The necessity for standardizing the measure as well as the equivalents of the doses, in order that the uncertainty of the dosage of medicines may be terminated, is thus presented. It is not creditable to the medical profession and to the intelligence of this generation that the inaccuracy of the administration of liquid medicines has existed for so long a time and still less so that it be permitted to continue. The purpose of this communication is to present a study of this necessity that has led the writer to design a Standard Dosage Measure.

What are the essentials for such a measure? The *doses* that are commonly prescribed and which must necessarily be shown on the measure claim first consideration. Experience advises that there are certain numbers of standard drops or minims, such as 5, 10, 15, 20, 30; the teaspoonful and at times fractions thereof, such as one-fourth, one-half; the dessertspoonful; the tablespoonful, and occasionally the wineglassful. These with their metric equivalents it was concluded should be indicated upon the measure.

The *shape* must be such as will permit of the smallest of these named doses, 5 minims, occupying an appreciable space in the measure and also such that each of the doses named as necessary may be accurately measured and graduated. It must also be sightly and convenient to drink and to pour from. The inverted cone is the only shape that possesses all of these qualifications and so this form was adopted.

The *graduation* must be clear and accurate and indicate by distinct lines and lettering each denomination.

Stability is another essential so that the measure will not be easily upset. A relatively broad, flat, round base was decided upon with a short heavy stem just above and the weight of glass at this point adds materially to this important feature.

The glass designed, as a result of this study, as the standard dosage measure, is shown in actual size in the accompanying illustration and a sample is exhibited. It will be noted that it contains distinct graduations for 5, 10, 15, 20, 30, 45, 60 minims; the teaspoonful, and the one-quarter, one-half and three-quarter fractions thereof; the dessertspoonful; the tablespoonful; and the wineglassful along with their equivalents in mils. The denominations are arranged in three distinct columns under proper classifications. Each graduation is distinct and each dose, even down to the smallest indicated, 5 minims, can be accurately measured.

LABORATORY NOTES.

BY THOMAS D. McELHENIE.

In a paper presented by Mr. Thomas D. McElhenie, in the form of notes, he recommends the use of interleaved editions of the United States Pharmacopoeia and National Formulary. Notations made on these sheets are always accessible when preparations are to be made and for which improved manipulation has been discovered. He dates the notations.

The author has found that Acetic Turpentine Liniment can be prepared by shaking, in a bottle. A thorough shaking after the addition of each ingredient in the order named insures a perfect emulsion.

The addition of 8 grammes of citric acid is recommended as an improvement of the formula for Compound Elixir of Glycerophosphates. For Elixir Iron,

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 Association 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 1 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