

Pharmaceutical Notes.

POWDERED CAMPHOR.—W. Schmidt, of New York, has been granted a patent for a process of pulverizing camphor. The process consists of dissolving crude camphor in a benzine whose boiling point is not higher than 80° C., the solution is allowed to stand in order to settle; the supernatant liquid drawn off and transferred to a distilling apparatus, by which the major portion of the benzine is distilled off. The residuary liquid, on cooling, deposits camphor in the form of an extremely fine powder, which is filtered off and dried. The article thus obtained is of considerable importance to the prescriptionist, as it saves him a good deal of time in compounding prescriptions in whose composition it is an ingredient.—*National Druggist*.

QUICK METHOD OF MAKING MERCURIAL OINTMENT.—Ettore Barbi gives in *Il Farmacista Italiano* a formula by which he says a 1 in 2 ointment can soon be made. A few grammes of decoction of saponaria root are put into a strong jar or bottle; 500 grammes of mercury are added, and the whole shaken until the globules of the metal are no longer visible. The emulsified mercury is poured into a mortar containing 400 grammes of lard and 100 grammes of white wax melted together, and, on triturating, the metal is soon taken up, and a smooth and perfect ointment results.—*Pharmaceutical Journal*.

DIACHYLON OINTMENT.—The following method of preparing the above substance is recommended by Max Denhardt, *Pharmaceutische Zeitung*: Place, in a suitable vessel, 100 parts of freshly rendered lard, a like quantity of olive oil and 90 parts of prepared oxide of lead; and, after adding a sufficient quantity of water, heat the whole until saponification shall have been effected. This done, beat the hot mass so obtained with a spatula until it has thoroughly cooled. Diachylon ointment, thus prepared, is of a uniform white color, and, moreover, keeps for an indefinite period.

A SOLVENT CAPABLE OF SEPARATING CODEINE FROM MORPHINE.—L. Fouquet (*Jour. de Pharm. et de Chim.* [6], 5, 49) has found that morphine is insoluble in anisole in the cold, and only slightly soluble at the boiling temperature. Codeine, on the contrary, is soluble in the same solvent cold, and its solubility rapidly rises with the temperature according to the following:

Temperature.	Morphine.	Codeine.
0°....	Insoluble.	7.50 per 100, by weight.
16°....	"	15.28 " "
32°....	"	" "
100°....	0.05 per 100	164.00 " "
150°....	4.50 " "	" "

These investigations were made with a very pure anisole, boiling at 150° C., and having a specific gravity of 0.991.

Morphine was found to crystallize in beautiful, colorless, anhydrous prisms by chilling the solution made in boiling anisole; these crystals did not melt at 120°, like the hydrated morphine, but became brown at 210°, and were converted into an oily black liquid at 247°.

It should be noted that the solubility of the codeine is increased by crystallization from anisole; since after one crystallization the alkaloid dissolves in the proportion of 10.75 parts per 100 at the temperature of 0°, whereas the proportion is only 7.80 per 100 at 9° with the codeine of commerce.

The author concluded that he could, with anisole, effect a separation of the two alkaloids when mixed, and to establish this he made a mixture of 1.044 grammes codeine and 0.710 grammes of morphine; he exhausted this with 20 c.c. of anisole at 15°, and washed the residue with 10 c.c. more of the solvent poured on the filter; after drying he found the residual morphine to weigh 0.702 grammes, corresponding to a loss of a little over 1 per cent. From these results he concluded that anisole is applicable in many ways as a laboratory solvent in toxicological investigations.—*American Journal of Pharmacy*.

ESTIMATION OF IODOFORM IN GAUZE.—Dr. Schacherl (*Zeitschr. Oester. Apoth. Verein.*) proposes the following method, which consists in decomposing the iodoform by means of sodium ethylate in a pressure flask and then estimating the liberated iodine (as KI), after Volhard's method. As pressure flask, the author employed a strong flask, the outer edge of the neck of which had been ground off perfectly level; over this a piece of rubber is placed, held in position by means of a piece of plate glass clamped on securely by means of an iron frame, which fits over the entire bottle.

Of the sample of gauze 1 to 1.5 gm. (30 to 50%), or 2 to 2.5 gm. (10 to 20%), are weighed off in the flask; over this is poured a cold solution of about 0.5 gm. of metallic sodium in 30 gm. of absolute alcohol, the flask is securely sealed and heated for one-half hour in a water bath. After cooling, the brown alcoholic fluid is decanted off and the gauze washed several times by decantation with distilled water. The mixed fluids are heated to drive off the excess of alcohol and evaporated to low bulk. The fluid is then acidified with pure nitric acid (free from nitrous) and filtered into a 200 c.c. flask; to this an accurately measured volume of $\frac{N}{10}$ volumetric solution of silver nitrate (30 c.c.) is added and water added up to the 200 c.c. mark. The mixture is well shaken and filtered into a dry vessel, 100 c.c. are drawn off, transferred to a flask, about 2 c.c. of a saturated solution of ferric chloride (free from Cl.) added, and then $\frac{N}{10}$ volumetric solution of ammonium sulfocyanide added until a permanent brownish coloration is produced. The number of cubic centimetres of the sulfocyanide solution

used, multiplied by 2, is subtracted from the volume of the silver solution used, the difference gives the quantity of silver solution taken up by the iodine. Each cubic centimetre of the silver solution corresponds to 0.013086 gm. of iodoform.

Metallic sodium is employed here in producing sodium alcoholate, in order to avoid introducing traces of chlorine, as would be the case in using caustic soda.

Another portion of the sample (weighed) is extracted with alcohol in a Soxhlet's extractor, then dried at 100° C., and weighed. On adding the percentages of iodoform and gauze, and subtracting this from 100, the percentage of glycerin present is estimated.—*Era*.

PURIFIED WATER FOR HYPODERMIC SOLUTION.—Water free from organic matter, and which will prevent the growth of fungi when holding alkaloids in solution, may be made as follows: Take of boiling hydrant water one gallon, to which add $\frac{3}{8}$ grain of potassium permanganate which has been dissolved in one ounce of water; mix well, allow to stand one hour, and, if the water loses the light pink color, add another portion of potassium permanganate, and in this manner continue until it retains a delicate tint from the salt. Then add 5 grains of alum, shake until dissolved, and allow to stand until the precipitate subsides, and until the tint from the permanganate has disappeared. The process is hastened by frequent shaking. Filter three times through a double thickness of white filter paper, which has previously been scalded, to render it sterile.

The process should be conducted in well closed glass containers, and during filtration the funnels should be covered with well-fitting rubber covers of the kind known as "sanitary covers." The finished product should be kept in absolutely clean, well stoppered bottles, and before using the lip of the bottle should be carefully freed from dust, and every care should be exercised to keep it clean and sterile. Water prepared as per above directions has been kept sterile for as long as six months; it, moreover, causes no abscesses where proper attention has been given to the syringe used in making an hypodermic injection.—*Sidney Rauschenberg, Ph.G., in American Druggist*.

New Flashlight Powder.

At the Antwerp section of the Belgian Photographic Society, it was stated by M. Ommeganck (*Amateur Photographer*) that a satisfactory flashlight powder can be prepared by rubbing well together in a mortar 5 parts of magnesium dust, 3 parts of aluminum dust, and 1 part of red, or amorphous, phosphorus. This preparation is said to give a more rapid flash than simple magnesium or aluminum dust, while free from the danger attending the use of explosive mixtures containing potassium chlorate.