# A synopsis of the principal changes in the United States pharmacopoeia effected by the Eighth Decennial Revision ... / by W. Harrison Martindale.

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# A SYNOPSIS

OF THE

# PRINCIPAL CHANGES

IN THE

# United States Pharmacopæla

EFFECTION BY THE

EIGHTH DECENNIAL REVISION.

1900-efficial from September 1st, 1905, compared with that of 1890, and the

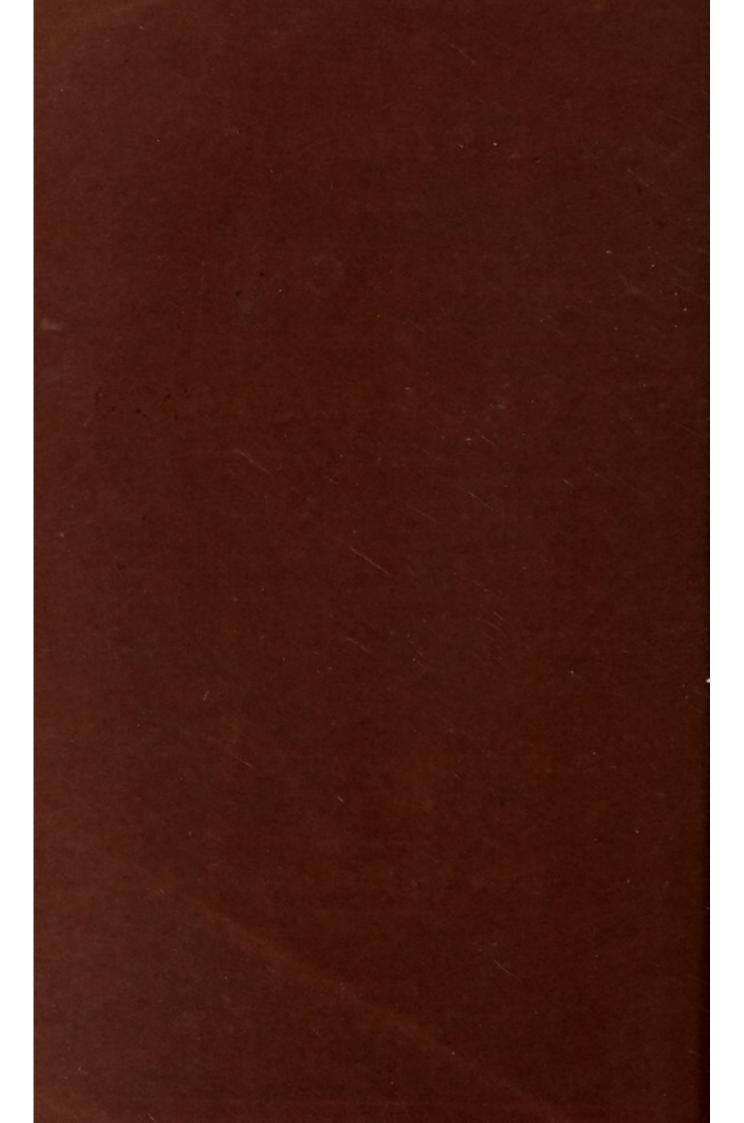
BRITISH PHARMACOPELLA. 1898.

BY

W. HARRISON MARTINDALE, Ph.D.

Price 2/-, pest free 21.

LONDON .



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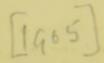
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In the following pages an endeavour has been made to indicate briefly the most important changes which have been carried out by the Eighth Decennial Revision of the United States Pharmacopæia, 1900 (to be official September, 1905), and to compare them with the British Pharmacopæia 1898. It is thought that such comparison may prove of interest both to medical men and pharmacists, as showing the trend of modern Therapeutics and Pharmaceutics.

The number of alterations may be tabulated :-

	New U.S.P.	1890 U.S.P.
Articles Test Solutions	1000	1257
Assays Articles in the Text	958	994
Articles added	117 151	
Test Solutions Volumetric Assays	155 149	135 114
Gravimetric Assays	25	14

The following **Drugs** and their preparations are now **standardised** for the first time—Aconite, Belladonna leaves and root, Coca, Colchicum corm and seed. Conium. Guarana, Hydrastis, Hyoscyamus, Ipecacuanha, Pancreatin, the essential oils (not preparations of), Physostigma, Pilocarpus, Stramonium. Nux Vomica is now demanded of fixed standard. In the 1890 Pharmacopæia its preparations only were assayed, and the requirement now in this instance is a proportion of strychnine as against one of total alkaloids.

It will be noticed that several of the "Heroic" Medicaments have been altered in strength so as to conform with those of the British and other pharmacopæias and (or) to coincide with the recommendations of the International Conference for the Unification of Pharmacopæial Formulæ of Potent Drugs and Preparations held at Brussels in 1902

These recommendations are marked "C.U.D." in the Extra Pharmacopæia. Tincture of Strophanthus U.S.P. is increased from 5 to 10 per cent. strength. Extract of Opium is increased from 18 to 20 per cent. (but the powdered opium is stronger than the B.P. powder. Ipecae anha has 2 per cent. alkaloids. Tincture of Cantharides is increased from 5 to 10 per cent. Tincture of Digitalis is reduced to 10 per cent., and Tincture of Hyoscyamus is also reduced to 10 per cent. Tincture of Aconite has been reduced from 35 per cent. to practically 10 per cent. Similarly, that of Veratrum from 40 per cent. to 10 per cent. The object in view in the U.S.P. has been to make tinctures of potent drugs a uniform 10 per cent. strength, and the other tinctures 20 per cent. Specific Gravities and Solubilities in the U.S.P. are now determined at 25° C., this being more sats actory for the U.S. than the old temperature 15° C.

Where **standards for purity** are given, it is not allowable to exceed 3 per cent. of moisture in non hygroscopic crystalline chemicals.

All Hygroscopic Salts are to be dispensed in a state of sensible dryness. Purity Standards for Efflorescent Salts refer to the uneffloresced crystals which alone should be dispensed.

**Synonyms** have, for the most part, been omitted from the text, but they are given in small type in the index under the official Latin names, and in their alphabetical positions for reference.

Synthetic Preparations added in this revision are represented (mostly under their chemical names) by Antipyrine, Phenacetine (Acet-phenetidinum), Saccharin (Benzosulphinidum), Bromoform, Choralamid (Cho alformamidum), Duotal (Guaiacolis Carbonas), Urotropin (Hexamethylenamina), Iodol, Methylene Blue (Methylthioninæ Hydrochloridum,) Trional (Sulphonethylmethanum), Sulphonal (Sulphonmethanum), Aristol (Thymolis Iodidum).

**Serum Antidiphthericum** is an important addition to the Pharmacopæia decided upon after considerable investigation by a special committee of bacteriologists.

Organotherapy is represented by the addition of Glandulæ Thyroideæ Siccæ and Glandulæ Suprarenales Siccæ.

Pluidextracta now represent the Extracta Fluida of the 1890 U.S.P. Those added in this edition and those in which there has been alteration by standardisation or nethod of manufacture are dealt with in the following pages, whilst the Extracta Liquida omitted are also indicated. It was thought desira le by the Committee of Revision to separate by this new nomenclature the fluidextracts from the extracts, so as to prevent confusion. Glycerin has been om tted in Fluidextract of Krameria and of Rubus. That of Sanguinaria is now an acetic one, containing no alcohol. In that of Senega, Potash Solution replaces Ammonia, and in that of Taraxacum, Sodium Hydroxide is employed.

Doses of comparatively potent substances are given where they differ from the B.P. ones. Where not otherwise stated, the strengths of the

preparations in the U.S.P. and the B.P. may be taken to be approximately the same.

An apology must be offered for employing in some instances the formulæ and contractions H<sub>2</sub>O for water, alc. for alcohol, H<sub>2</sub>SO<sub>4</sub> for sulphuric acid, NH<sub>3</sub> for solution of ammonia, E for ether, chl. for chloroform. Similarly several other chemical formulæ are introduced.

The appendix to the new U.S.P. contains a greatly en arged list of reagents also explanatory details as to methods of procedure. These have not been touched upon in this synopsis.

Chemicals and preparations added in this revision are indicated in

## Brevier type, thus :- Aqua Hamamelidis.

Articles that are omitted from this edition are indicated in distinctive italics thus :— Emplastrum Ichthyocolla.—Omitted.

Preparations, &c., retained are printed in Nonpareil, thus:— Extractum Ergotæ.

Dose in U.S.P. column = average dose for adults; but the physician may exceed when to him advisable.

- N.S. = New Standard. For these preparations there were no standards in the 1890 Pharmacopæia.
- O. N. = Old Name. Several important changes in nomenclature, so as to give the chemical character more correctly, have been effected, e.g., Acidum Arsenosum has been re-named Arseni Trioxidum, and Acidum Carbolicum has been altered to Phenol.

W. HARRISON MARTINDALE.

10, New Cavendish Street, London. July 17th, 1905.



## A SYNOPSIS

OF THE

## PRINCIPAL CHANGES

IN THE

## UNITED STATES PHARMACOPŒIA

AFFECTED BY THE

## EIGHTH DECENNIAL REVISION.

1900.

B. P. Comparative Notes.

Absin'hium .- Omitted.

Acetanilidum. Dose.—0.25 Gm. (4 grains).

Dose. — 1 to 3 grains.

Acetonum.—99 per cent. pure Sp. Gr. 0.790 at 25°C. Not official.

B. pt. 56.5°C. Neutral to test paper, and leaves no residue on evaporation. 20 Cc. mixed with 01 Cc. of Not official.

Not official.

The permanganate,—colour remains for 15 minutes (limit of empyreumatic substances).

Acetphenetidinum. Dose. — 0.5 Gm. (7½ Is Phenacetinum. grains). M.P. 134-135° C. 0.1 Gm. boiled one minute with 3 Cc. of sodium hydroxide 1 in 2, and the solution cooled and shaken with 5 Cc. of chlorinated soda solution, a clear yellow liquid is produced (absence of acetanilide); also bromine and iodine test as B.P.

Acetum Opii. Dose.—0.5 Cc. (8 minims). 1 in 10 Not official.

Acetum Scillæ. Dose.—1 Cc. (15 minims).

Acidum Aceticum dilutum 6 per cent. Dose. 4.27 per cent.

—2 Cc. (30 minims).

Dose—½ to 2 drachms.

Acidum Benzoicum. Dose.—0.5 Gm. (7½ grains). 5 to 15 grains.

Acidum Boricum, 99.8 per cent. pure. 5 to 15 grains.

Dose.—0.5 Gm. (7½ grains).

Not official.

Acidum Camphoricum, [C<sub>8</sub>H<sub>14</sub>(COOH)<sub>2</sub>]. Dose. —1 Gm. (15 grains). M.P. 187° C. Soluble 1 in 125 water at 25° C.

Not official.

5 to 20 grains, 99.38 per cent. pure.

5 to 15 grains.

Acidum Carbolicum Crudum, -Omitted.

Acidum Citricum. Dosc.—0.5 Gm. (7½ grains)
99.5 per cent. pure (volumetric test 1890 indicated
100 per cent.).

Acidum Gallicum. Dose.—1 Gm. (15 grains).

Not official.

Acidum Hydriodicum Dilutum. Dose.—0.5 Cc.
(8 minims). Made by interaction of potassium iodide, potassium hypophosphite and tartaric acid. Is to be arsenic-free. 10 per cent. of HI by weight.

Dose.—15 to 60 Acidum Hydrobromicum Dilutum. minims.

Dose.—4 Cc. (1 fluidrachm).

Dose. — 5 to 20 Acidum Hydrochloricum Dilutum. Dose. — 1 Ccminims. (15 minims).

2 to 6 minims. Acidum Hydrocyanicum Dilutum. Dose.—01 Cc. (12 minims).

Not official. **Acidum Hypophosphorosum**. 30 per cent. strength. Tests for metals and acids other than hypophosphorous are given.

Not official. Acidum Hypophosphorosum Dilutum. 10 per cent. strength. Dose.—0 5 Cc. (8 minims).

No official dose. Acidum Lacticum. Dose. -2 Cc. (30 minims).

17.44 per cent. Acidum Nitricum Dilutum. 10 per cent. Nitric Dose - 5 to 20 Acid. Dose.—2 Cc. (30 minims). minims.

5 to 20 minims. Three times quantity HNO<sub>3</sub> employed.

Acidum Nitrohydrochloricum Dilutum. Dose.—1 Cc. (15 minims).

13.8 per cent. 5 Acidum Phosphoricum Dilutum. 10 per cent. to 20 minims. Dose. - 2 Cc. (30 minims).

5 to 20 grains. Acidum Salicylicum. 0.5 Gm. (7½ grains).

13.8 per cent. 5 Acidum Sulphuricum Aromaticum. Dose.—
to 20 minims. 1 Cc. (15 minims). Now 20 per cent. H<sub>2</sub>SO<sub>4</sub>,
instead of about 18.5 per cent.

13.65 per cent. Acidum Sulphuricum Dilutum. 10 per cent. 5 to 20 minims Dose. -2 Cc. (30 minims).

6.4 per cent. \(\frac{1}{2}\) Acidum Sulphurosum. Not less than 6 per cent. to 1 drachm. (was 6.4 per cent.). Dose.—2 Cc. (30 minims).

2 to 5 grains. Acidum Tannicum. Dose.—0.5 Gm. (7½ grains.)

Acidum Tartaricum. Dose. - 0.5 Gm. (71 grains), 5 to 20 grains. 99.5 per cent. pure (was 100 per cent.).

Acidum Trichloraceticum M.P. 52°C. B.Pt. Not official. 195°C.

**Aconitina** (C<sub>34</sub>H<sub>47</sub>NO<sub>11</sub>) Dose. — 0.00015 Gm. C<sub>33</sub>H<sub>45</sub>NO<sub>12</sub>. No (100 grain). When rapidly heated melts at 195° C.; slowly heated at 182°C. Tests for pseudaconitine and atropine are given.

Aconitum. Dose. - 0.065 Gm. (1 grain.) At least No dose. 0.5 per cent. Aconitine.

No standard.

Assay.—The root in No. 40 powder is shaken with a mixture of 7 alcohol and 3 H<sub>2</sub>O, and percolated. The percolate is evaporated to dryness at a temperature not exceeding 60°C—the residue is treated with a sufficiency of N/10, H<sub>2</sub>SO<sub>4</sub> and H<sub>2</sub>O. The alkaloidal solution is treated with NH3 and E. in repeated quantities. The E washings are evaporated and dissolved in a measured volume of N/10, H2SO4, which is then back-titrated with N/50 KOH, using hæmatoxylin as indicator. The factor 0.064 is given for determining the amount of aconitine present.

Adeps Lanæ. M.P. 40°C. Ash limit 0.3 per cent. M.P. 40 to 44.4° No free fatty acids, alkalies, chlorides, or organic nitrogenous matter.

C. Same amount of ash.

Æther. Dose.—1 Cc. (15 minims).

Repeated, 10 to 30 m. Single dose 40 to 60 m.

Æther Aceticus. Dose. - 1 Cc. (15 minims). Repeated, 20 to About 90 per cent, pure.

40 m. Single dose 60 to 90 m.

Æthylis Carbamas. [CO(OC, H<sub>5</sub>)NH<sub>2</sub>] (= Not official. Urethane). Dose.-1 Gm. (15 grains). Melts at 47.5 to 50° C. Test for presence of urea or carbamide.

Æthylis Chloridum. Monochlor-Ethane, C2 H5 Cl. Not official. Sp. gr. 0.918 at 8°C. B.pt. 12.5 to 13°C. Test for HCl, alcohol and sulphur compounds. To be preserved in hermetically-sealed glass tubes.

Alcohol. Now 92.3 per cent. absolute alcohol by Represented by weight instead of 91 per cent. Test for fusel oil and for methyl alcehol.

Spiritus Rectificatus. Off. 85.65 per cent. by weight. Fusel oil and other impurities test. ed for.

Not official.

Alcohol Deodoratum .- O mitted.

Represented by
Alcohol 45 per
c e n t. (b y
volume). Off.
B. P. has also
70, 60, and 20
per cent.

Represented by Alcohol Dilutum. Now 41 5 per cent. absolute Alcohol 45 per alcohol by weight (48.9 per cent. by volume) instead of 41 per cent. (48.6 per cent. by volume).

B.P. has the two Aloe = O.N. Aloe Barbadensis or Aloe Socotrina. separately. Dose.—0.25 Gm. (4 grains.)

2 to 5 grains. Allium .- Omitted.

Not official. Aloe Purificata. Purified aloes. Dose. -0.5 Gm. (4 grains).

1/2 to 2 grains. Aloinum. Dose. - 0.065 Gm. (1 grain).

Potash or ammonium (Potash Alum). Dose.—0.5 Gm. (7½ grains).

nium alum.

5 to 10 grains.

Not official. Alumini Hydroxidum. = O.N. Alumini Hydras.

5 to 15 grains. Ammonii Benzoas. Dose.—1 Gm. (15 grains).

5 to 30 grains. Ammonii Bromidum. Dose.—1 Gm. (15 grains).
Test for chlori de slightly
more stringent.

3 to 10 grains. Ammonii Carbonas. Dose.—0.25 Gm. (4 grains).
97 per cent. pure and should yield 31.58 per cent.
ammonia gas.

5 to 20 grains. Ammonii Chloridum. Dose. — 0.50 Gm. No definite (7½ grains). 99.5 per cent. pure. standard of purity.

Official. Ammoniacum. - Omitted.

Not official.

Ammonii Iodidum. Dose.—0.25 Gm. (4 grains).

97 per cent. pure. Limit 3 per cent. Chlorides or
Bromides. Was about 0.5 per cent.

Not official. Ammonii Nitras. - Omitted.

Not official. Ammonii Salicylas. Dose. - 0.25 Gm. (4 grains)
98 per cent. pure NH<sub>4</sub> C<sub>7</sub> H<sub>5</sub> O<sub>3</sub>. Limit test for heavy metals.

Not official. Ammonii Valeras = 0.N. Ammonii Valerianas.

Dose. — 0.5 Gm. (7½ grains). Limit test for heavy metals.

Amylis Nitris=0.N. Amyl Nitris. Dose. —0.2 Cc. (3 minims). To be kept in hermetically scaled glass bulbs or in dark amber-coloured, glass-stoppered vials in a cool and dark place. To contain not less than 80 per cent. of Amyl Nitrite.

Anisum. Ripe fruit of cultivated plants. Dose. -0.50 Gm. (7½ grains).

Antimonii et Potassii Tartras.

Dose.—Expectorant ... 0.005 Gm (10 grain).

Emetic ... 0.03 Gm. ( $\frac{1}{2}$  grain). 99.5 per cent. pure (was 100 per cent).

Antimonii Oxidum. - Omitted.

Antimonii Sulphidum .- Omitted .

Antimonii Sulphidum Purificatum .- Omitted.

Antimonium Sulphuratum -Omitted.

Antipyrina. "Antipyrine." Dose.—0.25 Gm. (4 grains). Nitrie acid test given to distinguish from acetanilide and acetphenitidin.

Apoeynum. Dose.-1 Gm. (15 grains).

Apomorphinæ Hydrochloridum = 0. N. Apomorphinæ Hydrochloras.

Dose.—Expectorant ... 0.002 Gm.  $(\frac{1}{30} \text{ grain})$ . Emetic ... 0.005 Gm.  $(\frac{1}{10} \text{ grain})$ .

Tests for morphine, codeine, narceine, and narcotine are given.

Aqua Ammoniæ. Dose,—1 Cc. (15 minims).

Aqua Amygdalæ Amaræ.

Dose.—4 Cc. (1 fluidrachm).

Aqua Chlori .- Omitted.

Aqua Chloroformi. Dose.—16 Cc. (4 fluidrachms). Saturated Solution.

Aqua Creosoti. Dose.—8 Cc. (2 fluidrachms).

Aqua Hamamelidis. Dose.—8 Cc. (2 fluidrachms). Macerate 10,000 Gm. Hamamelis bark in 20,000 Cc. water 24 hours. Distil 8,500 Cc. and add 1,500 alcohol. Test for Formaldheyde is given.

B. P. Comp. Notes.

The vapour of 2 to 5 minims. 70 per cent. distils between 90 and 100°C.

No dose.

Antimonium tartaratum.

Diaphoretic,  $\frac{1}{24}$  to  $\frac{1}{8}$  grain.

Emetic, 1 to 2 grains.

Official.

Not official.

Official.

Official.

"Phenazonum" 5 to 20 grains.

Not official.

1 to 1 grain.

hypodermic, by

mouth 1 to 4

grain.

Liquor ammoniae.
No official dose.

Not official.

Not official.

No official dose. 2.5 Cc. in 1000 Cc.

Not official.

= Liquor Hamametidis. Distillate from
hydro-alcoholic
maceration.
of leaves. No
official dose.

Liquor Hydro- Aqua Hydrogenii Dioxidi.
genii Peroxidi.
1/2 to 2 fluid
drachms.

Dose.—4 Cc. (1 fluidrachm.)

Not official in Aqua Rosæ Equal volumes of stronger rose water diluted form. and distilled water, Dose, - 16 Cc. (4 fluidrachms).

Not official. Argenti Iodidum. - Omitted.

1 to 1 grain. Argenti Nitras. 99.9 per cent. pure. Dose. —
Practically pure. 0.01 Gm. (1 grain).

Same name. Argenti Nitras Mitigatus. = O.N. Argenti Nitras Dilutus.

to 2 grains. Argenti Oxidum. Corresponds to 92.9 per cent. Purity identimetallic silver. Dose.—0.065 Gm. (1 grain) cal.

Not official. Arnica = O.N. Arnicæ Flores. Dose. -1 Gm. (15 grains).

Official. Arnica Radix. - Omitted

1-20 to 1-5 grain Arseni Iodidum. Dose.—0.005 Gm. (\frac{1}{10} \text{ grain}). 82.7 per cent. iodine and 16.3 per cent. metallic arsenic.

Acidum Arsenio- Arseni Trioxidum. = 0. N. Acidum Arsenosum. sum 1-60 to Dose-0.002 Gm. (1-30 grain). 99.8 per cent. 1-15 grain. pure.

5 to 15 grains. Asafætida. Dose.—0.25 Gm. (4 grains). Ash limit the 10 per cent. same.

Not Official. Asclepias. - Omitted.

Not Official. Aspidosperma. - Omitted.

1-200 to 1-100 Atropina. Dose—0.0004 Gm. (160 grain). Tests grain. M.P.115 for purity and to distinguish from other alkaloids given. M.P. 113.8° C. (was 108° C.).

Dose as above. Atropinæ Sulphas. Dose.—As for atropina. M.P. 183°C. 189°9°C. (was 187°).

Citrus Aurantium Aurantii Amari Cortex. Dose.—1 Gm. (15 Var. Bigaradia grains). Risso, Citrus Vulgaris. Hook. f.

Aurantii Dulcis Cortex. Dose.—1 Gm. (15 grains).

Not official. Auri et Sodii Chloridum. Dose,—0.005 Gm.  $(\frac{1}{10} \text{ grain})$ .

5 to 15 grains. Balsamum Peruvianum. Dose. - 1 Gm. (15 grains).

Balsamum Tolutanum. Dose -1 Gm. (15 grains)

5 to 15 grains.

Barii Dioxidum, - Omitted.

Not Official.

Belladonnæ Folia. N. S. 0.35 per cent. mydriatic alkaloids. Dose. - 0.065 Gm. (1 grain).

No official dose. Not standardised.

Belladonnæ Radix. N. S. 0.5 per cent. mydriatic alkaloids. Dose. -0.045 Gm. (3 grain).

No official dose.

Assay.—The powdered leaves (or root) are shaken with Chl. and E in the presence of NH3 and percolated into a volume of N. H<sub>2</sub>SO<sub>4</sub>. The acid solution combined with that obtained by a further washing of the percolate with an additional quantity of H2SO4 is made distinctly alkaline and shaken out with Chl. The Chl. is evaporated, and the residue dissolved in E. The alkaloidal residue from this is dissolved in 3 Cc. of  $\frac{N}{10}$  H<sub>2</sub>SO<sub>4</sub>, and back-titrated with  $\frac{N}{50}$  KOH., using hæmatoxylin or iodeosin as indicator. The factor 0.0287 is provided for arriving at the percentage of mydriatic alkaloids.

Benzaldehydum = Benzaldehyde. Dose. - Not official. 0.03 Cc. (1 minim). Produced artificially or from natural oil of bitter almonds, &c., containing not less than 85 per cent, of Benzaldehyde. Sp. gr. 1.045 at 25° C. B.Pt., 179° to 180° C. Tests for hydrocyanic acid and chlorinated products and assay process given.

Benzin purified by Not official. Benzinum Purificatum. potassium permanganate in acid, then in alkaline solution.

Benzoinum. Dose 1 Gm. (15 grains).

No dose.

Benzosulphinidum = Benzosulphinide. Dose "Glusidum." No 0.2 Gm. (3 grains). Inorganic impurities, carbohydrates (with glucose and milk sugar), benzoic and salicylic acids are tested for.

dose.

Rhizome and roots of Berberis Aqui- Not official. folium, Pursh, and other species. Dose. - 2 Gm. (30 grains).

Betanaphthol. = O.N. Naphtol. Dose .- 0.25 Gm. "Naphthol" 3 to (4 grains).

10 grains.

Bismuthi Citras. Dose. -0.125 Gm. (2 grains.) Not official. Further tests for lead, copper, &c., are given.

Bismuthi et Ammonii Citras. Dose .- 0.125 Gm. Not official, except in liquor. (2 grains.)

"Bismuthi Car- Bismuthi Subcarbonas. Dose.--0.5 Gm. (7½ bonas" 5 to 20 grains.) 90 per cent. pure bismuth oxide.

Not official.

Bismuthi Subgallas. Dose.—0.25 Gm. (4 grains).

Yields not less than 52 per cent. nor more than 57 per cent. pure bismuth oxide. Tests for free gallic acid, nitrate and arsenic given.

5 to 20 grains. Bismuthi Subnitras. Dose.—0.5 Gm. (7½ grains).
80 per cent. pure bismuth oxide.

Not official.

Bismuthi Subsalicylas. Dose.—0.25 Gm. (4 grains). Yields not less than 62 nor more than 64 per cent. bismuth oxide. Tests similar to those for subgallate, i.e., free salicylic acid, nitrates and arsenic.

Not official. **Bromoform** contains 99 per cent. bromoform, CHBr<sub>3</sub>
Sp. gr. 2.808 at 25° C., B.Pt. 148° C. Tested for free acid, free bromine and compounds, and for acetone. *Dose*.—O·2 Cc. (3 minims.)

Not official. Bryonia. - Omitted.

No dose given. Buchu. Dose .- 2 Gm. (30 grains).

1 to 5 grains. Caffeina. *Dose*—0.065 Gm. (1 grain). Sublimes at 178° C., M.P. 236.8° (was 229° C.)

"Caffeinæ Citras" Caffeina Citrata. Dose — 0.125 Gm. (2 grains). 2 to 10 grains. Test for tartaric acid given.

U.S.P. now conforms with instead of 2 per cent. Citrated Caffeine. Dose.—
B.P. 4 Gm. (60 grains).

Dose.—60 to 120 grains.

Not official. Calamus. Dose .- 1 Gm. (15 grains).

Not official. Calcii Bromidum. Dose — 1 Gm. (15 grains).
97 per cent. pure (was 99.7 per cent.)

10 to 60 grains. Calcii Carbonas Præcipitatus. Dose—1 Gm. (15 grains). 99 per cent. pure.

5 to 15 grains. Calcii Chloridum. Dose-0.5 Gm. (7½ grains).

3 to 10 grains. Calcii Hypophosphis. Dose. — 0.5 Gm. (7½ grains. 98 per cent. pure.

"Calcii Phos- Calcii Phosphas Præcipitatus. Dose.—1 Gm. (15 phas." 5 to 15 grains). 99 per cent. pure. grains.

Not official. Calendula. Dose.—1 Gm. (15 grains).

Calx Chlorinata = O.N., Calx Chlorata. To have 33 per cent. availat least 30 per cent. available Cl. instead of 35 per cent. Dose. - 0.25 Gm. (4 grains).

able Cl. No dose.

Cambogia. Dose.—0.125 Gm. (2 grains).

1 to 2 grains.

Camphora. Dose.—0.125 Gm. (2 grains).

2 to 5 grains.

Camphora Monobromata. Dose. -0.125 Gm. Not official. (2 grains).

Cannabis Indica. Dose.—0.065 Gm. (1 grain).

No official dose.

Cantharis. Dose.—0.03 Gm. (1/2 grain).

No official dose.

Capsicum. Dose. -0.065 Gm. (1 grain).

No official dose.

Carbo Ligni. Dose.-1 Gm. (15 grains).

60 to 120 grains.

Cascarilla. - Omitted.

Official.

Cassia Fistula. Dose. - 4 Gm. (60 grains).

"Cassiæ Pulpa." No dose.

Castanea .-- Omitted.

Cataplasma Kaolini.—Kaolin 577, boric acid 45, No equivalent in thymol 0.5, methyl salicylate 2, peppermint oil 0.5, glycerin, 375. Heat the kaolin one hour on water bath, add boric acid, glycerin, and other components.

B.P.

Catechu. - Omitted.

Official.

Caulophyllum. - Omitted.

Not official.

Ceratum Cstacei. - Omitted.

Ung. cetacei Official.

Ceratum Resinæ Compositum. Rosin 225, Not official. Yellow Wax 225, Prepared Suet 300, Turpentine 115, Linseed Oil 135.

Cerii Oxalas. Dose.-0.065 Gm. (1 grain). A Dose.-2 to 10 mixture of cerium, didymium and lanthanum oxalates, and of other earths of this group. (Was taken as pure in 1890)

grains.

Cetraria-Omitted.

Charta Potassii Nitratis, - Omitted.

Chelidonium .- Omitted.

Chenopodium, -Omitted.

Chimaphila. Dose.—2 Gm. (30 grains).

Not official. No official dose.

Chirata. Dose.—1 Gm. (15 grains).

Chloralformamidum. Dose.—1 Gm. (15 grains). Not official Made by combining formamide with anhydrous chloral. M.P. 114°-115° C. Tests for inorganic and other impurities (free acids). (Is chloralamide.)

5 to 20 grains.

"Chloral hydras," Chloralum Hydratum = O.N. Chloral. Dose.—1 Gm. (15 grains).

I to 5 minims.

Chloroformum. Dose. -0.3 Cc. (5 minims).

Not official.

Chondrus. Dose.—In decoction, 15 Gm. (4 drachms).

"Acidum Chromicum."

Chromii Trioxidum = O.N. Acidum Chromicum. Should be 90 per cent. pure.

No official dose.

Chrysarobinum. Dose 0.03 Gm. (1 grain). Sp. gr. 0.920 to 0.922. Tests for distinction from chrysophanic acid are given.

No official dose.

Cimicifuga. Dose 1 Gm. (15 grains).

Not official except under quinine.

Cinchona (various barks). Tests.—Not less than 5 per cent. total anhydrous alkaloids and at least 4 per cent. ether-soluble alkaloids (instead of 2.5 per cent. of quinine). Dose.—1 Gm. (15 grains).

Assay.—The cinchona, in No. 80 or finer powder, is shaken with a mixture of chl. and E in the presence of NH<sub>3</sub>. A portion of the liquid is decanted into a volume of H<sub>2</sub>SO<sub>4</sub>, and the liquid is washed with a further quantity of the acid, and finally with water. The combined washings are divided into two parts—one for the estimation of anhydrous cinchona alkaloids by chl.-E purification, and the other for ether soluble alkaloidsquinine, quinidine, and cinchonidine, by washing out with E in the presence of NH3.

Cinchona succirubra should yield between 5 and 6 per cent. total alkaloids. of which not less than half consist of quinine and cinchonidine. No official dose.

Cinchona Rubra. Dose.—1 Gm. (15 grains). To contain not less than 5 per cent of anhydrous cinchona alkaloids.

Not official.

Cinchonidinæ Sulphas. Dose .- 0.25 Gm. (4 grains).

Not official.

Cinchonina-Omitted.

Not official.

Cinchoninæ Sulphas. Dose, -0.25 Gm. (4 grains).

Not official.

Cinnaldehydum. Aldehyde from cinnamon oil or synthetic; 95 per cent. pure. Sp. gr. 1.047 at 25° C. Dose.—0.05 Cc. (1 minim).

Assay. - Process given.

Not official.

Cinnamomum Cassia .- Omitted.

Cinnamomum Saigonicum. Dose. -0.25 Gm. (4 Not official. grains).

Cinnamomum Zeylanicum. Dose-As last.

Coca (N.S. 0.5 per cent. ether-soluble alkaloids). Dose. -2 Gm. (30 grains).

Assay. - A weighed quantity of the leaves (in No. 60 powder) is treated with a mixture of Chl. E and NH3. The percolate (and successive washings with the same mixture) are transferred to a sufficiency of H2SO4. NH3 is added to alkalinity, and the liquid is shaken out with E in three repeated quantities. The E solution is then evaporated to dryness, and dissolved in a measured volume of N/10 H2SO4. which is finally backtritrated with N/50 KOH in the customary manner, employing haematoxylin and the factor 0.03 to ascertain the percentage of ether-soluble coca alkaloids.

Cocaina. Dose. -- 0.03 Gm. (1/2 grain). C<sub>17</sub> H<sub>21</sub> NO<sub>4</sub>

Cocainæ Hydrochloridum. = O.N. Cocainæ Hydrochloras. Dose. - 0.03 Gm. (1 grain). MacLagan's Test introduced.

Codeina. Dose. -0.03 Gm. ( $\frac{1}{2}$  grain).

Codeinæ Phosphas.  $C_{18}H_{21}NO_3$ ,  $H_3PO_4 + 2H_2O \cdot \frac{1}{4}$  to 2 grains. Dose. -0.03 Gm.  $(\frac{1}{2}$  grain)). Soluble 1 in 2.25 of water at 25° C. Test for absence of morphine.

Codeinæ Sulphas.  $[C_{18} H_{21} NO_3]_2 H_2 SO_4$ , 5 H<sub>2</sub> O. Not official. Test and dose as phosphate.

Colchici Cormus.=0.N. Colchici Radix. N.S. 0.35 2 per cent. colchicine. Dose. - 0.25 Gm. (4 grains). Assay—A weighed quantity of drug in No60 powder is shaken with a mixture of E, chl. alc. and NH3. A measured quantity of the filtrate is then evaporated to dryness and the residue is dissolved in E. A small quantity of H2O is added and the E evaporated. The H<sub>2</sub>O solution, after further purification, is treated with chl. and the chl. evaporated, the residue dissolved in alc. and the residue from evaporation of this solvent is again taken up with E and H<sub>2</sub>O. The E is evaporated and the H<sub>2</sub>O solution treated with repeated quantities of chl. and evaporated, again dissolved in alc. which is evaporated and weighed.

Colchici Semen. N.S. 0.55 per cent. colchicine. No dose. Dose.—0.2 Gm. (3 grains). Assay—Method similar to above.

Colchicina. C<sub>22</sub> H<sub>25</sub> NO<sub>6</sub>. M.P. 142. 5° C. Not official, Dose—0.0005 Gm.  $(\frac{1}{128} \text{ grain})$ .

No dose given.

Not standardised. No official dose given.

to a grain.

1 to 2 grains.

+ 3 H<sub>2</sub> O.

to 5 grains. Not assayed.

strength.

Official. 1/2 the Collodium has 1 per cent, more pyroxylin than the 1890 Pharmacopæia.

No official dose.

Colocynthis. Dose. - 0.065 Gm. (1 grain).

No official dose.

Conium. N.S. 0.5 per cent. coniine. Dose. - 0.2 Gm.

(3 grains).

Asray-The Conium in No. 60 powder is shaken with E, Alcohol and NH3. An equivalent volume of the liquid is decanted into H2SO4, and the E evaporated from this solvent. Alcohol is added, and the (NH4)2SO4 then allowed to deposit. Na<sub>2</sub>CO<sub>3</sub> is then added, leaving the liquid, however, distinctly acid. The liquid is concentrated and the fat removed with E. The solution is made alkaline with Na2CO3 and washed with successive portions of E. The E solution is treated with a few drops of HCl, and the solution evaporated at a temperature not exceeding 60°C, and weighed-the factor 0.777 for multiplication gives ultimately the proportion of conline.

Not official.

Convallaria. Dose.—0.5 Gm. (7½ grains).

1 to 1 drachm.

Copaiba. Dose.—1 Cc. (15 minims).

1 to 5 minims.

Creosotum. Dose.—0.2 Cc. (3 minims). Tests to distinguish from coal tar creosote are given.

Not official.

Cresol [C<sub>6</sub>H<sub>4</sub>(CH<sub>3</sub>)OH.] consists of the three isomerides. Sp. gr. 1.032 at 25° C. Solubility tests, and for absence of phenol and hydrocarbons.

10 to 60 grains. Official.

Creta Præparata. Dose. - 1 Gm. (15 grains).

Official.

Crocus, - Omitted.

30 to 60 grains.

Cubeba. Dose.—1 Gm. (15 grains).

Cupri Sulphas. 99.5 per cent. pure.

1 to 2 grains. 5 to 10 grains. Dose. {Astringent ... 0.01 Gm. ( $\frac{1}{5}$  grain). Emetic ... 0.25 Gm. (4 grains).

4 to 4 ounce.

Cusso. Dose.—16 Gm. (240 grains).

Not official.

Cypripedium. Dose.—1 Gm. (15 grains).

to 2 grains.

Digitalis. Dose. - 0.065 Gm. (1 grain).

Not official.

Decoctum Cetraria. - Omitted.

=Liquor Sarsæ Compositus Concentratus.

Decoctum Sarasparillæ Compositum. - Omitted.

Not official.

Dulcamara. - Omitted.

1 to 1 grains.

Elaterinum. Dose. - 0.005 Gm. (1 grain) Identification colour-tests introduced.

valent.

No official equi- Elixir Adjuvans. Fluid Extract of Glycyrrhiza, 120, Aromatic Elixir, 880.

Elixir Ferri, Quininae et Strychninæ Phos- No official equiphatum. Contains ferric, quinine and strychnine phosphates, in ammonium acetate and aromatic elixir. Dose. - 4 Cc. (1 fluidrachm).

valent except the Syrupus.

Elixir Phosphori. - Omitted.

Not official.

Emplastrum Adhæsivum. A rubber plaster, No official equimade by combining rubber 20 with petrolatum 20, and mixing with lead plaster 960.

valent.

Emplastrum Ammoniaci cum Hydrargyro.—Omitted.

Official.

Emplastrum Arnica.—Omitted.

Not official.

Emplastrum Belladonnæ. N.S. 0.38 to 0.42 per Not standardised, cent. mydriatic alkaloids. Assay .- Method given.

but contains 0.5 per cent. alkaloids.

Emplastrum Ferri. - Omitted.

Not official.

Emplastrum Ichthyocollæ.-Omitted.

Not official.

Emplastrum Opii. A rabber plaster made with the Made with Resin Emplastrum Adhæsivum.

plaster.

Emplastrum Picis Cantharidatum. - Omitted. Emplastrum Picis Burgundica. - Omitted.

Not official. Official.

Emplastrum Plumbi. Now made by precipitation Similar to 1890 from lead acetate and soap.

U.S.P.

Emplastrum Resina. - Omitted.

Contains hard soap vice yellow U.S.P. wax 1890.

Emulsum Ammoniaci .- Omitted.

Not official.

Emulsum Amygdalæ. Dose.—120 Cc. (4 fluid Not official, exounces).

cept as P. Amygdalæ Co.

Emulsum Asafœtidæ. Dose.—16 Cc. (4 fluidrachms). Not official.

Emulsum Chloroformi. Dose. - 8 Cc. (2 fluidrachms).

Not official.

Emulsum Olei Morrhuae, (50 per cent. oil) with Not official. gaultheria to flavour, or may be with oil of bitter almond. Dose .- 8 Cc. (2 fluidrachms).

Emulsum Olei Morrhuae cum Hypophos- Not official. phitibus. This emulsion is similar to the above, but contains in addition calcium hypophosphite 10, potassium hypophosphite 5, sodium hypophosphite 5 in 1000. Dose,-As above,

B. P. Comp. Notes. Not official.

Emulsum Olei Terebinthinae. Contains 15 per cent. Rectified Oil of Turpentine. Dose. 4 Cc. (1 fluidrachm).

Not official.

Eriodictyon. Dose.—1 Gm. (15 grains).

Not official.

Eucalyptol. Dose.—0.3 Cc. (5 minims).

Not official.

Eucalyptus (Dried leaves of E. Globulus, Labillardière).

Dose.—2 Gm. (30 grains).

Not official.

Eugenol. An unsaturated aromatic phenol.

[C<sub>6</sub> H<sub>3</sub> (OH) (OCH<sub>3</sub>). C<sub>3</sub>H<sub>5</sub>, 4:3:1] from oil of cloves and other sources. Specific gravity 1.072 to 1.074. B.Pt. 251° to 253° C. Absence of phenol ensured. Dosg.—0 2 Cc. (3 minims).

No offic al dose.

Euonymus. Dose. - 0.5 Gm. (71/2 grains).

Not official.

Eupatorium. Dose. - 2 Gm. (30 grains).

Not official.

Extractum Aconiti. - Omitted.

1 to 4 grains.

Extractum Aloes. Dose.—0.125 Gm. (2 grains).
Not necessarily from Barbadoes aloes, as in B.P.

Estructum Arnicae Radicis-Omitted.

Extrac:um Arnicae Radicis Fluidum -Omitted.

Not official.

Extractum Asclepiadis Fluidum-Omitted.

Extractum Aspidospermatis Fluidum-Omitted.

Not official.

Extractum Belladonnæ Foliorum. = O.N. Extractum Belladonnæ Foliorum Alcoholicum.

Dose.—0.01 Gm. († grain). N.S. 1.4 per cent.

mydriatic alkaloids. The method of assay is on the lines of that for Belladonna Leaves q.v.

1 to 1 grain.

Extractum Cannabis Indicæ. Dose.—0.01 Gm.

Not official.

 ${\bf E}xtractum\ Castan {\bf \textit{w}}\ Fluidum-Omitted.$ 

Extractum Cinchonæ. - Omitted.

Not official.

Extractum Cimicifugæ. Dose.—0.25 Gm. (4 grains). Now made from fluidextract with Glycyrrhiza a sufficiency.

Not official.

Extractum Colchici Radicis Fluidum.—Omitted.

\$\frac{1}{4}\$ to 1 grain.

Not assayed.

Extractum Colchici Cormi. = 0.N. Extractum Colchici Radicis. Dose. — 0.065 Gm. (1 grain). N.S. 1.4 per cent. colchicine. The assay is on the lines of that for Colchicum Corm. q.v.

Not official.

Extractum Colocynthidis. Dose.—0.03 Gm.  $(\frac{1}{2} \text{ grain}).$ 

2 to 8 grains.

Extractum Colocynthidis Compositum. Dose. —0.5 Gm. (7½ grains).

Extractum Conii .- Omitted.

Extractum Cusso Fluidum .- Omitted.

Not official.

Extractum Digitalis. Dose. -0.01 Gm. (1 grain). Not official. Now made by concentration of fluidextract.

Extractum Dulcamaræ Fluidum .- Omitted.

Extractum Ergotæ. Dose.—0.25 Gm. (4 grains). 2 to 8 grains. Now made on the lines of the B.P., but contains 10 per cent. glycerin (instead of concentrating the fluidextract).

Extractum Euonymi. Now made by concentration Extractum Euoof fluidextract with glycyrrhiza a sufficiency.

nymi Siccum, official.

Extractum Gossypii Radicis Fluidum .- Omitted.

Not official.

Extractum Hyoscyami. N.S. 0.3 per cent. mydriatic alkaloids. Method of as ay as for Extract of Belladonna.

Not official from dried leaves but green extract.

Extractum Iridis and Extractum Iridis Fluidum .- Omitted.

Not official.

Extractum Jalapa. - Omitted. Extractum Juglandis. - Omitted. Official. Not official.

Extractum Lobelia Fluidum (hydro-alcoholic menstruum.-Omitted.

Not official.

Extractum Malti. Cold maceration 6 hours, then I hour at not exceeding 55°C. Evaporation in Not official

Extractum Menispermi Fluidum .- Omitted.

Not official.

Extractum Nucis Vomicæ. Dose. -0.015 Gm. (4 grain). Now 5 per cent. strychnine, was 15 per cent. total alkaloids. Assay on the lines of nux vomica q.v.

Same strength. Dose 1 to 1 grain.

Extractum Opii. Dose, -0.03 Gm. (1 grain). Same strength. Now 20 per cent. morphine (cryst.); was 18 per

to 1 grain.

Extractum Physostigmatis. Dise. -0.008 Gm. 4 to 1 grain, not (1 grain). N.S. 2.0 per cent. ether-soluble alkaloids.

standardised.

Assay on lines of Physostigma estimation q.v.

Extractum Podophylli - Omitted.

Official.

Extractum Rhamni Purshianæ. Extract of Aqueous extract Cascara sagrada, 4=1, Hydro-alcoholic percolation and final adjustment with glycyrrhiza.

and not a definite equivalent as the U.S.P.

Extractum Rhei. Now by concentrating Fluid- Official. extract.

Extractum Rumicis Fluidum .- Omitted.

Not official.

Not official.

Extractum Scillæ Fluidum (hydro-alcoholic menstruum) .-Omitted.

Not official.

Extractum Scoparii Fluidum - O mitted.

Not official.

Extractum Scopolæ. Dose. -0.01 Gm. († grain). By concentrating Fluidextract. Standardised to 2 per cent. mydriatic alkaloids. Method of assay as for Extract of Belladonna leaves.

monii " official. to 1 grain.

"Extractum Stra- Extractum Stramonii Seminis and Extractum Stramonii Seminis Fluidum .- Omitted.

Not official.

Extractum Stramonii. Dose. - 0.01 Gm. (1) grain). 1.4 per cent. mydriatic alkaloids. By concentrating Fluidextract. Standardise 1 as for Extract of Belladonna.

Not official

Extractum Sumbul. Dose. - 0.25 Gm. (4 grains). By concentrating Fluidextract.

From fresh juice. Extractum Taraxaci. Now Hydro-alcoholic (from dried root). Was aqueous from fresh root.

Not official.

Extractum Uvæ Ursi.-Omitted.

Quinine.) Dose 5 to 10

(15 per cent. Ferri et Quininæ Citras (11.5 per cent. quinine). Dose. - 0.25 Gm. (4 grains).

grains. Not official.

Ferri Hydroxidum. = O.N. Ferri Oxidum Hydratum.

Not official.

Ferri Hydroxidum cum Magnesii Oxido. = 0.N. Ferri Oxidum Hydratum cum Magnesia.

Not official.

Ferri Iodidum Saccharatum. - Omitted.

Not official.

Ferri Lactas. - Omitted.

75 per cent.

Ferrum Redactum. 90 per cent. metallic iron.

Not official.

Ferri Valerianas. - Omitted.

Not official.

Fluidextractum Aconiti, = O.N. Extractum Aconiti Dose. -0.05 Cc. (1 minim). N.S. 0.4 Gm. Aconitine in 100 Cc. Assay on lines of Aconite Root, q.v.

alkaloids. No dose.

0.75 per cent. Fluidextractum Belladonnæ Radicis. 0.05 Cc. (1 minim). N.S. 0.5 Gm. mydriatic alkatoids in 100 Cc. Assay on lines of Belladonna Root, q.v.

Not official.

Fluidextractum Berberidis. By hydro-alcoholic percolation. l=1 Dose-2 Cc. (30 minims).

alkaloids.

5 per cent. of Fluidextractum Cinchonæ. N.S. 4.0 Gm. anhydrous ether-soluble alkaloids in 100 Cc. Assay on lines of Cinchona, q.v.

- Fluidextractum Cocæ. N.S. 0.5 Gm. ether-soluble Not standardised. alkaloids in 100 Cc.
- Fluidextractum Colchici Seminis. N.S. 0.5 Gm. Not official. colchicine in 100 Cc. Dose 02 Cc. (3 minims).
- Fluidextractum Conii. Dose.—0.2 Cc. (3 minims). Not official. N.S. 0.45 Gm. Coniine in 100 Cc.
- Fluidextractum Euonymi. Dose.—0.5 Cc. (8 Not official. minims). By hydro-alcoholic percolation.
- Fluidextractum Granati. Dose.—2 Cc. (30 Not official. minims). 1=1. A glycero-hydro-alcoholic extractive.
- Fluidextractum Guaranæ. Dose. 2 Cc. (30 Not official. minims). N.S. 3.5 Gm. alkaloids in 100 Cc.
- Fluidextractum Hamamelidis Foliorum. = 0.N. Official.

  Extractum Hamamelidis Fluidum.
- Fluidextractum Hydrastis. N.S. 2.0 Gm. Hydras- Net standardised.
- Fluidextractum Hycscyami. N.S. 0.075 Gm. Not official. mydriatic alkaloids in 100 Cc. Dose 0.2 Cc. (3 minims).
- Fluidextractum Ipecacuanhæ. N.S. 1.75 Gm. 2 to 24 per cent. alkaloids in 100 Cc. Dose—Emetic: 1 Cc. (15 minims). Expectorant: 0.05 Cc. (1 minum). Expectorant: 15 to 20 minims. Expectorant: to 2 minims.
- Fluidextractum Lobeliæ. Dose.—0.5 Cc. (8 Not official. minims). 1=1. An Acetic Extractive.
- Fluidextractum Nucis Vomicæ = 0.N. Extractum 1.5 per cent. Nucis Vomicæ Fluidum. 1 Gm. strychnine in Strychnine. 100 Cc., (was 1.5 per cent. total alkaloids).
- Fluidextractum Pilocarpi. Dose.—2 Cc. (30 "Extractum Jaminims). N.S., 0.4 Gm. alkaloids in 100 Cc. borandi Liquidum." Dose 5 to 15 minims. Not standardised.
- **Fluidextractum Quercus.** 1=1. A glycero-hydro- Not official. alcoholic extractive.
- Fluidextractum Quillajæ. 1=1. A hydro- Not official.

Not official.

Fluidextractum Rhamni Purshianæ Aromaticum. Dose.—1 Cc. (15 minims). l=1. A glycero-hydro-alcoholic percolate of cascara containing liquorice and magnesia flavoured with Compound Spirit of Orange.

Not official.

Fluidextractum Sanguinariæ. Dose. - 0.1 Cc.  $(1\frac{1}{2} \text{ minims})$ . 1=1. An acetic extractive.

Not official.

Fluidextractum Scillæ. 1=1. An acetic extractive.

Not official.

Fluidextractum Scopolæ. Dose. - 0.05 Cc. (1 minim). 1 = 1 about. Hydro-alcoholic, contains 0.5 per cent. mydriatic alkaloids. Assay as for Fluidextract of Belladonna.

Not official.

Fluidextractum Staphisagriæ. Dose. - 0.05Cc. (1 minim). l = 1. A hydro-alcoholic extractive.

Not official.

Fluidextractum Stramonii. Dose. - 0.05 Cc. (1 minim). 1 = 1, N.S. 0.35 Gm. mydriat. alkaloids in 100 Cc.

Not official.

Fluidextractum Sumbul. Dose. - 2 Cc. (30) minims). l = 1, hydro-alcoholic.

cial.

Catechu is offi- Gambir (to replace Catechu, 1890 Pharmacopæia). An extract from leaves and twigs of Ourouparia Gambir (Hunter). Not less than 70 per cent. is soluble in alcohole Ash not more than 5 per cent.

other tests for purity.

No ash limit, but Gelatinum. Prepared from animal tissues by boiling water. Ash limit 2 per cent.

Not official.

Gelatinum Glycerinatum. Gelatin and Glycerin equal quantities. Water is employed to soak the gelatin at first.

Not official.

Glandulæ Suprarenales Sicce. 0.25 Gm. (4 grains). Suprarenal glands of sheep, free I from fat, cleaned, dried and powdered. Ash limit 7 per cent.

" Thyroideum Siccum." 3 to 10 grains similarly prepared.

Glandulae Thyroideæ Siccæ. 0.25 Gm. (4 grains). Preparet as Glandula Suprarenales Siccæ (above). Ash limit 6 per cent.

Not official.

Glyceritum Ferri, Quininæ et Strychninæ Phosphatum. Dosc. — 1 Cc. (15 minims). Contains soluble ferric phosphate and the phosphates of strychnine (0.8 Gm. base in 1,000 Cc.) and quinine.

Glyceritum Phenolis = 0. N. Glyceritum Acidi 1 of Phenol in Carbolici. Dose. 0.3 Cc. (5 minims). 1 in 5 of liquefied phenol.

5. No official dose.

Glyceritum Vitelli .- Omitted.

(8 minims).

Not official.

Gossypii Cortex. = O.N. Gossypii Radicis Cortex. Not official. Guaiaci Lignum. - Omitted. Official.

Guaiacol [C<sub>6</sub> H<sub>4</sub> (OH) (OCH<sub>3</sub>) 1: 2] from beech- Not official. wood tar or made synthetically. Tests for crossote and oily hydrocarbons are given. Dose. - 0.5 Cc.

Guaiacolis Carbonas  $[(C_6 H_4 (OCH_3) O)_2 . CO]$ . Not official. Made by action of carbonyl chloride on sodiumguaiacolate. Dose. -1 Gm. (15 grains). Is tested for free guaiacol.

Guaiacum = O.N. Guaiaci Resina.

Official.

Guarana, N.S. 3.5 per cent. alkaloids.

Not official.

Assay.—The alkaloids are removed by shaking with chl. and NH3. The chl. is distilled from a measured volume of the liquid representing an equivalent of the drug. The residue is dissolved in a mixture of HoSO, and H<sub>2</sub>O, which solution is then treated with NH<sub>3</sub> and successive quantities of chl. The chl. solution is evaporated.

Hamamelidis Cortex. Bark and twigs of Hama. Bark Official, melis Virginiana, Linné. Dose.—2 Gm. (30 No dosc. grains).

Hamamelidis Folia = O.N. Hamamelis. Dose. - Official, 2 Gm. (30 grains). No dose.

Hexamethylenamina. [(CH<sub>2</sub>)<sub>6</sub>N<sub>4</sub>] Condensa- Not official. tion product obtained by action of ammonia on formaldehyde. Dose. - 0.25 Gm. (4 grains).

Homatropinæ Hydrobromidum. [H Br.C<sub>16</sub>H<sub>21</sub> Official. Dose  $NO_3$ ]. Dose.—0.0005 Gm.  $(\frac{1}{128} \text{ grain})$ . Obtained 1-80 to 1-20 by condensation of tropine and mandelic acid. grain. Tests for other alkaloids given.

Hydrargyri Cyanidum .- Omitted.

Not official. Not official.

Hydrargyri Subsulphas Flavus.—Omitted.

**Hydrastina**. Hydrastine C<sub>21</sub>H<sub>21</sub>NO<sub>6</sub>. An alkaloid Not official. from Hydrastis. In white glistening prisms. Test for distinction from hydrastinine is given. Dose.— 0.01 Gm. (\frac{1}{5} grain).

Hydrastininæ Hydrochloridum = O.N. Hydras- Not official, tininæ Hydrochloras. Dose.—0.03 Gm. (½ grain).

Comp. Notes.

No official dose.

Hydrastis. Dose. - 2 Gm. (30 grains). N.S. 2.5 per

cent. Hydrastine.

Not assayed.

Assay.—The drug in No. 60 powder is treated with E, NH<sub>3</sub> and H<sub>2</sub>O. A volume of the filtrate is shaken out with H2SO4 and H2O. The acid solution is rendered alkaline with NH, and shaken out with E and the ethereal solution is evaporated and the residue weighed.

1-200 to 1-100 Hyoscinæ Hydrobromidum = O.N. Hyoscinæ grain Hydrobromas. Dose.—0.0005 Gm.  $(\frac{1}{1.28})$  grain.

Not official,

Hyoscyaminæ Hydrobromidum. O.N., Hyoscyaminæ Hydrobromas. Dose. — 0.0005 Gm.  $(\frac{1}{128} \text{ grain}).$ 

Dose.—1-200 to Hyoscyaminæ Sulphas. Dose. — 0.0005 Gm. 1-100 grain.  $\left(\frac{1}{128} \text{ grain}\right)$ .

standardised.

No official dose.

Hyocsyamus is not Hyoscyamus. Dose. -0.25 Gm. (4 grains). N.S. 0.08 per cent, mydriatic alkaloids.

Note.-Error on p. lxxii. "0.8." Hyoscyamus is assayed in manner similar to that for Belladonna.

Not official.

Ichthyocolla .- Omitted.

Not official.

Illicium.—Omitted.

Infusum Cinchonæ Acidum.

Infusum Cinchona. - Omitted.

Now comes under the general directions for Infusa.

Not official.

Inula.—Omitted.

Not official.

Iodolum. Dose.—0 25 Gm. (4 grains). Tetraiodopyrrol obtained by acting on pyrrol with iodine in alcohol. Soluble in 9 of alcohol, 1.5 of ether and 105 of chloroform at 25°C. Decomposes at 140°C. Tests for organic impurities, free iodine, and other iodine compounds are given.

cacuanha excluded, Official doses are double the U.S.P.

Carthagena Ipe- Ipecacuanha. N.S. 2 per cent. alkaloids. Ipecacuanha, also Carthagena yield ng not less than 2 per cent. Ipecacuanha alkaloids.

Dose Expectorant, 0.065 Gm. (1 grain). Emetic, 1.0 Gm. (15 grains).

Assay.—The Ipecacuanha, in No. 80 powder, is shaken with Chl, E & NH3. A volume of the solution is treated with H<sub>2</sub>SO<sub>4</sub>, and this solution shaken out with E in the presence of NH3. The E-soluble alkaloid thus obtained is dissolved in N/10H2SO4, warming gently if necessary. The acid solution is then back-titrated with alkali, employing the factor 0 0238 to ascertain the percentage of alkaloids.

Not official.

Iris .- Omitted.

Should yield not

less than 9 nor more than 11

per cent. resin,

of which not

more than 10 per cent, shall

be ether-solu-

Jalap. To contain at least 8 per cent. alcohol-soluble resin and not more than 1.5 per cent. ether-soluble resin (was 12 per cent. alcohol-soluble and 1.2 per cent. ether-soluble).

Assay.—The drug in No. 60 powder is percolated with E, and the percolate evaporated. This gives the percentage of ether-soluble resin. The marc is then again percolated with alc. and a volume of this percolate is shaken with an equal volume of chl. and of H2O. The chl. solution is evaporated and weighed when of constant weight to obtain the percentage of resin insoluble in ether which added to the first figure gives total resin.

Juglans, -Omitted.

Kaolinum. Native aluminium silicate consisting of the pure silicate [H2 Al2 Si2 O8 + H2O] powdered and freed from gritty particles. Should leave not less than 85 per cent. non-volatile residue on ignition. Is tested for iron.

Kamala .- Omitted .

Krameria. Now Krameria triandra (Peruvian), K. Ixina (Savanilla) and K. argentea (Para).

Linimentum Sinapis Compositum .- Omitted.

Liquor Antisepticus contains borie acid 20, benzoic Not official. acid 1, thymol 1, eucalyptol 0.25, oil of peppermint 0.5, oil of gaultheria 0.25, oil of thyme 0.1, alcohol Filtered through tale. 250 and water to 1000. Dose.—4 Cc. (1 fluidrachm).

Liquor Chlori Compositus = O N. Aqua Chlori.

Liquor Cresolis Compositus. Cresol 500, emulsified with linseed oil 350, and potassium hydroxide 80, in water a sufficiency to make 1000.

Liquor Ferri Acetatis. - Omitted.

Liquor Ferri Chloridi Now 29 per cent. = to 10 Gm. Fe in 100 Gm, instead of 37.8 per cent. anhydrous ferric chloride = 13 Gm. Fe. in 100 Gm.

Not official.

Test not so stringent.

Not official.

No Savanilla.

Official.

Not official.

Not official.

Official.

Liquor Ferri Perchloridi Fortis contains 22.5 Gm.Fe (=65.2)FeCl<sub>2</sub>) in 100 Cc.

Liquor Ferri Perchloridi contains 5.63 Gm. Fe (=16.3 Fe)Cl.) in 100 Cc.

Not official.

Liquor Ferri Citratis! - Omitted.

Not official.

Liquor Ferri et Ammonii Acetatis. Now 4 Cc. of tincture of ferric chloride in 100 Cc. (was 2 Cc. in 100 Cc.)

Official.

Liquor Ferri Nitratis. - Omitted.

Persulphatis 5 Cc. yield 1 04 Gm.  $Fe_9O_3 =$ 10.4 per cent. Fe.

= Liquor Ferri Liquor Ferri Tersulphatis now 36 per cent. = not less than 10 per cent. Fe instead of 28.7 per cent. normal ferric sulphate Fe<sub>2</sub>(S<sub>2</sub>O<sub>2</sub>,O<sub>2</sub>) =8 per cent. Fe.

Not official.

Liquor Formaldehydi. Contains not less than 37 per cent. by weight absolute formaldehyee (H·COH). Sp. gr 1.075 to 1.078 at 25° C. Absence of formic and other acids, also lead, iron and copper ensured. Assay method by means of sodium hydroxide and hydrogen peroxide.

Official.

Liquor Potassii Hydroxidi = O.N. Liquor Potassæ.

Official.

Liquor Sodæ Chlorinatæ = O.N. Liquor Sodæ Chlorata

Not official.

Liquor Sodii Hydroxidi = O.N. Liquor Soda.

Not official.

Liquor Sodii Silicatis .- Omitted.

Not official.

Liquor Sodii Phosphatis Compositus. Dose -8 Cc. (2 fluidrachms). Contains sodium phosphate 1000, sodium nitrate 40, citric acid 130, in water to 1000.

lithium citrate.

Official, 5 per cent. Lithii Citras Effervescens. Now 5 per cent. instead of 17 per cent. lithium citrate.

Not official.

Macis. - Omitted.

Not official.

Magnesii Citras Effervescens. - Omitted.

Official.

Magnesia Levis Magnesii Oxidum=0. N. Magnesia.

rosa. Official

Magnesia ponde- Magnesii Oxidum Ponderosum = 0. N. Magnesia Ponderosa.

tains sugar.

Similar, but con- Magnesii Sulphas Effervescens contains 50 per cent. magnesium sulphate granulated in the customary manner through a No. 6 tinned-iron sieve, and dried at not exceeding 54° C.

Not official.

Maltum. Grain of barley partially germinated arti ficially and then dried. Yields 70 per cent. extract. The acidity calculated as lactic acid should not exceed 0.3 per cent.

Not official.

Mangani Dioxidum Præcipitatum = O. N. Mangani Dioxidum.

Not official.

**Mangani Hypophosphis.** Mn  $(PH_2O_2)_2 + H_2O_2$ 97 per cent. pure. Dose. -0.2 Gm. (3 grains). Tests for carbonate, phosphate, calcium and arsenic are given.

Massa Copaiba. - Omitted.

Mel Depuratum = O.N. Mel Despumatum.

Melissa. - Omitted.

Menispermin. - Omitted.

Methylis Salicylas = 0.N. Methyl Salicylas.

Methylthioninæ Hydrochloridum. Methylene Obtained by action of hydrogen sulphide on an oxidation product of para-amido-dimethylaniline. Dose. - 0.25 Gm. (4 grains). Tests are given for commercial dye and other impurities and for arsenic.

Morphine Hydrochloridum = O.N. Morphine Hydrochloras. Dose. -0.015 Gm. (1 grain).

Morphinæ Sulphas. Dose. - As above.

Naphthalenum = O. N. Naphthalinum. Dose. - Not official. 0 125 Gm. (2 grains).

Nux Vomica. N.S. 1.25 per cent. Strychnine. Assay. - A weighed quantity in No. 60 powder is shaken with a mixture of E, Alc., Chl. and NH3. A measured equivalent quantity is decanted and shaken with repeated amounts of H. SO4. Chl. and Ammonia is added and Chl. drawn off. Chl. solution is evaporated, and residue dissolved in warm H2 SO4, and when cooled HNO3 is added, and the solution shaken with Chl. in the presence of excess of Soda. The Chl. solution is evaporated and the residue dissolved in N/10 H<sub>2</sub> SO<sub>4</sub>, and back-titrated with N/50 Potassium Hydroxide in usual manner, using Iodeosin as indicator the factor 0.0332 being employed to obtain percentage of Strychnine.

Oleatum Atropinæ. Atropine 2, in alcohol 2, Not official. oleic acid 50, and olive oil to 100.

Oleatum Cocainæ. 5 per cent. strength made Not official. similar to above.

Oleatum Hydrargyri. Now 25 per cent. instead of Made by precipi-20 per cent. Yellow Mercuric Oxide in oleic acid.

Not official. Official, but con-

tains no glycerin.

Not official.

Not official.

Not official.

Not official.

Official. 1-8 to grain.

Not official.

Not standardised, except in preparations.

tation from mercuric Chloride and soap.

Oleatum Zinci .- Omitted.

B. P. Comp. Notes.

Not official.

Not official.

Oleatum Quininæ. Quinine 25, oleic acid 75.

Made with oleic acid and olive Oleatum Veratrinæ. oil instead of oleic acid alone.

Is in Unguentum Zinci Oleatis.

Not official.

Oleum Amygdalæ Amaræ. Dose. - 0.03 Cc. (1) minim). N.S., 85 per cent. benzaldehyde with 2 to 4 per cent. hydrocyanic acid by weight.

From either. Dose.  $-\frac{1}{2}$  to 3 minims.

Oleum Anisi. Distilled from Anise or Star Anise. Dose.—0.2 Cc. (3 minims). Was from Anise only in 1890 U.S.P.

Not official.

Oleum Aurantii Corticis. From fresh peel of sweet orange. Dose—0.2 Cc. (3 minims). (Was from sweet or bitter orange).

Oleum Aurantii Florum .- Omitted.

Not official.

Oleum Bergamotta. Omitted.

Oleum Betulæ = O.N. Oleum Betulæ Volatile. Dose. -1 Cc. (15 minims).

for proportion with phosphoric acid. Dose .to 3 minims.

Approximate test Oleum Cajuputi. N.S., 55 per cent. cineol by volume. Assay method given. Dose. - 0.5 Cc. (8 minims).

gr. 0.910 to 0.920at 15.5°C.

Oleum Carui. Sp. Oleum Cari. Sp. gr. 0.905 to 0.915 at 25° C. Soluble in equal volume of alcohol, and in 3 to 10 volumes of 80 per cent. alcohol. Angle of rotation varies from + 70 to + 80° in 100 mm, tube at 25° C.

Oleum Caryophylli. N.S., 80 per cent. eugenol by

Eugenol content not specified.

Dose.  $-\frac{1}{2}$  to 3 minims.

volume. Assay method given.

Test given to ensure absence of more than 50 per cent. constituents other than Aldehydes. Sp. gr. lower than U.S.P.

Oleum Cinnamomi Dose.—0.05 Cc. (1 minim). N. S., 75 per cent. cinnamic aldehyde by volume. Sp. gr. 1.045 to 1.055 at 25° C.

Dose.-5 to 20 minims. Sp. gr. 0.900 to 0.910 at 15.5° C.

Oleum Copaibæ. Dose. - 0.5 Cc. (8 minims). Sp. gr. 0.895 to 0.905 at 25° C., increasing with age.

В, Р. Comp. Notes.

Not official.

Oleum Eucalypti. Dose. - 0 5 Cc. (8 minims). For Eucalyptus (dried) Leaves, E. Globulus is

Dose.  $-\frac{1}{2}$  to 3 minims.

From E. Globulus. Phosphoric acid test provides for due proportion of cineol.

Nitrite test also employed.

Oleum Fœniculi. Dose.—0.2 Cc. (3 minims). A Not official. volatile oil distilled from fennel. Sp. gr. 0.953 to 0.973 at 25° C. Soluble in an equal volume of alcohol, and in 10 volumes or less of 80 per cent. alcohol. Congealing point should not be below 5° C. (41° F.).

Oleum Erigerontis. Dose. -1 Cc. (15 minims).

specified, but the oil is distilled from "fresh euca-

lyptus leaves." N.S., 50 per cent. cineol by

volume. Nitrite test for excess of phellandrene.

Oleum Juniperi. Oil distilled from fruit of Juniperus Communis. Sp. gr. 0.860 to 0.880 at 25° C. Soluble in 10 volumes of 90 per cent. alcohol (was 0.850 at 15° C., and was soluble in about four times its volume of alcohol).

Sp. gr. 0.865 to 0.890 at 15.5° C. Soluble in4. times volume of a mixture of equal parts of absolute alcohol and alcohol 90 per cent.

Oleum Lavandulæ Florum. Volatile oil from Lavandula Officinalis Chaix Sp. gr. 0.880 to 0.892 at 25 °C. Soluble in three parts of 70 per cent. alcohol. Shaken with water in narrow graduated cylinder, volume of oil should not be diminished (absence of alcohol).

Sp. gr. not below 0.885 at 15.50 C. Solubility in alcohol the same.

Oleum Limonis. NS., 4 per cent of aldehyde by Rotation not less weight calculated as citral. Method of assay given. Sp. gr 0.851 to 0.855 at 25° C. Optical rotation not less than + 60° in 100 mm. tube at 25° C.

than + 59°.

Oleum Menthæ Piperitæ. N.S., 8 per cent. No assay process. menthyl acetate with 50 per cent. total menthol by weight. Assay processes given.

Oleum Myrciæ. - Omitted.

Not official.

Oleum Myristicæ. "Soluble in an equal volume of Evaporation test alcohol, and in 3 volumes of 90 per cent. alcohol." Angle of rotation between + 14° and +28° at 25°C. No crystallising residue on evaporation on water bath.

same as U.S.P.

Official 1 per Oleum Phosphoratum. - Omitted. cent.

No assay method. Oleum Pimentæ. N.S., 65 per cent. eugenol by volume. Assay process given.

to 22.2° C.

Congeals at 19:4 Oleum Rosæ congeals at between 18° and 22°C. Saponification value not less than 10 nor more than Assay process given.

given.

Tests for purity Oleum Rosmarini. N.S., 5 per cent. bornyl acetate by weight with total borneol 15 per cent. Assay method given.

Not official.

Distilled from fresh tops of savin. Oleum Sabinæ. Angle of rotation between  $+40^{\circ}$  and  $+60^{\circ}$ .

Oil of Sandal Wood. Tests for cedar wood oil and other varieties of sandal wood oil. Dose .- 5 to 30 minims.

Oleum Santali (Oil of Santal). N.S., 90 per cent. alcohols calculated as santalol by weight (process given). Angle of rotation (-) same as BP. Test for presence of chloroform given. Dose. -0.5 Cc. (8 minims).

Not official.

Oleum Sassafras. Dose. - 0.2 Cc. (3 minims).

In I.C. Add.

Oleum Sesami. - Omitted.

Official. Dose.

Oleum Sinapis Volatile. Dose. — 0.008 Cc. (\frac{1}{8}\text{ minim.}) To estimate, by process given, not less than 92 per cent. allyl-iso-thyocyanate.

Not official.

Oleum Thymi. N.S., 20 per cent. phenols by volume.

See opium.

Opii Pulvis now contains 12 to 12.5 per cent. crystallised morphine (assayed as given under opium q.v.) was 13 to 15 per cent.

grains.

Dose. - 1 to 2 Opium. In its normal moist condition to yield not less than 9 per cent. crystallised morphine (as 1890).

Method of assay amount of pure morphine ultition with H2 SO4.

Dose. -0.1 Gm.  $(1\frac{1}{2}$  grains). Assay.—Shake Opium, in small pieces if fresh, or if similar, but dry in very fine powder, with a volume of water during three hours. Filter, wash the marc, and repeat the anhydrous process with a further quantity of water. Evaporate the filtrate to a given weight, add alcohol, E., and NH, mately ascer- shake, and allow to stand six hours. Decant the ether tained by titra- through a double filter paper, then collect the crystals, N wash with morphinated alcohol, dry at not exceeding 10 60° C. and weigh. Then wash the crystals with lime water until they cease to give precipitate with mercuric potassium iodide solution. Dry, weigh, and deduct the weight of the insoluble residue from the weight of impure morphine first found—which gives the content of pure morphine.

Opium Deodoratum. Standard as Opii Pulvis. Now deodorised by petroleum benzin (was by ether). Dose. - 0.065 Gm. (1 grain).

Not official.

Opium Granulatum. - Standard same as Opii Pulvis. Prepared by drying at a temperature not exceeding 85° C. and reducing to No. 20 powder. Dose. - 0.065 Gm. (1 grain).

Not official.

Pancreatinum. N. S. Now of strength, -1 digests 25 starch. Dose.—0.5 Gm. (7½ grains).

Not official.

Paraffinum. Sp. Gr. 0.89 to 0.905 at 25° C. M.P. 51.6 to 57.2° C. Test for absence of stearic acid (with fuchsin).

Sp. Gr. 0.82 to 0.94 at 15.5°C, M.P. 54.4 to 57.2°C. Alcoholic solution should not redden litmus.

Pelletierinæ Tannas. Dose.—0.25 Gm. (4 grains). Not official. A mixture in varying proportions of the tannates of the alkaloids punicine, iso-punicine, methyl-punicine, and pseudo-punicine, obtained from Punica Granatum Linné. Soluble in 235 water, 12.6 alcohol, 300 E. at 25° C.

Pepsinum Saccharatum.—Omitted.

Not official.

Now includes petrolatum molle and Petrolatum. petrolatum spissum. M.P. 45° to 48° C.

Paraffinum Molle M.P. 35'5 to 38.9°C.

Petrolatum Album = White Petrolatum.

Paraffinum Molle (white).

Phenol = O.N. Acidum Carbolicum.

Acidum Carbolicum.

Phenol Liquefactum contains not less than 86.4 per cent. by weight of phenol, and about 13.6 per cent. by weight of water.

Water 9 per cent. approximately.

Phenylis Salicylas = 0.N. Salol.

Salol (official).

N.S. 0.15 per cent. ether-soluble No dose. Physostigma. alkaloids. Dose. - 0.1 Gm. (1 grains.)

No assay method.

Assay.—The drug in No. 60 powder is shaken with E, NaHCO3 solution added, and the mixture shaken at intervals during four hours. Decant half the E. originally taken and wash out with repeated quantities of H2SO4 and water. Shake out the combined acid liquids

with E twice in the presence of sufficient NaHCO3. Evaporate E solution and dissolve residue in a volume of

20 H2SO4 and a small quantity of E. Titrate the excess of acid with N/50 KOH, with indeesin as The factor 0.0273 is given as representing the amount in grammes of alkaloids (mostly physostigmine) required to neutralise 1 Cc. of N/10 H2SO4.

Not official.

Dose .- 0.001 Gm. Physostigminæ Salicylas. ( grain) - Tested for sulphate.

Not official.

Phytolacca. = O.N. Phytolacca Radix.

Not official.

Phytolaccæ Fructus. - Omitted.

Official.

Picrotoxinum. - Omitted.

Dose.  $-\frac{1}{100}$  to and grain,

Pilocarpinæ Hydrochloridum = O.N. Pilocarpinæ Not official. Hydrochloras.

given.

Identity test also Pilocarpinæ Nitras. Test for distinction from other alkaloids given.

Jaborandi. standardised. No dose.

Not Pilocarpus. N.S. 0.5 per cent. alkaloids. Dose.— 2 Gm. (30 grains).

Assay.—Percolate the drug in No. 60 powder with ammoniated chloroform. Shake the chloroformic solution of the alkaloids with H<sub>2</sub>SO<sub>4</sub> twice, and finally with H<sub>2</sub>O. The combined acid liquor is evaporated and the residue dissolved in a volume of N/10 H2SO4, and excess of acid titrated with N/50 KOH. The figure 0.2 is employed as representing the weight in grammes of the alkaloids (mainly pilocarpine) neutralising 1 Cc. of N/10 H<sub>2</sub>SO<sub>4</sub>.

Not official. Official

Pilulæ Antimonii Compositæ. - Omitted. Pilulæ Aloes et Asafætidæ. - Omitted.

Not official.

Pilulæ Laxativæ Compositæ. 100 pills contain aloin 1.3, strychnine 0.05, extract of belladonna leaves 0.8, Ipecacuanha 0.4, glycyrrhiza 4.6. syrup q.s.

valent.

No official equi- Pilulæ Podophylli, Belladonnæ et Capsici, 100 pills contain podophyllum resin 1.6 Gm., extract of belladonna leaves 0.8 Gm., capsicum 3.2 Gm., sugar of milk 6.5 Gm., acacia 1.6 Gm., glycerin and syrup q.s.

Not official.

Pilulæ Rhei .- Omitted.

Official.

Pix Burgundiea. - Omitted.

Official.

Plumbi Carbonas .- Omitted.

Potassa cum Calce. - Omitted.

Not official. Official.

Potassa Sulphurata. - Omitted.

Potassii Citras Effervescens now contains 20 Not official. per cent. instead of 48 per cent. potassium citrate.

Potassii Cyanidum. Dose. -0.01. Gm. ( grain.)

Not official except as test.

Potassii Dichromas = 0. N. Potassii Bichromas.

Official.

Potassii Ferrocyanidum, Dose, -0.5 Gm. (7) grains).

Not official except as test.

Potassii Hydroxidum = O. N. Potassa.

Official.

Pulsatilla.-Omitted.

Not official.

Pulvis Acetanilidi Composita. Acetanilde 70, caffeine 10, sodium bicarbonate 20. Dose. - 0.5 Gm. (71 grains).

Not official.

Pulvis Antimonialis. - Omitted.

Official.

Pyroxylinum consists chiefly of cellulose tetranitrate [C<sub>12</sub>H<sub>16</sub>(ONO<sub>2</sub>)<sub>4</sub>O<sub>6</sub>]. Quantities for making now omitted.

Quantities given.

Quercus. = 0.N. Quercus Alba.

Not official.

Quinidinæ Sulphas. - Omitted.

Not official.

Quininæ Hydrobromidum. = O.N. Quininæ Hydrobromas.

Not official.

Quininæ Hydrochloridum. = O.N. Quininæ Hydrochloras. Dose. - 0.25 Gm. (4 grains).

Official. 1 to 10 grains.

**Quininæ Salicylas.**  $2C_{20}H_{24}N_2O_2.C_7H_6O_3 + H_2O.$ Soluble in 77 water, 11 alcohol, 110 E, 37 chl., and 16 glycerin at 25° C.

Not official.

Quininæ Valerianas.-Omitted.

Resinæ Copaibæ-Omitted.

Not official. Official.

Resina Podophylli. Dose .-

Purgative 0.015 Gm. (4 grain). Laxative 0.005 Gm.  $(\frac{1}{10}$  grain.) Official. Dose. -4 to 1 grain.

Resorcinol = 0 N. Resorcinum, Dose 0.125 Gm. (2 grains).

Not official.

Rhus Toxicodendron. - Omitted.

Not official.

Rosa Centifolia. - Omitted.

Not official. Not official.

Rubus Idæus. - Omitted.

Rumex-Omitted.

Not official. Not official.

Sabal. Dose-1 Gm. (15 grains). Partially dried fruit of Serenoa Serrulata (Roemer and Shultes) Hooker filius (Fam, Palmæ). This fruit is the Saw Palmetto.

Official.

Sambucus. - Omitted.

Not official.

Safrolum. The methylene-ether of allyl pyrocatechol  $[C_6H_3.C_3H_5. (OOCH_2) 1:3:4]$  from oil of sassafras, camphor oil and others, purified if necessary. Sp. gr. 1.105 to 1.106 at 25°C. Optically inactive. Soluble in equal volume of strong alcohol, and in about 30 of 70 per cent alcohol.

Not official.

Scopola. Dried Rhizome of Scopola Carniolica, Jacquin. Containing not less than 0.5 per cent. of its alkaloids. The assay of the rhizome is identical with that for belladonna leaves.

Dose.  $-\frac{1}{200}$ 100 grain.

to Scopolaminæ Hydrobromidum. HBr.C17H21 NO<sub>4</sub>+3H<sub>2</sub>O from solanaceous plants, Chemically identical with hyoscine hydrobromide. Dose.— 0.0005 Gm. (128 grain).

Not official.

Serum Antidiphthericum. Fluid from the coagulated blood of a horse (Equus Caballus, Linné) immunised by diphtheritic toxin. The standard of strength in units of antitoxic power is controlled by U.S. Public Health and Marine Hospital Service. Dose. -3,000 units. Immunising dose for well persons, 500 units.

Official. Dose.— 1 to 1 grain.

Sodii Arsenas Exsiccatus. 98 per cent. pure anhydrous di-sodium-ortho-arsenate [AsO(OH) (ONa)<sub>2</sub>]. Dose.—0.003 Gm.  $(\frac{1}{2.0}$  grain). Tests for arsenite, lead, copper, iron, &c , provided.

Official.

Sodii Carbonas. - Omitted.

Official.

Sodii Carbonas Exsiccatus.—Omitted.

Not official.

Sodii Carbonas Monohydratus. To contain not less than 85 per cent. pure anhydrous sodium carbonate corresponding to 99.5 per cent. crystallised monohydrated salt Na<sub>2</sub>CO<sub>3</sub> + H<sub>2</sub>O.

Not official.

Sodii Citras. 2 Na<sub>3</sub>C<sub>6</sub>H<sub>5</sub>O<sub>7</sub>+11 H<sub>2</sub>O. To contain not less than 97 per cent, pure sodium citrate. Soluble in 1.1 water at 25° C. Tested for carbonate and heavy metals,

as test.

Not official except Sodii Hydroxidum = O.N. Soda.

Official.

Sodii Phenolsulphonas = O.N. Sodii Sulphocarbolas.

mately same strength.

Official. Approxi- Sodii Phosphas Effervescens. 20 per cent. exsiccated sodium phosphate.

Not official.

Sodii Phosphas Exsiccatus. 99 per cent. pure:

В. Р. Comp. Notes.

Not official except as test.

Sodii Thiosulphas = 0.N. Sodii Hyposulphis.

Spiritus Aurantii. - Omitted.

Spiritus Frumenti may contain 37 to 47.5 per cent. Not official. by weight instead of 44 to 50 per cent. absolute alcohol by weight.

Spiritus Glycerylis Nitratis = O.N. Spiritus Liquor Trinitrini Glonoini. Dose. - 0.05 Cc. (1 minim). 1 per cent. Dose.—2 minims.

Spiritus Limonis. - Omitted.

Spiritus Myrciæ. - Omitted.

Spiritus Myristica. - Omitted.

Spiritus Phosphori. - Omitted.

Stramonium. = O.N. Stramonii Folia. N.S. 0.35 per Official. cent, mydriatic alkaloids. The method of assay of the leaves is identical with that for belladonna leaves.

Stramonii Semina .- Omitted.

Strontii Lactas .- Omitted.

Strontii Salicylas. To contain not less than 98.5 Not official. per cent. pure strontium salicylate, Sr(C<sub>7</sub>H<sub>5</sub>O<sub>3</sub>)<sub>2</sub> +2H<sub>2</sub>O. Soluble 1 in 18 water, and 66 alcohol at 25° C. Dose. -1 Gm. (15 grains). Tests for limit of barium and for heavy metals.

Strophanthinum. A glucoside or mixture of several Not official. obtained from strophanthus. M.P. 1900 C., but begins to fuse at 170° C. Dose. - 0.0003 Gm.  $(\frac{1}{200} \text{ grain}).$ 

Strychninæ Nitras. Limit test for brucine given. Not official.

**Sulphonethylmethanum**  $[(CH_3)(C_2H_5)C(SO_2C_2)]$  Not official. H<sub>5</sub>)<sub>2</sub> (Trional). An oxidation product of mercaptol made by the condensation of mcthylethylketone with ethylmercaptan. Soluble 1 in 195 water at 25°C. Tests for sulphates, chlorides, and oxidisable organic impurit es.

Sulphonmethanum (Sulphonal). [(CH<sub>3</sub>)<sub>2</sub> C Official. (SO<sub>2</sub> C<sub>2</sub> H<sub>5</sub>)<sub>2</sub>]. The product of oxidation of the Dose.—10 to 30 mercaptol, obtained by condensation of acetone with ethyl mercaptan. Soluble in 360 water, 47 alcohol, 16 chl. Tests similar to those for trional. Dose.—1 Gm. (15 grains).

Not official.

Official.

Not official.

Official.

Not official.

grains.

May be any weight. Mass contains 70 per cent. glycerin.

May be any Suppositoria Glycerini. Contain 3 Gm., were 6 weight. Mass Gm. Mass contains 80 per cent. approx.

Not official.

Syrupus Acidi Hydriodici. Now made 1 per cent. HI by mixing diluted hydriodic acid 100 with water 300 and syrup 600 (was by decomposition of KI with tartaric acid).

Not official,

Syrupus Allii.—Omitted.
Syrupus Althew.—Omitted.

Not official.

Syrupus Amygdalæ. Method of making altered. Now Spirit of Bitter Almonds 10, with orange flower water 100, and syrup to 1000.

Official 10 per cent.

Syrupus Ferri Iodidi. Now 5 per cent., was 10 per cent. ferrous iodide.

Not official,

Syrupus Hypophosphitum cum Ferro.-Omitted.

Not official.

Ferric and manganese hypophosphites and sodium citrate are firstly dissolved in water. Then the calcium, potassium and sodium hypophosphites are dissolved in a further quantity of water with the diluted hypophosphorous acid. The quinine and strychnine with a little hypophosphorous acid are then dissolved. Finally the sugar in the mixed solutions. Dose.—8 Cc. (2 fluidrachms).

Not official.

Syrupus Rubi Idai.—Omitted.

Tabacum.—Omitted.

Not official.

Talcum. Native hydrous magnesium silicate.

Not official.

Talcum Purificatum. The above purified by aid of hydrochloric acid. Tested for iron and limit of soluble substances.

Not official.

Tanacetum. - Omitted.

Not. official,

Thymolis Iodidum. Dithymol-diiodide. [(C<sub>6</sub>H<sub>2</sub>. CH<sub>3</sub>.C<sub>3</sub>H<sub>7</sub>.OI)<sub>2</sub>]. From 2 molecules of thymol with 2 atoms of iodine in the phenolic groups; contains 45 per cent. iodine. Tested for iodides alkalics, free iodine and limit of ash.

Not standardised. Strength 1 in 20.

Tinctura Aconiti. Now 1 in 10, was 1 in 2.85 N.S. 0.045 Gm. aconitine in 100 Cc.

Not official.

Tinctura Arnicæ = O.N. Tinctura Arnicæ Florum.

Official.

Tinctura Arnicæ Radicis-Omitted.

Not official.

Tinctura Aurantii Dulcis. Now 1 in 2, was 1 in 5.

Tinctura Belladonnæ Foliorum. Now 1 in 10, Not official. was 1 in 6.67. N.S. 0.035 Gm. mydriatic alkaloids in 100 Cc.

Tinctura Benzoini Composita. Now 1 in 10, Official, 1 in 10. was 1 in 8.33 benzoin.

Tinctura Bryonia. - Omitted.

Not official.

Tinetura Calumbæ. Now 1 in 5, was 1 in 10.

Official, 1 in 10

Tinetura Cannabis Indicæ. Now 1 in 10, was 1 Official. 1 in 20. in 6.67.

Tinetura Cantharidis. Now 1 in 10, was 1 in 20 Official. 1 in 80. cantharides.

Tinetura Capsici. Now 1 in 10, was 1 in 20.

Official. 1 in 20.

Tinctura Cardamomi. Now 1 in 5; was 1 in 10 Not official. cardamom.

Tinctura Catechu Composita,-Omitted.

Tinctura Catechu equivalent.

Tinctura Chirata. - Omitted.

Official.

Tinctura Cinchonæ. To contain 0.75 per cent. ether- Official soluble cinchona alkaloids.

Standardised to 1 per cent.

Tinctura Cinnamomi. Now Saigon Cinnamon 1 in Official. Ceylon 5; was 1 in 10.

Cinnamon 1 in 5.

Tinctura Colchici Seminis. Now 1 in 10; was 1 in 6.67. N.S. 0.05 Gm colchicine in 100 Cc.

Official. 1 in 5. Not standardised.

Tinctura Croci. - Omitted.

Official.

Tinctura Cubeba. - Omitted.

Official.

Tinctura Digitalis. Now 1 in 10; was 1 in 6.67.

Official 1 in 8.

Tinctura Ferri Chloridi. Now 13.28 per cent. by weight instead of 13.6 per cent. anhydrous ferric chloride.

16.3 Gm, in 100 Cc. approx. FeCl<sub>3</sub>.

Tinctura Gambir Composita. Now 1 in 20; was 1 in 10 of catechu.

Tinctura Catechu, official equivalent.

Tinctura Gelsemii. Now 1 in 10; was 1 in 6.67.

Official. 1 in 10.

Tinctura Herbarum Recentum - Omitted.

Not official.

Tinctura Humuli, -Omitted.

Official.

Tinctura Hydrastis. N.S. 0.4 Gm. hydrastine in Official 1 in 10. 100 Cc.

Not standardised.

1 in 10. Not standardised.

Official, 1 in 10.

Official. 1 in 4.

Tinct. Lobelia Ætherea 1 in 5.

Not official.

0.24 to 0.26 per cent. strychnine.

Dose. - 5 to 15 min ms.

cent. morphine. Dose. - 5 to 15 minims repeated. Single. 20 to 30 minims.

Not official.

Not official.

Official, 1 in 10. Not official.

Not official.

Not official.

Official. 1 in 5. Official. 1 in 5.

Not official.

1 in 5 (Leaves). Dose.—5 to 15 minims.

Not standardised.

1 in 40. Dose.— 5 to 15 minims.

Official 1 in 10.

Tinetura Hyoseyami. Now 1 in 10; was 1 in 6.67. N.S. 0.007 Gm. mydriatic alkaloids in 100 Cc.

Tinctura Kino. Now 1 in 20; was 1 in 10.

Tinctura Limonis Corticis. 50 per cent. strength by maceration in alcohol.

Tinctura Lobeliæ. Now 1 in 10; was 1 in 5.

Tinctura Matico. - Omitted.

Tinctura Nucis Vomicæ. Now 0.1 Gm. strychnine in 100 Cc.; was 0.3 Gm. total alkaloids in 100 Cc. Dose. - 0.6 Cc. (10 minims).

0.7 to 0.8 per Tinctura Opii. Now 1.2 to 1.25 Gm.; was 1.3 to 1.5 Gm. morphine (cryst.) in 100 Cc. Dose. -0.5 Cc. (8 minims).

> Tinctura Opii Deodorati. Now 1.2 to 1.25 Gm. : was 1.3 to 1.5 Gm. morphine (cryst.) in 100 Cc. Dose. — As above.

> Tinctura Physostigmatis. Now 1 in 10; was 1 in 6.67. N.S. 0.014 Gm. ether-soluble alkaloids in 100 Cc. Dose. -1 Cc. (15 minims).

Tinctura Quassiæ. Now 1 in 5; was 1 in 10

Tinctura Rhei. Now 1 in 5; was 1 in 10.

Tinctura Rhei Dulcis, - Omitted.

Tinctura Sanguinariæ. Now 1 in 10; was 1 in 6.67.

Tinctura Scillæ Now 1 in 10; was 1 in 6.67.

Tinctura Serpentariæ. Now 1 in 5; was 1 in 10.

Tinctura Stramonii Seminis. - Omitted.

Tinctura Stramonii (Leaves). Replaces Tinctura Stramonii Seminis 1890. 1 in 10. N.S. 0.03 Gm. mydriatic alkaloids in 100 Cc. There is a slight confusion on p. lxxv. Tinctura Stramonii Seminis (1890), 1 in 6.67, is compared with this tincture. Dose. - 0.5 Cc. (8 minims).

Tinctura Stropbanthi. Now 1 in 10; was 1 in 20. Dose.—0.5 Cc. (8 minims).

Tinctura Sumbul. - Omitted.

Tinetura Tolutana Now 1 in 5; was 1 in 10.

Official 1 in 10.

Tinctura Veratri = O.N. Tinctura Veratri Viridis. Not official. Now 1 in 10; was 1 in 2.5.

Trochisci Catechu. - Omitted.

Official. 1 grain in each.

Trochisci Cretæ. - Omitted.

Not official.

Now contain 0.125 Gm., Not official. Trochisci Cubebæ. instead of 0.25 Gm. oleoresin in each.

Trochisci Ferri.—Omitted.

Not official.

Trochisci Gambir. To replace Trochisci Catechu Represented in the 1890 Pharmacopæia. Contain 6 per cent, of Gambir, with sugar, tragacanth and stronger orange flower water.

Trochisci Catechu.

Trochisci Ipecacuanha. - Omitted.

Official. 4 grain in each.

Trochisci Menthæ Piperitæ. - Omitted.

Not official.

Trochisci Morphinæ et Ipecacuunhæ.-Omitted.

Official. Morphine 1 Ipecac. 1 grain.

Trochisci Zingiberis. — Omitted.

Not official.

Unguentum Acidi Borici. Boric acid 10, paraf- Official. Boric fin 10, white petrolatum 80,

acid 1, hard paraffin 2.7. soft paraffin 6 3.

Unguentum Chrysarobini is now 6 per cent. in- Official. 1 in 25. stead of 5 per cent.

Unguentum Hydrargyri Dilutum. Mercurial Not official. ointment 67, petrolatum 33.

Unguentum Phenolis = O.N. Unquentum Acidi Official 4 per cent. Carbolici. Now about 3 per cent. instead of 5 per cent.

Unquentum Plumbi Carbonatis.—Omitted.

Official 10 per cent

Unguentum Plumbi Iodidi.—Omitted.

Official 10 per cent.

Unguentum Stramonii (Leaves). Extract of stramonium rubbed smooth with diluted alcohol and hydrous wool fat, and benzoinated lard added.

Not official,

Unguentum Strumonii (Seed) .- Omitted.

Not official.

Unguentum Sulphuris. 15 per cent. instead of 30 Official 10 per per cent. of washed sulphur.

cent.

Not official. Unguentum Zinci Stearatis. Zinc stearate and white petrolatum equal parts.

Not official. **Vanillin**. Methylprotocatechuic aldehyde. Soluble in 100 parts of water at 25° C. M. Pt. 80° to 81° C. Occurring naturally in Vanilla—the cured full grown, but immature fruit of *Vanilla planifolia* (Andrews).

Not official. Veratrum = O.N. Veratrum Viride.

Not official. Vinum Album and Vinum Rubrum. May contain 7 to 12 per cent. absolute alcohol instead of 10 to 14 per cent.

Not official. Vinum Cocæ. Fluidextract 65, alcohol 75, sugar 65, red wine to 1000.

Official 1 in 5. Vinum Colchici Radicis. - Omitted.

Not official. Vinum Colchici Seminis. Now 1 Cc. of fluidextract in 10 Cc., instead of 1 Gm. of seed in 6.67.

Not official. Vitellus. - Omitted.

Formula gives

1 H<sub>2</sub>O.

Not official. Vinum Ergotæ. Alteration as Vinum Colchici.

Official. Vinum Ferri. = O.N. Vinum Ferri Citratis.

Official.

No dose. Tests
similar.

Zinci Phenolsulphonas. Zn (C<sub>6</sub>H<sub>5</sub>O<sub>4</sub>S)<sub>2</sub>+8H<sub>2</sub>O.
Contains in uneffloresced cristals 99.5 per cent.
Zinc paraphenolsulphonate.

Soluble 1 in 1.7 of water or alcohol at 25° C. Loses 6 molecules of water on heating to 100° C., and the remainder at 125° C. A time limit test for arsenic, cadmium, lead, and copper is employed, and absence of sulphates and chlorides, and modified Gutzert's test for arsenic also given. Dose.—0.125 Gm. (2 grains).

Not official. Zinci Phosphidum .- Omitted.

Not official. Zinci Stearas may contain a small but varying proportion of palmitate. Leaves on heating about 15.5 per cent. residue, consisting chiefly of zinc oxide.

1 to 3 grains Zinci Valeras = O.N. Zinci Valerianas. Dose. — 0.125 Gm. (2 grains).

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