ings and the results published. Some amendment along this line is necessary and will no doubt be made, but if we do not do our duty and take proper interest in these matters, amendments may be passed by Congress that will prove burdensome to us.

HINTS ON PROPOSED N. F. FORMULÆ.*

LOUIS SAALBACH, PHAR. D.

The formula proposed for Mistura Ferri Salicylatis is as follows:

MISTURA FERRI SALICYLATIS.

Sodium salicylate	125.0 Gm.
Tinct. of ferric chloride	125.0 Cc.
Ammonium carbonate	6.5 Gm.
Citric acid	14.0 Gm.
Oil of betula	4.0 Cc.
Glycerin	175.0 Cc.
Distilled water enough to make	1000.0 Cc.

Dissolve the citric acid in 200 Cc. of distilled water, add the ammonium carbonate and then dissolve the sodium salicylate in this solution. Add the tincture of ferric chloride, glycerin and oil of betula; mix, and then add enough distilled water to make 1000 Cc. and filter. When prepared according to the above formula and instructions, a heavy precipitate forms. This consists of ferric salicylate and salicylic acid. The ammonium carbonate and citric acid are used in this formula to make ammonium citrate, in a solution of which, ferric salicylate is soluble.

There is insufficient ammonium carbonate present to convert all of the citric acid to citrate; furthermore, the salicylic acid also requires an alkali to keep it in solution.

Good results may be obtained by increasing the quantity of ammonium carbonate to 25 grammes and mix as follows:

Dissolve the citric acid in 300 Cc. of distilled water, add the ammonium carbonate, and when solution has been effected add the glycerin, then the tincture of ferric chloride, in which the oil of betula has previously been dissolved, and finally enough distilled water to make the mixture measure 1000 Cc.

When prepared in this manner a clear dark red solution is produced, which does not require filtration.

PETROXOLINUM LIQUIDUM.

Liquid petrolatum	50 Gm.
Oleic acid	28 Gm.
Oil of lavender flowers	2 Gm.
Stronger ammonia water	5 Gm.
Alcohol	15 Gm.

Mix the liquid petrolatum and oleic acid in a flask, add the alcohol and then the stronger ammonia water, and warm the mixture on a water bath with frequent

*Presented to the Pittsburgh Branch.

agitation, until it becomes clear. Lastly add the oil of lavender flowers and mix thoroughly.

By comparing this formula with that of Liquid Petrolatum Saponatum now in the N. F. the substitution of stronger ammonia water for spirit of ammonia will be noted. This is undoubtedly a wise change, when we consider that the ordinary drug store does not usually have spirit of ammonia upon its shelves. Or when it has, it is deficient in strength.

The mode of preparation may, however, be improved upon. By following the above instructions, a clear mixture is produced within five minutes after placing on a water bath. But on cooling it frequently separates into two layers. In the writer's experience this happened three times in succession.

Uniform results may be rapidly obtained when we proceed as follows:

To the oleic acid contained in a flask, add the stronger ammonia water, and alcohol which have previously been mixed. Shake well, and when completely saponified, add the liquid petrolatum and oil of lavender flowers. Mix thoroughly by shaking.

CORK.*

ITS HISTORY, ORIGIN AND MANUFACTURE.

OTTO RAUBENHEIMER, PH. G.,

The writing and reading of a paper on Cork may seem trivial to a great many, but I have been prompted to undertake this task for the following two reasons:

1. The average pharmacist, who uses corks daily and considerably, has but very little knowledge of the source and manufacture of that necessary commodity.

2. The books in English, especially the books available to the pharmacist, f. i., those on pharmacy and botany, and also the dispensatories, have nothing or but very little to say as to the history, origin and manufacture of cork. Through an introduction to the owners of one of our large cork factories in Brooklyn I had the good fortune of visiting their plant in operation, thus obtaining a great deal of practical knowledge.

Just as the venerable oak, the monarch of the trees, the patriarch of the forests, has been known from times immemorial and its bark has been used in tanning, so another species, the cork oak, has been well known to the ancients and five of the chief properties of its bark were known and utilized 2000 years ago.

Theophrastos, 400 B. C., the father and founder of botany, describes the cork oak in his great work, Historia Plantarium. He calls the tree "phellos," and gives its habitat as the Pyrenees, and also describes two varieties, one an evergreen, our present *Quercus suber*, L., the other losing its leaves in the winter, our present *Quercus occidentalis*, Gay. Theophrastos also states that "phellos" produces a thick, fleshy bark, which when stripped off will grow again and makes

*Read and demonstrated with specimens at the March meetings of the New York Branch of the A. Ph. A. and the Kings County Pharmaceutical Society.