

Pharmaceutical Uses of Extract of Malt.

BY JEAN GORDON, PH. G.

Although the use of extract of malt as an emulsifying agent and as a vehicle for various remedies is frequently mentioned in journals and pharmaceutical works, and manufacturing chemists have put upon the market a very large number of mixtures or emulsions of malt extract with cod liver oil, some of them so prepared as to be quite agreeable to the taste, yet I am not aware that the dispensing pharmacist has availed himself to any extent of its advantages in preparing mixtures when insoluble substances are to be suspended. I was first led to experiment with it on being asked by a physician to prepare an emulsion of *naphthalin* and to make it as pleasant as possible. The slight solubility of *naphthalin* in water renders most of its mixtures very unpleasant, and after trying many experiments it occurred to me that extract of malt might be used, it not seeming to possess sufficient medicinal activity to cause its use to be objectionable in the very small proportion necessary to form a good mixture. After rubbing the *naphthalin* in a mortar to a very fine powder, a definite quantity of malt extract is then added gradually, and triturated until a perfectly smooth mixture is obtained. The substance is now suspended, but the mixture is too thick to pour well from the bottle; it is then diluted by the addition of an equal volume of wild cherry, which not only renders the mixture fluid enough to pour out easily, but also imparts to it an agreeable flavor. The higher specific gravity of the malt extract causes the particles of the *naphthalin* to remain suspended, and its viscosity, even when diluted one-half, is sufficient to prevent it from floating on the top until after standing for some time, when slight agitation will restore a uniform mixture. In an emulsion of *naphthalin* with mucilage of *acacia*, a very large proportion of *acacia* must be used, and after standing for some hours the *naphthalin* will be seen at the bottom of the bottle, and it is only after the most vigorous shaking that a smooth mixture can be restored, if at all, it being very difficult to dislodge the sediment. Compressed tablets of *naphthalin* are prepared, but on account of its bulkiness and the large dose sometimes used, it is not a substance exactly suited to that form of administration, if by any means a preparation can be obtained that will to some degree mask the strong odor and taste.

In extract of malt it seems to be less soluble than in syrup, or mucilage of *acacia*, the mixture just described having scarcely any of the odor and even less of the taste of *naphthalin* unless held on the tongue until it has been partly dissolved by the fluids of the mouth. It was not the purpose of the physician to administer a medicinal dose of malt, hence only a sufficient quantity was used to make a satisfactory preparation—five grains of finely

powdered *naphthalin* being contained in one fluid dram.

Some of the resinous substances most frequently administered in form of emulsion yield with extract of malt mixtures equal in all cases to the *acacia* emulsions, and, in most instances, more agreeable to the taste, and of more attractive appearance. The unsightly appearance of both the tincture and resin of *guaiac* when made into an emulsion with *acacia* is well known to every pharmacist, and it is a remedy which is frequently prescribed. It would seem to be worth making an effort to improve upon the old emulsion. With the *Tincture of Guaiac* a good mixture can be made by stirring together, in a graduate, equal measures of extract of malt and afterwards tincture of *guaiac*, gradually added; care must be taken not to allow the tincture to come in direct contact with the sides of the graduate, and it is well to take the precaution to first wet the sides with the extract and syrup before the addition of the tincture. The mixture obtained in this way, while not as bright in appearance as either the malt extract or the syrup, does not assume the bluish color of the gum emulsion. After standing for a day it separates into two layers, the lower transparent and bright, the upper one having a slightly curdled appearance, but a slight shake of the bottle suffices to cause the layers to mix again. That the *guaiac* is contained in both layers I have determined by setting aside a portion in a narrow tube until the two layers had formed and examining them both; the lower one becomes opaque by the addition of water, but glass tubes or graduates containing it can be made perfectly clear and bright by simply rinsing with cold water, thus showing that the resin has been taken up or emulsified by the extract of malt.

With the *Resin of Guaiac* the method must be slightly different. It should be first rubbed thoroughly in a mortar with the extract of malt until a smooth paste is obtained, after which sufficient of the syrup of wild cherry is added to make the mixture fluid again.

With *Tincture of Asafetida* a mixture is obtained in the same manner as with tincture of *guaiac*, but to prepare a mixture from the gum resin, it is best to rub it first in a mortar with a small quantity of hot water to form a paste, then add the malt and syrup alternately in small portions; it can easily be made to contain 8 per cent.—double the strength of the U. S. P. *Mistura Asafetidae*. An advantage of this over the official mixture is, that it does not have the exceedingly disagreeable smell of the latter and the taste is less unpleasant. Like the mixtures mentioned before the addition of water renders it opaque.

For the administration of the tincture and fluid extract of *Cannabis Indica*, malt extract answers very well, with these preparations the best result is obtained with the following proportions:

R Tincture Cannabis Indicae.	1/2 oz.
Extracti Malti	1 dr.
Syrupi Pruni Virginianae	1/2 oz.

With *Copaiva* it is necessary to proceed much the same as in making an ordinary emulsion, starting with a small portion of the extract of malt in a mortar and adding with trituration alternately portions of *copaiva*, malt and syrup. The mixture retains about the color of the malt, forms two layers on standing, but is easily restored by agitation.

With other resinous tinctures and fluid extracts the results have been similar to those described, the ones selected for mention being those we are called upon most frequently to dispense, and are also typical resinous substances. Extract of malt, as prepared by the official process, or as found in the market prepared by the various manufacturers, is in itself too thick to dispense as a vehicle, hence it is necessary to use a diluent of some kind. I have selected the syrup of wild cherry for the purpose, because of its agreeable taste and slight odor of hydrocyanic acid. With an extract of malt made according to the direction of the Pharmacopœia, results were obtained identical with those from the commercial extracts; about the only difference noticed was in the color of the mixtures, some of the commercial extracts being of a darker color.

In summing up the result of my work in this direction, it may be said that in extract of malt we have a ready, inexpensive and equally good substitute for *acacia* in suspending and masking the taste of disagreeable, resinous and other insoluble substances, wherever its presence in small quantity is not found to interfere with the therapeutic action of the substance prescribed.—*Am. Jour. Phar.*

Therapeutic Notes of Interest to Pharmacists.

BY H. M. WHELFLEY, M. D., PH. G.

THE vapor of vinegar is now used in the treatment of catarrhal as well as membranous croup. The medicinal action must be due to the acetic acid contained in the vinegar. Why not use the acid and be done with it?

Acne, or what is commonly called "pimples," is a disease both common and troublesome; young ladies especially are anxious to be relieved of the blemish, and resort to all kinds of patent face washes. To show how useless these are, and impress the necessity of medical advice, I quote the following from the pen of Dr. J. M. Winfield: "In nearly every case of *acne* in the female there will be found some menstrual or genital trouble. Almost all women have a temporary outbreak of *acne* at the menstrual period, and if there is a chronic rosacea, it is apt to be aggravated at that time."

Red hands annoy some persons. The following ointment has been proposed to correct the trouble and should be applied at night: