Quinine and Strychnine he suggests strychnine hydrochloride in place of sulphate.

The author deplores the omission of Compound Digestive Elixir from the National Formulary and recommends the use of 800 mils of concentrated syrup of raspberry in 8000 mils of preparation, to displace an equivalent volume of Aromatic Elixir. He states that the flavor blends nicely and improves with age.

In Elixir of Cinchona Alkaloids the use of hydrochlorides instead of sulphates is suggested, and this produces at once a clear preparation. He also advises an elixir of ten times the strength of the N. F., which may either be given in correspondingly smaller doses, or may be diluted as wanted. Codeine is often prescribed in cough mixtures with ammonium chloride and the corresponding salt of the alkaloid is suggested not only to conform but because the stomach contents contains hydrochloric acid.

The author refers to his paper read before the New Jersey Pharmaceutical Assoication in 1917, wherein he advised the addition of 1 percent hydrochloric acid to Tincture of Cinchona Compound; further experimentation proves the value, and the addition to a tincture made without the acid and which had precipitated produced, after standing, an entirely limpid preparation. He recommends the addition of hydrochloric acid for consideration by the U. S. P. Revision Committee. Percolation of ground Red Cinchona with chloroform water, acidulated with r percent hydrochloric acid, yields 25 percent of extract containing all the alkaloids.

The writer of the paper dispenses the ingredients of Cathartic Pills, powder form, in capsules; for "blue pills" he dispenses 5 grain capsules of powdered blue mass. For powder folders suitable beveled slides of walnut are an attachment of the prescription counter. As a convenience in keeping inventory of little used narcotic pills and tablets, Mr. McElhenie marks the contents on a bottle cap fixed over the container.

SOME PHARMACEUTICAL NOTES.

BY WILLIAM R. WHITE.

In a paper prepared for the Chicago meeting, A. Ph. A., the author presents some experiences in manufacturing and relates how he solved some of the problems he had to deal with during the year.

High temperature in preparing Oleate of Mercury resulted in a very dark product. The addition of a small amount of $\frac{N}{50}$ V.S. -KOH, under trituration, produced a beautiful white Oleate. This was washed with distilled water until the washings were neutral. A sample has kept without apparent change for six months.

The addition of tartaric acid to a darkened methyl salicylate restored the product to its natural color, after filtration.

When Unna's Soft Zinc Paste is made following N. F. directions a putty-like mass is produced with separation of lime water. If the linseed oil and lime water are thoroughly mixed and saponified and to this the mixed zinc oxide and calcium carbonate gradually added a permanent soft paste is obtained.

Milk of magnesia or magnesium oxide and water mixed with elixir of lactated pepsin, colored with Amaranth Red, will decolorize in a short time; calcium oxide will also destroy the color; potassium hydroxide, sodium hydroxide and ammonia do not affect the color. The writer cannot explain the action.

Five pounds of collodion and 25 ounces of salicylic acid when mixed gelatinized. It required a large volume of alcohol and ether to dissolve the gel, but 5 percent of acetone brought it into perfect solution.

Essence of pepsin, containing 8 percent of alcohol, gave much trouble in filtering when talc was added, however, when allowed to stand a few days, and then a small amount of talc added to the decanted clear fluid, filtration proceeded quite rapidly.

What is Camphorated Oil? The U. S. Dispensatory says it is a German preparation, official as Oleum Camphoratum, composed of one part of camphor and nine parts of olive oil intended for hypodermatic use. The writer has always dispensed U. S. P. Camphor Liniment for it. The American Dispensatory and Standard Formulary give the latter as a synonym of Camphorated Oil.

When definite weights of oils, balsams, etc., are to be filled into bottles the work can be expedited by balancing 6 to 12 bottles on each scale pan, adding the required weights, one at a time, on one pan, and filling the bottles as the weights are consecutively added, until the bottles on one scale pan are filled. Then take off a weight at a time and fill the bottles consecutively on the opposite scale pan until all bottles are full, when both sides will balance.

A batch of syrup was made which when finished appeared dark. Investigation proved that the sugar had been partially caramelized in the process of manufacture. Though white in appearance, it had a molasses-like odor.

Solution of ferric chloride, labeled U. S. P., became turbid on the addition of alcohol and precipitated; oxychloride was present and a deficiency of hydrochloric acid shown. The solution assayed 10 percent iron, whereas a solution of the so-called neutral chloride of iron assayed 12.3 percent of iron.

Magnesium carbonate was used as a filtering medium for an extract of grape containing a large amount of grape juice. An inky black product resulted; the addition of a little citric acid restored the purplish red color.

Tincture of Iodine made from Denatured Alcohol No. 25, gave a light yellow precipitate when the additional iodine and potassium iodide were added. The presence of copper was proven and present in the denatured alcohol. A small amount of sodium thiosulphate added to the denatured alcohol decolorized the iodine and precipitated the copper so that it could be filtered out.

Sulphuric acid was used in an endeavor to remove some F. I. D. Amaranth Red No. 107 from a mortar. A deep green color developed which changed to red on the addition of water. It is supposed that a salt of the dye was formed, which is green, and the water dissociated it into the basic dye and acid radical.

ANIMAL AND VEGETABLE RENNETS.*

THEIR PROPERTIES, THEIR PREPARATION, AND THEIR MODE OF ACTION.

The coagulation of the casein of milk by rennet is one of the most singular problems in biological chemistry, and still imperfectly understood, though much studied by such men as Richard Peters, Duclaux, Chodat, Javillier, Gerber, etc.

^{*} Translated for the Scientific American Supplement from Larousse Mensuel. Reprinted from Scientific American Supplement, May 3, 1919.