

Massol: A New Pill Excipient. An English pharmacist, Mr. P. B. Phillips, has suggested a new excipient for pills, under the name "Massol." It is made by the following formula:

Gelatin	40 grains
Glycerin	2 drams
Sugar	3 drams
Dist. water enough to make 1 oz.	

Place the gelatin in a tared dish with one-half ounce of water. After an hour add the glycerin and heat on a water bath until solution is effected. Add the sugar and heat until the mass weighs 1 oz. Now beat the mass vigorously with a spatula until it sets and keep in covered jars.

Massol is claimed to be generally useful in making pill masses. It keeps well, and the beating incorporates a lot of air which whitens it, so that white powders can be made into white pills by its use.

The Phthalein Test is now used to determine the efficiency of the renal functions. Its use is described in the "Archives of Internal Medicine" of March 15. The substance used is phenolsulphone-phthalein. It is a bright red crystalline powder, somewhat soluble in water and alcohol and readily soluble in the presence of alkalies. It is non-toxic, non-irritant locally and is excreted almost entirely by the kidneys with great rapidity. In alkaline solution it presents a brilliant red color, which renders it very suitable for quantitative colorimetric determination. It is used in the form of an aqueous solution containing 6 mgm. to the cc, this dose being administered by subcutaneous, intramuscular or intravenous injection. In acid urine the color is yellow or orange. The chemical part of the test is easily and quickly carried out.

SUGGESTIONS FOR THE IMPROVEMENT OF SOME U. S. P. FORMULAE.*

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Liquor Potassii Arsenitis. The official directions for this preparation are: Boil the arsenic trioxide and potassium bicarbonate in a tared dish with 100 gm. of water until solution has been effected. Then add enough water to make the solution weigh 970 gm. and lastly add the 30 gm. of Compound Tincture of Lavender.

A person, upon reading these directions and without any further instructions, will naturally select an evaporating dish to carry on the boiling of the salts as directed. The U. S. P. further directs that 100 gm. of water are to be used instead of 100 cc. Why is it necessary to weigh the water, as some of it evaporates in bringing the arsenic trioxide into solution? A flask would be more suitable in preparing this solution. This would lessen the evaporation of water,

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and besides, one can readily see when all the arsenic trioxide is in solution, which is impossible when an evaporating dish is used. Again, there seems to be no good reason why the Compound Tincture of Lavender is to be weighed instead of measured, since enough water is finally added to bring the solution up to the desired weight. Even if the official directions for its preparation are carefully followed, a cloudy and unsightly solution is obtained. My experience with this preparation leads me to suggest a change in the formula and also in the directions for its preparation, as follows:

Arsenic Trioxide	10.00 gm.
Potassium Bicarbonate	20.00 gm.
Comp. Tr. Cardamom.....	50.00 cc.
Distilled Water, q. s.	1000.00 gm.

Dissolve the Potassium Bicarbonate in 100 cc. of boiling water contained in a liter flask, then add the Arsenic Trioxide and continue the boiling until solution is effected. Dilute this solution with 500 cc. of distilled water. To this add 50 cc. of Compound Tincture of Cardamom and lastly enough water to make the product weigh 1000 gm. Filter, if necessary.

Liquor Cresolis Compositus. The Pharmacopoeial directions for the preparation of this solution are as follows. Dissolve Potassium Hydroxide in 50 gm. of water in a tared dish, add the Linseed Oil and mix thoroughly. Then add the Cresol and stir until a clear solution is produced, and finally add enough Water to make the finished product weigh 1000 gm.

If these directions are followed it is impossible to make a preparation that will mix with water in any proportion without forming a cloudy, milky solution. This is objectionable and physicians are not prescribing the solution as often as they should. To remedy this difficulty, I suggest to dissolve the potassium hydroxide in 50 cc. of water instead of 50 gm. and to add to this solution the linseed oil, mix well and heat this mixture on a water-bath for one-half hour or until the oil is saponified; that is, until a little of the soft soap added to boiling water dissolves completely without leaving any oil globules floating on the liquid. From here on the directions of the Pharmacopoeia may be followed.

The finished product can be mixed with water in any proportion without forming a milky or cloudy solution.

A recent graduate from the College of Pharmacy of the University of Minnesota has made a reputation both for himself and for his employer among the physicians by making this solution according to the above directions.

Elixir of Iron, Quinine and Strychnine Phosphate. I venture to say that most druggists who follow the directions of the Pharmacopoeia in making this preparation are not satisfied with its manufacture. Many pharmacists have their own formula, simply because they can make it very much quicker, with less trouble than by the official method.

The official directions are to dissolve the alkaloids in the alcohol, then add the Phosphoric Acid and 350 cc. of Aromatic Elixir. The alkaloids are best dissolved in the alcohol by the aid of heat. If the Phosphoric Acid is added directly

to the alcoholic solution of the alkaloids, a thick precipitate is formed which is very difficult to redissolve. If, however, the Phosphoric Acid is mixed with the Aromatic Elixir before being added to the solution of the alkaloids this precipitate is avoided entirely. The further directions of the U. S. P. are to add the Acetic Acid to the Ammonium Carbonate and neutralize with Ammonia Water. The Acetic Acid is directed to be weighed while the Phosphoric Acid is measured. This seems impractical. Then, again, it is a long and tedious operation to get this Ammonium Acetate solution exactly neutral and this is quite unnecessary, as Sodium Citrate, which is nearly neutral in aqueous solutions, will answer the same purposes as Ammonium Acetate in the making of this preparation.

The following formula has been worked out carefully and makes a satisfactory and presentable preparation. This is easily and quickly put together and I believe that more pharmacists will make their own elixir if this formula were used. The suggested formula is as follows:

Soluble Ferric Phosphate.....	17.50 gm.
Quinine (alkaloid)	8.75 gm.
Strychnine (alkaloid)	0.275 gm.
Phosphoric Acid	2.00 cc.
Sodium Citrate	8.00 gm.
Alcohol	60.00 cc.
Distilled Water.	.
Aromatic Elixir aa q. s.	1000.00 cc.

Dissolve the alkaloids in the Alcohol with gentle heat; add the solution to the Phosphoric Acid, which has been previously diluted with 375 cc. of Aromatic Elixir. Dissolve the iron salt in 50 cc. of warm water and mix. Add this mixture to the alkaloidal solution gradually with stirring. A precipitate is formed at once, but this readily dissolves upon the further addition of the alkaloidal and iron solution. Finally, add enough Aromatic Elixir to make the product measure 1000 cc. and filter, if necessary.

Glycerite of Starch. The official directions are: Triturate the Starch with the Water until a homogenous mixture is produced. Then gradually add this to the Glycerin contained in a porcelain dish and heated to about 140° C. Continue the heat, with constant stirring, keeping it below 144° C. until a translucent jelly is formed.

I venture to say that nine beginners out of every ten making this preparation for the first time will triturate the starch with the water and then gradually add this paste to the Glycerin, previously heated to about 140° C. with the result that when this starch paste strikes the hot glycerin the starch becomes baked and the resulting lumps can not be worked out into a smooth jelly. I suggest that the directions read thus: Triturate the Starch with the Water, add this paste to the Glycerin gradually and heat the mixture with constant stirring up to 140° C. and keep at this temperature until a translucent jelly is produced.

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