Public Misuse of Carbolic Acid.

The Cleveland Pharmaceutical Association has issued a circular bearing the above title. The circular says. "Carbolic acid, U.S.P., is in crystals; and not being convenient in this form for the household or medical use, it is made liquid by the addition of from 5 to 8 per cent. of water; when thus prepared, it *does not strictly conform to the legal* (U.S.P.) standard, yet by common usage it has become recognized by the public and by many physicians, erroneously, as true carbolic acid, and has been so labelled."

Since this conveniently liquefied acid apparently mixes with water, oils, and other liquids, yet solution does not usually take place. The strong, milky, or cloudy acid that remains undissolved acts as a powerful caustic instead of a healing agent.

"If directed to be mixed at home with oil, vaseline, lard, or other fats, the liquefied acid *will not dissolve on account of* the 5 to 8 per cent. of water it contains, thereby resulting in caustic instead of healing actions."

"If swallowed by accident, it is almost universally fatal before assistance can arrive; yet it is not desired or needed in so dangerous a liquid form."

"The Cleveland Pharmaceutical Association, having had its attention called thereto, and believing that it owes a duty to the public to prevent injury as far as possible without depriving the people of the proper use of a valuable drug, have devised and adopted a formula and label *for carbolic acid for general dispensing* purposes, which they hope will do away with much of the injury due to careless use, and respectfully request the co-operation of all pharmacists and physicians to that end.

FORMULA.

Take of carbolic acid crystals.. 16 troy ozs.
Glycerin..... 40 "
Melt the acid and stir in the glycerin.

OR FOR PRACTICAL PURPOSES.

Carbolic acid..... 1 measure.
Glycerin..... 2 measures.

"This formula furnishes a 33 per cent. carbolic acid fluid. The label explains the rest. It is to be popularized as No. 33 carbolic acid, which indirectly instructs the physician as to the strength of the acid and indirectly enables him to tell what strength it is by its directions for making a practically 1 per cent. solution; thus also, by multiplying the amount directed, he can order a 1, 3, 4, or 5 per cent. solution as desired.

"This No. 33 acid mixes readily with water or alcohol in all proportions, and not being as caustic cannot result in as much mischief or fatality if taken accidentally or purposely.

"The Cleveland Pharmaceutical Association have unanimously decided to recommend:

"(1) To all druggists, and especially to their members, not to dispense a stronger carbolic acid than No. 33, except on physicians' prescriptions.

"(2) To all physicians, when desiring to mix carbolic acid with fatty bodies, instead of entrusting such dangerous work to the laity (since such work requires professional skill to suit each case), it will be the best entrusted to the proper professional expert—the pharmacist.

"(3) To all physicians requiring the liquefied carbolic acid as hitherto dispensed, to please specify this article in their prescriptions to avoid error and relieve the druggist of the responsibility for dispensing it, or of embarrassment for refusing to sell without prescription.

"(4) All druggists desiring electrotypes of the label may obtain them by applying to the committee."

The label which accompanies the circular designates the solution as "Strong Carbolic Acid, Fluid No. 33." The antidotes are given, and also the directions for making a 1 per cent. solution by mixing one tablespoonful of the solution with one pint of water.

Paraffin as a Secondary Ingredient in Pomades.

M. E. Cranzel, in the *Bulletin de Pharmacie de Bordeaux*, strongly recommends paraffin as a secondary ingredient to give consistency in pomades, such as the various cerates, cold cream, chloroform ointment, camphor ointment, etc., in place of the dearer white wax, or spermaceti. It is not only cheaper, but better. M. Cranzel says:

It will aid in keeping such preparations, which, owing to the ready oxidation of the fats composing them, are prone to rancidification. The three products—white wax, spermaceti, and paraffin—have a close analogy in their physical properties, density point of fusion, solubility in certain liquids, etc.

In point of stability, and other principal properties, pomades with paraffin as a base are in no whit inferior to those prepared with white wax or spermaceti. Take Galen's cerate, for example, prepared with paraffin in the proportion that white wax is generally used, and it will be found even whiter than the old product, and less unctuous. The same applies to cold cream. The great and real value of paraffin, however, lies in its inalterability, and that quality in cerates, etc., made with it.

In the opinion of M. Cranzel, paraffin is destined to replace wax, both white and yellow, and spermaceti in all preparations in which the latter now enter, even as lard has been supplanted by vaselin in current use--for other reasons, it is true, but for analogous considerations. —*National Druggist.*

On the Determination of Morphine in Opium.

By Lyman F. Kebler, M.S., Ph.C.

As is very well known, the morphine obtained by the official process contains an appreciable quantity of impurity. This impurity is supposed to consist principally of calcium meconate. In order to prove or disprove this supposition, a quantity of the crude morphine was carefully incinerated in a platinum crucible, and the ash examined quantitatively. It was found that more than one fourth of the residue consisted of salts of potassium and sodium. On this analysis the per cent. of pure morphine was based. The per cent. of pure morphine was also *established by titration with a volumetric* acid solution, the lime water method, and the absolute alcohol method. The relative efficiency of the methods is as given in the above order.

Series of experiments were at once undertaken to determine whether the per cent. of impurity contained in the crude morphine was in excess of the per cent. of the morphine lost in the assay. One hundred grams of opium were extracted as in the assay method, and nine assays made. The time allowed the morphine for precipitation varied from 3 to 36 hours. In the portion of aqueous extract remaining, *the amount of substance* precipitated by alcohol alone was estimated.

The per cent. of pure morphine was estimated in each case by the ash method, titration with a volumetric acid solution, and the lime water method. As a final per cent. of pure morphine, the averages of all the percentages obtained, excepting the three hour, was taken as representing the per cent. of pure morphine contained in the crude morphine.

The mother liquors and the aqueous washings were collected in a bottle from eight assays, and the amount of precipitate estimated after allowing the mixture to stand two months. An aliquot part of the above mixture was next treated according to Dieterich's process. It was found that the per cent. of pure morphine ultimately obtained corresponded very closely to the amount of crude morphine precipitated in twenty hours. From the results obtained, it was concluded that the amount of morphine lost in the assay corresponded closely to the per cent. of impurity contained in the crude morphine. If the U.S.P. directions are adhered to closely, the per cent. obtained very closely represents the per cent. of morphine originally contained in the opium.—*British and Colonial Druggist.*

Substitute for a Funnel.

Prof. A. M. Edwards (*Chemical News*) dispenses with the use of a funnel in cases of difficult filtration through paper, replacing it by a piece of celluloid, in which numerous holes have been punched. This is bent into the shape of a funnel, and supported in a retort stand ring. When not in use the celluloid can *be washed and put away flat like a piece* of paper.

Only those who pay their bills have a right to help the poor.