
Yellow, becoming brown with heat.
Sp. gr. 0.855, colorless, Yellow becoming brown.
Sp. gr. 0.854, colorless, Yellow becoming brown.
Sp. gr. 0.855, colorless, Yellow, becoming slight color with H_2SO_4 and heat.
Sp. gr. 0.858, colorless, odorless, nearly tasteless, very dark with H_2SO_4 and heat.
Sp. gr. 0.858, colorless, odorless, tasteless, with H_2SO_4 and heat, nearly colorless. With PbO test O. K. E. L. PATCH.

Much offered had a kerosene odor and taste and some darkened markedly with sulphuric acid.
W. L. SCOVILLE.

OIL, PENNYROYAL: Samples answered all tests but that of sp. gr. Two lots were over 0.940 (U. S. P. 0.920 to 0.935). E. L. PATCH.

OIL, SANDALWOOD, GERMAN: A mixture of W. I. Oil, from *Amyris balsamifera* and Copaiba. O. P. & D. REPORTER.

OIL, THYME: There is a scarcity of oil of thyme. Several shipments which exhibited a decided red color, were rejected. H. ENGELHARDT.

Received a shipment of oil of thyme that contained more carvacol than thymol and was not satisfactory for manufacture of thymol. NAT. ANIL. & CHEM. CO.

OIL, TURPENTINE: Sp. gr. 0.8435. Refractive index 1.4622 at 20° C. (Range of other lots 1.4703 to 1.4712). Contained a notable quantity of kerosene. E. L. PATCH.

OILS—VOLATILE: Artificial substitutes for the natural oils are increasing. Oils of coriander, rose, neroli and cinnamon (Ceylon) are mostly of the artificial variety. It is needless to say that they are not as satisfactory as the natural oils, but the latter are not always obtainable. W. L. SCOVILLE.

OLEORESIN MALEFERN: Varies considerably in the amount of crude filicin. Four samples contained 19.7%, 21.8%, 22%, 24.3% determined by Fromme's method. Good Oleoresin of Malefern should contain 27% to 28%. It would be advisable that the U. S. P. give an assay process for this product. H. ENGELHARDT.

PAPAIN: Has run better than formerly. Two lots were worthless and three others less than half strength, but 60% of the samples offered were satisfactory. W. L. SCOVILLE.

PARSLEY SEED: Eight lots yielded from 11% to 29% of oleoresin. H. ENGELHARDT.

PAW PAW JUICE: Owing to the persistency of the Department in rejecting adulterated shipments, in spite of all clamor, this article is now universally of good quality. H. H. RUSBY.

PHENOL: Has been troublesome. High grade lots are scarce. Most of that offered is dark in color, has a foreign odor and a low melting point. W. L. SCOVILLE.

PINKROOT: This drug, which a few years ago was very scarce, except in a highly adulterated form, is now quite abundant and of reliable quality, although adulterants and substitutes have still to be carefully looked for. It is a tribute to the care and persistence of the Food and Drug Department that collectors have finally been induced to supply the genuine drug. H. H. RUSBY.

PODOPHYLLIN:	Alcohol soluble.....	99 %	Ash.....	0.4%
	Alcohol soluble.....	99.6%	Ash.....	1.2%
	Alcohol soluble.....	99.8%	Ash.....	0.4%

E. L. PATCH.

POPPY SEED: One of the most curious conditions has arisen in regard to Poppy Seed. It was claimed that an occasional henbane seed had been found in this drug and it was learned that the Department had adopted a ruling that one henbane seed to fifteen thousand poppy seeds should be the limit of acceptance. On this basis a person would require to eat nine pounds of seed to get a single medicinal dose of henbane seed. It developed that the Department had been compelled to adopt this standard for the reason that it was the standard for export in some European countries and our international agreements will not permit us to receive from another country anything, the exportation of which is forbidden by that country. H. H. RUSBY.

POTASSIUM SALTS: The growing scarcity of potassium salts has led to technical salts being offered as medicinal quality. The technical salts usually contain large proportions of chloride and are below the U. S. P. or N. F. standards. Watchfulness has become necessary in their purchase. W. L. SCOVILLE.

POTASSIUM BROMIDE: Sample labeled Potassium Bromide was sodium bromide and contained a large excess of moisture—12%. DRUG TOPICS.

RENNIN has almost disappeared from the market, and samples offered are usually low in strength. W. L. SCOVILLE.

RICE POWDERS: Of sixteen samples, so labeled, two were genuine, and only six contained rice starch at all. Thirteen contained talc, two bismuth subnitrate, three chalk, and seven zinc oxide. C. H. LAWALL.

SAFFLOWER: This drug has been imported on an unprecedented scale during the past year. Shipments have aggregated many tons. This result is doubtless due to the scarcity of dyestuffs. The claim is made that it is largely used in the making of a color preparation that is falsely credited to genuine saffron. H. H. RUSBY.

SAGE: The general quality of the shipments of sage received during the past year has been very poor indeed. Almost all of it was stemmy. In some cases the stems reached eighty-five or ninety percent of the whole. In addition, much was badly cured and of a blackish color. One of the most important developments in relation to this drug has been the offering of considerable quantities of Sideritis theaezans as sage, which it closely resembles in appearance, though not in odor or taste. The proper name of this article is Greek Tea, which name must not be confounded with Greek sage. H. H. RUSBY.

SANDALWOOD: For the first time since my connection with the Bureau of Chemistry, shipments of so-called West Indian Sandalwood, *Amyris balsamifera* L., have appeared upon the market. Since they were offered under their real name of "West Indian Sandalwood" their acceptance was obligatory, but they bear little resemblance in odor or taste to genuine sandalwood, although trimmed in the same way and of similar appearance. I have not learned what disposition was made of them. H. H. RUSBY.

SARSAPARILLA, MEXICAN: A number of shipments received which presented a most peculiar appearance, unlike anything before seen. They were said to have been collected in the state of Vera Cruz from new land which had never before yielded any Sarsaparilla to commerce. The roots were exceedingly thick and woody, of a black color and with a very thin bark which was brittle and tended to crumble or scale off. The whole root had a sort of dead appearance and

was dry and tasteless. Not only was there a serious doubt as to its pertaining to the plant *Smilax medica*, but even if so it must have been rejected on the ground of inferior quality.

H. H. RUSBY.

SCOPOLA: The shortage in Belladonna Root has caused much advantage to be taken of suitable opportunities for using Scopola in plasters and its importation has thus increased. Its supply has been deficient and, in view of the stressful conditions, the Department has permitted the use of the Japanese variety for making an extract, provided the latter be brought up to the proper alkaloidal strength. H. H. RUSBY.

SENNA: The supply of Senna has been very scanty, great inconvenience, especially to the manufacturers of proprietary articles, having thus resulted. Many shipments have been of decidedly poor quality, so poor that in an ordinary year they would doubtless have been rejected. Owing to the scarcity referred to, the limits have been strained to the utmost in admitting low grades. Several shipments of spurious senna have been rejected and many broker's samples, representing several species of Cassia have reached me. A sample of "Kolinji" was received with the information that it was being used as an adulterant of India Senna. Kolinji is a native Indian name for orange leaves, but these leaves were identified as those of *Cracca villosa*. I have never seen them in Senna. H. H. RUSBY.

SENNA SIFTINGS: When the Department proposed to reject senna siftings containing a larger percentage of foreign matter than was allowed in senna itself, there was a most violent protest. It was declared to be impossible to secure senna siftings of that quality and impossible to so clean them after arrival here as to cause them to meet the standard. The Department was very firm and even went so far as to clean several bales and thereby demonstrate the practicability of the process. As a result we now have senna siftings which are, if anything, superior in activity to the whole leaf. H. H. RUSBY.

SODIUM CARBONATE, DRIED: N. F. 1916. U. S. P. 1890. 73% Na_2CO_3. 7 lots assayed 81.6%, 82.4%, 82.1%, 77.4%, 78.4%, 75.3%, 95.3%. E. L. PATCH.

SODIUM GLYCEROPHOSPHATE: Fine, white, crystalline form, freely soluble, 1 gramme ignited gave 0.430 residue. So-called 75% ignited gave 0.450 residue. E. L. PATCH.

SOLUTION CRESOL COMPOUND: A sample of this preparation was rejected because it contained 20% water. It had probably been manufactured with soft soap. H. ENGELHARDT.

SOLUTION CITRATE OF IRON: A good deal of trouble was experienced with this preparation. Some shipments arrived in a gelatinous condition, while others did not form clear solutions. H. ENGELHARDT.

SPIRIT ANISE: Two lots 69% and 70% of official. MASS. ST. B. OF H.

SPIRIT CAMPHOR: Samples found only 50% of official. MASS. ST. B. OF H.

80%, 70%, 60%, 57%, 20%, 18% of official contents of Camphor. One—33% alcohol.

N. A. R. D.

SPIRIT NITROUS ETHER: Mess. Kebler, Palkin and Ewing, Washington, D. C., conclude that the Spirit of Nitrous Ether U. S. P. will keep well for six months under all ordinary conditions, with no marked deterioration in eighteen months kept with ordinary precautions. Compare these findings with report of exhaustive experiments conducted by the Massachusetts State Board of Health published in our last year's report.

SPIRIT PEPPERMINT: Four samples ranged from 22% to 84% of official.

MASS. ST. B. OF H.

SQUILLS: Powdered Squill containing starch has occasionally been found in the market and an occurrence of the past year may explain this fact.

There was offered for import at New York a good sized shipment of whole bulbs of squill, undried and capable of germinating when planted. They pertain to the amaryllis groups. Upon microscopical examination, these bulbs were found entirely wanting in needle shaped crystals and to contain an abundance of starch. In spite of most strenuous protests as to their genuineness, they were rejected. It is not improbable that it was an admixture of these bulbs with genuine squill that is the origin of the starch-bearing powder referred to. H. H. RUSBY.

STRAMONIUM LEAVES: Four samples were of good quality. H. ENGELHARDT.

0.38%, 0.4%. E. L. PATCH.

Five lots varied from 0.27% to 0.57% alkaloids. W. L. SCOVILLE.

SUMBUL: Advanced in price from eight cents to three dollars. The *Journ. of Am. Chem*

Soc. Feb. 16 states that the market product is not true ferula sumbul, but the root of an undetermined umbelliferous plant coming from central and northern Europe through Moscow.

E. L. PATCH.

TRITICUM: Genuine doggrass has become increasingly scarce throughout the year, until at length the genuine article appears to be unobtainable. Almost all that which was offered at the port of New York was spurious. This spurious doggrass is of two or three species. All are of very pale color and hard rather than soft and gummy like true doggrass. One is very hard and woody with little or no starch, while another is not so hard and is very starchy.

H. H. RUSBY.

UNICORN ROOT: We continue to find much confusion existing as to the application of the term "Unicorn Root" and "False Unicorn Root." It should be remembered that true Unicorn root is Aletris and that false Unicorn root is Chamaelirium. When labeled otherwise the Government is obliged to declare them misbranded. H. H. RUSBY.

VALERIAN: Much Japanese Valerian Root has been offered for import and has finally been accepted as genuine. There is still some doubt as to whether the Japanese plant is *Valeriana officinalis* or a distinct species; but it is of excellent odor and taste, very clean and is in reality superior for medicinal purposes to the European form. It is of a very dark color.

H. H. RUSBY.

VIBURNUM PRUNIFOLIUM: Attention may well be called here to the ill-advised endeavor of the Medical Council of the A. M. A. to discredit this valuable drug. The recorded experiments on the results of which this action is based, would be ludicrous if the matter were not of such serious importance. Undoubtedly there have been many wild claims made for the therapeutic activity of this bark on the part of manufacturers of proprietary preparations, but it is equally true that medical practice has been full of cases in which life has been saved by its judicious use. H. H. RUSBY.

WEIGHTS: Of 10,921 troy weights 659 were accurate, 6335 light, 1990 heavy and 1828 condemned. Of 2030 metric weights 311 were accurate, 1040 light, 617 heavy, 62 condemned. Of 871 balances 441 only were in good condition. *Pharmaceutical Era.*

WITCH HAZEL DISTILLED EXTRACT: One lot only 9% of alcohol.

DRUG TOPICS.

ZINC SALTS: Some samples showed a large excess of metallic impurity.

W. L. SCOVILLE.

ADDENDA.

Many samples of adulterated aspirin have been found on the market. A sample of fluidextract of cinchona, yellow, with a deficiency of approximately 25% of cinchona alkaloids, was referred to the courts and the jury found the defendants guilty. The trial was full of technicalities which showed the great necessity of adhering strictly to the details outlined in the methods of analysis. To illustrate: One step of the analysis reads as follows: "Draw off and reject the lower aqueous layer, and then transfer the ether layer into a tared beaker." Great stress was laid on the fact that the Government analyst transferred the ether to a tared beaker by pouring it out of the top of a separatory funnel, rather than drawing it off from the bottom. The defendants intimated that such a procedure on the part of the chemist invalidated the method sufficiently to warrant a new trial or appealing the case. Attention is called to this fact showing the necessity of using language in the Pharmacopoeia which is susceptible of only one construction.

On referring to page 579 will be found the following statement: "The final operation must always be the collection of the free alkaloid by the use of a portion of the immiscible solvent, drawing this off into a beaker, rinsing with a small portion of the solvent to prevent possible loss." It was maintained that general directions govern in case there is a conflict with same in the specific method of analysis. The court refused to rule on the matter and left it for the jury to take into consideration in arriving at its decision.

Attention might also be called briefly to the work of the Post Office Department in eliminating frauds from the mail. The Post Office Department has continued its activities in denying the use of the mails to those engaged in medicinal schemes to defraud the consumer. The Department has taken the position that it is impossible to diagnose disease through the mails by means of filling out a so-called symptom blank. It has usually been found that the parties so

operating do not conduct their business in good faith as is shown by the fact that they will send medicines to what appear from the symptom blanks to be most grave diseases, as well as to those which so far as it is able to judge from the symptom blank are in perfectly good health. Appeals to the courts from the Postmaster General's decisions in the issuing of fraud orders have been overruled by the courts, thus sustaining the position taken in these matters. The medicines usually employed are of the most simple, although they are frequently represented as possessing some mysterious occult healing properties.

Recent examinations by the chemists engaged in the enforcement of the Food and Drugs Act of shipments of benzoic acid offered for entry into the United States have revealed that much of it is adulterated with boric acid. This adulteration is probably due to the high price which benzoic acid now commands owing to its scarcity. It is quoted at about eleven dollars per pound, while the price of high grade boric acid is only twenty to twenty-five cents per pound. As some of the shipments of benzoic acid have been found to contain as much as thirty percent boric acid, the enormous profit in this form of adulteration is apparent.

The officials in charge of the enforcement of the Food and Drugs act are of the opinion that benzoic acid containing boric acid is adulterated, and that shipments of such a mixture offered for entry into the United States should be denied admission under the Food and Drugs Act.

L. F. KEBLER.

There has recently arrived at the Port of New York a shipment of India Senna heavily adulterated with *Cracca villosa*, the first case of the kind that has ever come under my observation.

H. H. RUSBY.

ADEPS LANAE: Much has been said about the adulteration of Adeps Lanae with Petrolatum and Resin. The addition of Petrolatum alone lowers the saponification number, but there seems to be a range of ten in lots that meet the U. S. P. requirements. Any gross adulteration with Petrolatum would reduce the saponification number so as to require the addition of rosin or some other body to prevent it. The addition of rosin is discovered by the U. S. P. test of solution in ether, addition of phenolphthalein solution and addition of normal KOH solution. This is Test No. 5 of table given below. It is also plainly indicated by applying a modification of the U. S. P. test with cupric acetate solution as given under guaiac. This is Test No. 6 of table below.

		1. % of water.	2. Color.	3. Odor.	4. Saponification No.	5.	6.
1	Anhydrous	None	Light amber	Nearly odorless	90.57	O. K.	Slight yellow color
2	Anhydrous	None	light amber	slight odor	95.4	0.1 Cc. N Sol. KOH	slight yellowish green
3	Anhydrous	None	dark amber	perceptible	89.37	0.1 Cc. N Sol. KOH	slight yellowish green
4	Anhydrous	None	dark amber	perceptible	100.4	0.1 Cc. N Sol. KOH	slight yellowish green
5	90% No. 2 6% Rosin 4% Petrolatum	..	....	perceptible	94.86	0.6 Cc. N Sol. KOH	decided green
6	Hydrous	26%	light amber	nearly odorless	68.2	O. K.	slight yellow
7	Hydrous	30%	light amber	slight	67.0	O. K.	slight yellowish green
8	Hydrous	26.6%	light amber	slight	65.6	O. K.	slight yellowish green
9	Hydrous	28%	light amber	slight	70.4	O. K.	slight yellowish green

E. L. PATCH.

Since the marked drop in the prices of the bromides, there has been a quadruple increase in their use in some quarters.

E. L. PATCH.

COMMITTEE { EDGAR L. PATCH, LYMAN F. KEBLER, H. H. RUSBY, H. ENGELHARDT