

Section on Practical Pharmacy and Dispensing
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SOME SLIGHT CHANGES WHICH LEAD TO PERFECTION.

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Many pharmacists, if unsuccessful in their first attempt to make some preparation according to the formula in one of the official books, will freely and unfavorably criticize the book, the constructor of the formula, or the Committee of Revision.

A little thought about the perplexing formula, patience and some experimental work with the expenditure of little money are the only things necessary to find out that the formula in most cases is good or nearly so.

We must remember that we do not all work under the same conditions—that atmospheric and climatic changes play an important role in some cases—that the change of seasons acts as another joker.

Aromatic Elixir. Using Magnesium Carbonate in place of Purified Talc gives better results. 5 gm. is sufficient to prepare 1000 cc. of perfectly clear elixir.

Elixir of the Phosphates of Iron, Quinine and Strychnine. This important elixir is not as difficult to prepare as it at first appears. If prepared as suggested by Mr. Dunn, with a slight change in the directions a most satisfactory preparation which will keep for a long time is obtained. The formula and directions in the Pharmacopoea should be changed to read as follows:

Soluble Ferric Phosphate.....	17.500 gm.
Quinine	8.750 gm.
Strychnine	0.275 gm.
Phosphoric Acid	2.000 cc.
Ammonium Carbonate	5.000 gm.
Alcohol	60.000 cc.
Acetic Acid	16.000 cc.
Distilled Water	
Aromatic Elixir each, a sufficient quantity	
To make.....	1000 cc.

Dissolve the Quinine and Strychnine in the Alcohol, then add the Phosphoric Acid and *three hundred and fifty cubic centimeters* of Aromatic Elixir. Add the Acetic Acid to the Ammonium Carbonate, contained in a suitable vessel, and when solution is complete add enough Distilled Water to make the product measure *fifty cubic centimeters*. Mix the solution of Ammonium Acetate with the solution of the alkaloids and add enough Aromatic Elixir to make the liquid measure *eight hundred and eighty cubic centimeters*. Dissolve the Ferric Phosphate in *fifty cubic centimeters* of Distilled Water and add enough Aromatic

Elixir to make the product measure *one hundred and twenty cubic centimeters*. Finally mix the two solutions and filter.

Note: If precipitate will appear, agitate until dissolved. Keep in a bottle covered with dark paper and well corked. This preparation will slightly darken with age, but its efficiency is not affected.

Syrup of Hypophosphites. When made adhering strictly to the formula and directions of the U. S. P. this preparation is a failure. It will not keep for any length of time. When finished it is not of the U. S. P. strength, as some of the hypophosphites are precipitated and left in the filter.

After some experimentation I came to the conclusion that a little change in the formula, which does not affect the active principles is necessary. Therefore I suggest the following as entirely satisfactory:

Calcium Hypophosphite	45	gm.
Potassium Hypophosphite	15	gm.
Sodium Hypophosphite	15	gm.
Diluted Hypophosphorous Acid	2	gm.
Sugar	640	gm.
Lactic Acid	1.25	gm.
Water, a sufficient quantity		
To make	1000	cc.

Dissolve the Hypophosphites in *four hundred and fifty cubic centimeters* of Water, add the Diluted Hypophosphorous Acid the Lactic Acid and the Sugar, which dissolve by agitation, and add enough water to make the product measure *one thousand cubic centimeters*. Filter and keep in a glass container, well corked.

Compound Syrup of Hypophosphites. The U. S. P. formula requires an increase in the amount of sugar called for and a rearrangement of the directions. If these corrections are made, a most satisfactory preparation will result.

The formula and directions are as follows:

Calcium Hypophosphite	35.000	gm.
Potassium Hypophosphite	17.500	gm.
Sodium Hypophosphite	17.500	gm.
Ferric Hypophosphite	2.250	gm.
Manganese Hypophosphite	2.250	gm.
Quinine	1.100	gm.
Strychnine	0.115	gm.
Sodium Citrate	3.750	gm.
Diluted Hypophosphorous Acid	15.000	cc.
Sugar	815.000	gm.
Water, a sufficient quantity		
To make	1000	cc.

Dissolve the Calcium Potassium and Sodium Hypophosphites in *three hundred and seventy-five cubic centimeters* of water, to which *five cubic centimeters* of Diluted Hypophosphorous Acid has been previously added. Dissolve the Quinine and Strychnine in *thirty cubic centimeters* of Water, to which *ten cubic centimeters* of Diluted Hypophosphorous Acid has been previously added. Rub the Ferric and Manganese Hypophosphites with the Sodium Citrate, add *thirty cubic centimeters* of Water and warm the mixture on a water-bath, stirring continuously until the salts are dissolved and a clear greenish solution is obtained. Mix the three solutions in the order named. Dissolve the sugar by the aid of a water-bath, stirring continuously. As soon as the sugar is dissolved remove the

syrup from the water-bath and filter. Finally add enough water through the filter to make the product measure *one thousand cubic centimeters*.

Note: Keep in a bottle covered with dark colored paper and well corked. In the northern latitudes, and during the cold season in some sections, the sugar may be reduced to 805 or 810 grms.

In conclusion I will say, that to be successful in preparing this and many other preparations, only the best and purest materials obtainable should be used. We can not expect good results from cheap, inferior materials. Consider as a guiding principle in your work the fact that there is nothing too good for the sick, that whatever is not good enough for your loving wife, your dearest child, and your father or mother—is not good enough for any one else. We should be conscious of the duty we owe to humanity, we should keep in mind that we are only the servants of the suffering, and as such should serve them rightly—with a sincere and honest consideration for their welfare.

SOME DISPENSING HINTS.

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In the course of my routine duties I have encountered repeated difficulties, the solution of which has caused me considerable worry and thought, and I herewith offer the result of some of these efforts, hoping that they may prove to be of some benefit to some of my fellow workers.

In prescriptions calling for camphor and menthol or phenol and camphor to be dissolved in albolene or similar bland, oily liquids, I have followed the practice of placing the solids, in a fairly fine state of comminution, in the glass container in which they are to be dispensed with a small portion of the solvent, then carefully heating over an alcohol lamp, with gentle agitation, until dissolved, to which is added the balance of the solvent. By this means the trouble of washing out a mortar is obviated and no loss of medicaments results.

Anyone who has had any experience with methylene blue remembers what an annoying chemical it is, for it has the habit of depositing small particles thereof upon everybody and everything when triturating it with other remedial agents. By using the *small crystal* form of this chemical and moistening it so as to prevent its becoming light enough to float about in the air, we have had no difficulty in handling it without annoyance. As it is usually prescribed in combination with fixed oils, the latter can be used to moisten the chemical whilst reducing it to a finer state of comminution—preferably in a glass mortar, which can readily be cleansed.

When filling a prescription calling for soft capsules, containing oils, it is very annoying (and at times exasperating) to find one or more of the capsules imperfectly sealed, due generally to a small portion of the oil coming in contact with the sealing lip of the capsule. We have adopted the practice of wiping off carefully the tops of the capsules with pellets of cotton moistened with chloroform, using