

## Section on Practical Pharmacy and Dispensing

Papers Presented at the Fifty-Ninth Convention

### NOTE ON DISTILLED WATER.

W. H. ALLEN, PH. G.

The process of producing distilled water of the U. S. P., if properly carried out, will produce an article answering all the requirements thereof.

In the conduct of certain other industries great quantities of condensed water are produced, and in at least one of them, namely, the artificial ice industry, the condensed water is collected. Owing to the pollution of water supplies there has sprung up a demand for sterile waters, and as a consequence we have both distilled water and distilled-water-ice on the market.

In some plants the steam, after having passed through the engines, is condensed, the cylinder oil carried over mechanically by the steam is separated, the water chilled and very carefully filtered, producing a perfectly transparent water. This product is sold as distilled water; it will answer the requirements of the U. S. P.

In one of the ice processes the above water is used and remains quiescent while being frozen in tanks, and any impurities in the waters are contained in the last portion frozen. Such ice is termed "can ice." In the center of the cake is a line showing any separated dissolved air, etc. This central portion at times contains ammonia; also, in some cases, oil. It is presumed that the oil was in pseudo solution in the water before freezing and during the process is separated out. It is very small in amount, but can be noticed by cutting out the core and permitting it to thaw out, when the oil will appear as an iridescent film.

The question arises: Are the requirements of the U. S. P. sufficient? The water mentioned above answers all the U. S. P. tests, yet it may contain oil, which can only be determined by freezing out the sample, when its presence or absence can be determined in the core or last portion frozen.

### NOTES ON THREE U. S. P. FORMULAS.

THOMAS A. EGAN.

*Elixir Aromaticum.* This valuable and extensively used Elixir, made according to the U. S. P., with the following exceptions, will possess an elegant aroma.

Take of the oils the required amount to make compound spirit of orange, U. S. P., and dissolve them in the alcohol. Put this solution in a refrigerator

(the soda fountain may be used), and allow the solution to remain forty-eight hours. Remove the solution from the refrigerator and let stand at the temperature of the room for twelve hours. Now follow the official directions to completion.

This preparation, made in this way, retains its fine aroma for a longer time than when made by any other process I have tried.

*Elixir Ferri, Quininae Et Strychninae Phosphatum.* This valuable and extensively used elixir is best made according to the U. S. P. method, with the following exception:

The soluble ferric phosphate is put into a wide mouth bottle with 30 cc. distilled water and dissolved by agitation without the aid of heat.

Dissolve the alkaloids in alcohol and heat enough to slightly warm and add the phosphoric acid, when the alkaloids are immediately converted into phosphates without precipitation.

Add the acetic acid to the ammonium carbonate contained in a suitable vessel, and when solution is complete, do not neutralize, but leave slightly acid. Neutralization with ammonia deprives the elixir of its color, which should be a nearly "pea green." Complete according to the official formula.

I have made this elixir for several years by this process, and have a sample nearly two years old that is as perfect in color as when first made.

*Syrup of Hydriodic Acid.* The elements of hydriodic acid have such slight affinity for each other that the acid is quite readily decomposed. By replacing 4 fluidounces of syrup with an equal volume of glycerin a permanent preparation, free from irritation, will be obtained.

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#### MORE WORKING FORMULAS FOR CHEMICALS U. S. P.

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W. H. GLOVER.

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The loss of some chemicals which do not keep well, and for which the call in many drug stores is limited, leads the writer to suggest that working formulas for small quantities, say 100 grams, be inserted in the Pharmacopoeia for certain chemical compounds, as, for example, Ammonium Iodide, Strontium Iodide, Zinc Iodide, Calcium Chloride, Calcium Bromide, and also that working formulas for 50% solutions of Phosphate of Iron, Citrate of Iron and Ammonium, and Citrate of Iron and Quinine be inserted. I believe many pharmacists would prepare these solutions who would not prepare the scale salts, and the convenience at the prescription counter I am sure would be appreciated, particularly in damp weather.

As transportation companies refuse to forward Pyroxylin, I would suggest that a working formula for this be added, and also formulas for Zinc Stearate, Potassium and Sodium Citrates, Ammonium Salicylate, Thymol Iodide, and Hydrogen Peroxide.