sions containing tannin, on cinchona and preparations containing alkaloids.

Perchloride of mercury is a test for the mydriatic alkaloids, a fact important to the dispenser in the case of atropine, which has unusually powerful alkaline properties and precipitates mercuric oxide from mercuric solutions (Attfield). Metallic contact is to be avoided; absolutely so in the presence of moisture, and the true incompatibles have to be most carefully managed.

We dispense them in this instance, not at random, nor in any uncertain way. The advanced dispenser will have a sure guide in compounding this mercuric remedy; the prescriber will know how to exhibit it under the most favorable conditions, and the junior may learn not to use a damp steel palette knife with the perchloride, nor to allow his mucilage to come in direct contact in the following prescription :—

℞ Hydrargyri perchloridi ..... 2 gr.
Mucilag. Acaciæ ..... 2 dr.
Aquæ Destillatæ.
Aquæ Calcis .....aa 5 dr. mft.

But, taking advantage of incompatibility, if he wishes to produce a clear, non-precipitated solution with the subjoined—

℞ Hydrargyri perchloridi ..... 2 gr.
Mucilag. Acaciæ ..... 2 dr.
Sp. Chloroform..... 1 dr.
Liq. Potassæ..... ½ oz.
Aquæ Destillatæ..... .....ad 1½ oz.

he will proceed thus—

Dissolve $HgCl_2$ in Aquæ ℥ss : to which add mucilage. Dilute KHO with full amount of water at command : combine the two solutions and add the spirit last.

Should he further have learnt the dispensing value of glycerine, he will be able to produce Hanbury's Lotion in a fit condition, and to understand why the formula "is either transparent and colourless, or opaque and of a brick-red, according to the order in which the ingredients are mixed.

℞ Potassii chloratis.
Boracis .....aa ½ dr.
Hydrargyri perchloridi ..... 4 gr.
Glycerini ..... ½ oz.
Aquæ Destillatæ .....ad 8 oz.

This systematic treatment should be extended to other large sections of the dispensing art, and it would be well to study the following after the same plan :—

I. Camphor, Creasote, and Carbolic Acid.

II. Oleum Terebinthinæ, and Chloroform.

III. Bismuth, Borax, Ferrous and Ferric preparations.

IV. Lead, Opium, and Mercurials [other than $HgCl_2$].

V. Quinine—salts and preparations.

VI. Acacia, Tragacanth, Glycerine, and Syrupus.

Without an exact knowledge of the dispensing values included in Section VI., the dispenser is advised to try some other occupation.

(Concluded next month.)

A Ready Method for Benzoinating Lard.

GEO. HARVEY, PH. G.

The Committee on Scientific Papers submitted the following query :

"What is the best method for benzoinating lard?"

This apparently simple problem presents difficulties which have been experienced more or less by all pharmacists, and are not readily overcome. A successful, practical method for manipulating this troublesome and often neglected preparation has been the subject of considerable discussion at various times and intervals. The present process of the pharmacopœia is so unsatisfactory that little need be said beyond the fact, that in the hands of many manipulators it has proven a sore disappointment, principally on account of the length of time required and the danger of excessive heat, thereby fusing the benzoin into a mass, in which condition it is impervious to the lard.

Various ways have been suggested for overcoming this tedious and uncertain process, some possessing considerable merit, as may be mentioned the admixture of an alcoholic or ethereal solution of benzoin with the melted lard, and subsequent evaporation of the solvent and precipitation of the resin.

But in this age of progressive and elegant pharmacy, the prime desideratum is expediency as well as efficiency, and as the employment of benzoin presents too many difficulties to meet these conditions, it becomes necessary to cast about for some other agent to accomplish the same or identical results, with less expenditure of time and energy. An available and unobjectionable substance is found in Balsam Peru, a substitute presenting the essential features of a preservative in a concentrated form; its constituents, benzoic acid and cinnimic acid, associated with benzylic compounds, having antiseptic and aromatic properties similar to benzoin. The presence of a considerable proportion of an objectionable resin unfits it for use in many ointments : when mixed with lard and afterwards heated this resin will deposit, causing an unsightly mixture.

Herewith is submitted a simple process for the ready separation of this inert resin, retaining the aromatic and antiseptic principles of the balsam in a concentrated and unaltered form, ready for extemporaneous use, thus enabling the pharmacist to preserve lard or ointments, without a thought of previous unpleasant experiences.

Different methods are employed for deresining the balsam, the following giving the least trouble and the best results :

Balsam Peru, 4 oz. av.

Purified Lard, q. s. to finish 16 oz. av.

Heat 12 ounces of lard to 200° F., add the Balsam Peru slowly and with brisk stirring, maintaining about the same temperature until all of the balsam has been added. Keep the mixture in a fluid condition at a somewhat lower temperature for half an hour or less, to allow the resin to collect at the bottom of the vessel, when the fluid portion containing the aromatic and oily constituents dissolved in the lard may be decanted, and sufficient lard added to make the weight 16 ounces av. This should be constantly stirred until cold, so as to insure a perfect homogeneous mixture; which is of a slight amber color, and represents twenty-five per cent. of the original balsam. The separated resin is very dark brown and friable when cold, showing that it is practically exhausted. One-half of one per cent. of Balsam Peru added to lard has been found to be fully as effective as when the officinal process has been followed : therefore a simple calculation will show that one part of the twenty-five per cent. mixture with forty-nine parts of purified lard or ointment will yield the desired object, either by simple admixture or addition to the melted preparation. This preparation may be varied to suit the ideas of the dispenser.

Occasions frequently arise when, from lack of time or otherwise, the officinal process cannot be followed, and at such times this ready-made mixture demonstrates its special utility. The finished preparation thus made has scarcely any more color than the pure article, and has a perceptible balsamic odor.—*Proceedings. California Pharm. Association.*

Making Oil Out of Corn.

A sugar refining company in Chicago is making oil out of corn. It is said to be a soft, yellow liquid that resembles linseed oil in appearance. The process of separating the oil from the corn was discovered by Dr. Arno Behr. It had been known for a long time that maize contained an oily property, but it remained for some one to turn the idea into account. "There is no danger," says Dr. Behr, "of corn oil ever taking the place of linseed oil. In the first place it will always be too scarce. The amount of oil contained in corn is only about 4 per cent. of its total weight, and we find that we lose about half of it in the process of extraction, so that we get a very small amount of oil after all. The assertion has been made that corn oil can be put to little use—that it cannot be employed in making either soap or paint. The great value of linseed oil for paints is that it dries readily, and it has been asserted that corn oil will not dry. Now, this is a mistake, and as a matter of fact, corn oil can be used in making paint or varnish, and also in soaps. It makes a splendid soft soap. That there are valuable uses to which it can be put is shown by the fact that there is a demand for it in foreign markets." As only one company has the secret of the process and employs it, after the corn has been converted into starch or glucose, so that nothing shall be wasted, there is no danger of a glut of corn oil in the market.—*Evening Post.*