

and divide this product by the weight of strontium arsenite taken. The quotient represents the percentage of absolute strontium arsenite.

### THUJA.

#### ARBOR VITAE.

Yellow Cedar. Fine White Cedar. Tree of Life. Feather-leaf Cedar.

The recently dried young twigs of *Thuja occidentalis* Linné. (Fam. *Pinaceae*).

Twigs leafy, fan-shaped, flattened, bearing the scale-like leaves appressed in four rows; leaves of the edges boat-shaped, the intermediate flat, those at the tips of the twigs very broad, the lower elongated, all bearing conspicuous glands on the back. Odor strongly balsamic, aromatic and pungent, taste camphoraceous, terebinthinate and bitter.

Upon incineration Thuja yields about 7 per cent of ash.

### PINUS ALBA CORTEX.

#### WHITE PINE BARK.

#### Pine Bark.

The dried inner bark of *Pinus Strobus* Linné. (Fam. *Pinaceae*).

In flat pieces of very variable size and about 1 to 3 mm. thick; outer surface varying from a pale pinkish white, when fresh, to a light or rather deep yellowish brown, according to freshness, occasionally with small patches of the gray-brown periderm adhering, more or less fuzzy, and often showing small scattered pits, inner surface either lighter or darker than the outer, finely striate; fracture tough-fibrous, transverse section an outer yellowish and an inner whitish band. Odor slight, terebinthinate. Taste slightly mucilaginous, bitter-sweet and astringent.

Upon incineration White Pine Bark should yield not more than 2 per cent of ash.

### ZINCI DIOXIDUM.

#### ZINC DIOXIDE.

#### Zinc Peroxide.

A partly hydrated form of zinc dioxide ( $ZnO_2$ ) containing not less than 45 per cent of pure zinc dioxide, when estimated by the method given below.

A heavy yellowish powder, stable in dry air; almost insoluble in water and readily soluble in diluted acids with the formation of hydrogen dioxide.

A solution of 0.1 Gm. of zinc dioxide in 5 Cc. of diluted hydrochloric acid, rendered

slightly alkaline with ammonia water and reacidulated with acetic acid, yields a voluminous precipitate upon the passage of hydrogen sulphide through the mixture.

#### QUANTITATIVE ESTIMATION OF ZINC DIOXIDE.

Agitate a weighed quantity, about 0.4 Gm. of zinc dioxide with 25 Cc. of water and to effect the solution of the substance add 25 Cc. of diluted sulphuric acid (1 in 5). Then add gradually tenth-normal potassium permanganate V. S. from a burette, until a permanent pink color remains after agitation. Multiply the number of Cc. of the tenth-normal potassium permanganate V. S. consumed, by 0.004833, and divide this product by the weight of the zinc dioxide taken; the result multiplied by 100 represents the percentage of pure zinc dioxide present.

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### COMMITTEE ON NATIONAL FORMULARY.

The following is the fifth installment of some of the new formulas that have been suggested for inclusion in the forthcoming edition of the National Formulary. The Committee is desirous of having them thoroughly tried by pharmacists in different sections of the country so as to avoid as much as possible unfavorable comment after the final publication of the book. Comments and criticisms based on practical experiences will be welcome. All communications should be addressed to the Chairman of the Committee,

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who will submit the comments to the Subcommittee having the matter in charge.

#### FLUIDEXTRACTUM BAPTISIAE.

#### Fluidextract of Baptisia.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....3 volumes  
Water .....1 volume

#### FLUIDEXTRACTUM CHIONANTHI.

#### Fluidextract of Chionanthus.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....3 volumes  
Water .....1 volume

FLUIDEXTRACTUM COCILLANAE.

Fluidextract of Cocillana.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....3 volumes  
Water .....1 volume

FLUIDEXTRACTUM CONDURANGO.

Fluidextract of Condurango.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Diluted Alcohol.

FLUIDEXTRACTUM DIOSCOREAE.

Fluidextract of Dioscorea.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....4 volumes  
Water .....1 volume

FLUIDEXTRACTUM DROSERAE.

Fluidextract of Drosera.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....2 volumes  
Water .....1 volume

FLUIDEXTRACTUM ECHINACEAE.

Fluidextract of Echinacea.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....4 volumes  
Water .....1 volume

FLUIDEXTRACTUM EUPHORBIAE PILULIFERAE.

Fluidextract of Euphorbia Pilulifera.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Diluted Alcohol.

FLUIDEXTRACTUM HELIONIATIS.

Fluidextract of Helonias.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Diluted Alcohol.

FLUIDEXTRACTUM NEPETAE.

Fluidextract of Nepeta.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....3 volumes  
Water .....4 volumes

FLUIDEXTRACTUM RHAMNI CATHARTICI.

Fluidextractum Rhamnus Catharticus.

Reserve the first 750 Cc. and then proceed as in Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Diluted Alcohol.

FLUIDEXTRACTUM SENECTIONIS.

Fluidextract of Senecio.

Process A (see N. F. III, p. 56), No. 40 powder.

Menstruum: Alcohol .....2 volumes  
Water .....1 volume

FLUIDEXTRACTUM TRIFOLII.

Fluidextract of Trifolium.

Reserve the first 800 Cc. and then proceed as in Process A (see N. F. III, p. 56), No. 30 powder.

Menstruum: Diluted Alcohol.

FLUIDGLYCERATES.

Fluidglycerates are intended to be of the same strength as fluidextracts. They contain approximately 50 percent. by volume of glycerin and no alcohol. The drug should be in a No. 20 or 30 powder unless otherwise directed. For drugs that do not require either acid or alkaline menstruum they may be prepared by the following outlined process:

GENERAL PROCESS.

Drug, in coarse powder.....1000 Gm.  
Glycerin ..... 500 Cc.  
Water .....1500 Cc.  
Chloroform Water, a sufficient  
quantity to make.....1000 Cc.

Mix the Glycerin and Water and moisten the drug thoroughly with a portion of the mixture, then *pack it very lightly* in a cylindrical percolator, and add enough of the menstruum to saturate the powder and leave a stratum above it. When the liquid begins to drop from the percolator, close the lower orifice, and having closely covered the percolator, macerate for 48 hours. Then allow the percolation to proceed slowly until the drug is exhausted, using first the remainder of the menstruum and afterward Chloroform Water. Reserve the first 500 Cc. of percolate and evaporate the remainder on a water bath, the weaker portion first, then the stronger until it is reduced to 600 Cc., then add the reserved portion and continue the evaporation until the product measures 1000 Cc. Allow the preparation to stand for a few days, then decant the clear portion and strain the remainder.

## FLUIDGLYCERATUM GLYCYRRHIZAE.

Fluidglycerate of Glycyrrhiza—Fluidglycerate of Licorice.

Glycyrrhiza, Russian, in No. 20  
powder .....1000 Gm.  
Ammonia Water..... 60 Cc.

Mix 50 Cc. of the Ammonia Water with 600 Cc. of the Glycerin Water menstruum, moisten the ground drug with the mixture and complete the preparation by following the General Process for Fluidglycerates, excepting that the mixed percolates are to be evaporated to 990 Cc. and the remaining 10 Cc. Ammonia Water added to the cold product.

## FLUIDGLYCERATUM KRAMERIAE.

Fluidglycerate of Krameria.

Krameria, in No. 20 powder...1000 Gm.  
To make...1000 Cc.

Follow the General Process for Fluidglycerates, using 600 Cc. of menstruum to moisten the ground drug.

## FLUIDGLYCERATUM RHAMNI PURSHIANAE.

Fluidglycerate of Cascara Sagrada.

Cascara Sagrada, in No. 20  
powder .....1000 Gm.  
To make...1000 Cc.

Follow the General Process for Fluidglycerates, using 500 Cc. of menstruum to moisten the ground drug.

## FLUIDGLYCERATUM RHAMNI PURSHIANAE

## AROMATICUM.

Aromatic Fluidglycerate of Cascara Sagrada.

Cascara Sagrada, in No. 20  
powder ..... 750 Gm.  
Fluidglycerate of Glycyrrhiza.. 250 Cc.  
Lime ..... 38 Gm.  
Glycerin ..... 375 Cc.  
Water .....2625 Cc.  
Oil of Fennel..... 1 Cc.  
Oil of Cloves..... 1 Cc.  
Oil of Cassia..... 1 Cc.  
Chloroform Water, a sufficient  
quantity to make.....1000 Cc.

Mix the Lime with 1500 Cc. of Water and stir in the Cascara Sagrada, moistening the drug evenly and thoroughly. Dry the moist powder by exposure to a moderate heat until

air-dry. Mix the glycerin with 1125 Cc. of Water and moisten the Cascara Sagrada with 600 Cc. of this menstruum, *pack it lightly* in a cylindrical percolator and add enough of the menstruum to saturate the powder and leave a stratum above it. When the liquid begins to drop from the percolator, close the lower orifice, and having covered the percolator macerate the mixture for 48 hours. Then allow the percolation to proceed slowly until the drug is exhausted, using first the remainder of the menstruum and afterwards Chloroform Water. Reserve the first 375 Cc. of the percolate and evaporate the remainder on a water bath, the weaker portion first, then the stronger, until it is reduced to 450 Cc., then add the reserved portion and continue the evaporation until the liquid measures 747 Cc. When cold add the Fluidglycerate and the volatile oils and mix thoroughly. Allow the preparation to stand for a few days, then decant the clear portion and strain the remainder.

## FLUIDGLYCERATUM RHEI.

Fluidglycerate of Rhubarb.

Rhubarb, in No. 30 powder....1000 Gm.  
To make...1000 Cc.

Follow the General Process for Fluidglycerates, using 500 Cc. of menstruum to moisten the ground drug.

## SYRUPUS IODOTANNICUS.

Syrup of Iodo-tannin.

Iodine ..... 2.7 Gm.  
Tannic Acid..... 5.4 Gm.  
Sugar ..... 800.0 Gm.  
Distilled Water, a sufficient  
quantity to make.....1000.0 Cc.

Reduce the iodine to a powder and introduce it into a flask with the Tannic Acid and 450 Cc. of Distilled Water and then heat the mixture on a water bath, at a temperature not exceeding 50° C., agitating the flask from time to time until a drop of the liquid ceases to give a blue coloration with Starch T. S. Then add the Sugar and when this is dissolved remove the flask from the water bath, allow the Syrup to cool and finally add enough Distilled Water to make the product measure 1000 Cc.