

must be remembered so that all utensils used will be scrupulously free from such disturbing causes, for aside from these there is little chance of failure.

Upon comparing mucilage of Irish moss with the other available vehicles, its advantage over tragacanth will be seen to lie in the ease of preparation; while its preference over starch and acacia comes through it introducing so little substance into the preparation.

The advantages of mucilage of Irish moss may then be emphasized as follows: It can be depended upon as an efficient suspending agent.

It is easily and quickly prepared.

It gives a permanent emulsion.

It supplies a sufficiently viscid medium though adding but a trifle of solid matter.

It is as inert as any other suitable substance.

It is inexpensive.

While yet concerned with this subject a few words will be said regarding the sulphur which is present in Irish moss. To one who had never incinerated a vegetable drug and found a mass of hepar sulfuris as the resulting ash, it was a revelation to encounter such when some unwashed Irish moss was subjected to a bright red heat. With a lower heat very little sulphide is formed, but raised to bright redness, one can see a phosphorescence as of free sulphur burning, although sulphur dioxide could not be detected by odor. The fused mass amounted to 21.25 percent of the original weight. Chlorides were present, of course.

Sulphates, earthy phosphates, carbonates, iron, aluminum, and silica were other constituents encountered in the examination of this ash, but no complete analysis was attempted.

A second weighed portion of moss was washed until it began to gelatinize, then dried and ignited. The result showed ten percent of ash and contained abundant alkaline sulphides, and a little chlorides.

A third weighed portion was completely exhausted by repeated applications of boiling water, the residue was dried and weighed. This insoluble part represented ten percent of the original substance. It was next incinerated and found to yield 2.5 percent of ash, calculated on original moss. The ash from this treatment was snow-white; it contained neither chlorides nor sulphides, but consisted of silicious matter. It is worthy of remark that in whatever form the sulphur exists in Irish moss, it has arranged itself in a very accommodating manner, so far as our present use for the mucilage is concerned.

SYRUP OF TEA FOR ICED TEA.*

BY CHARLES H. LAWALL AND M. R. LAWALL.

One of the overlooked opportunities of the pharmacist during the summer season is the preparation and sale of a concentrated syrup from which iced tea may be instantaneously made by the simple addition of water, ice and lemon.

Iced tea is one of the most popular of summer drinks taken with meals either at home or in restaurants. It is somewhat of a bother to prepare in the home and the average housekeeper would doubtless welcome a simplification of this portion of her summer work connected with the family menu.

That the plan is practicable and the syrup permanent when properly made has

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been demonstrated during two summers in our own home and we believe that the idea would be a moneymaker if properly used.

The flavor of iced tea does not markedly differ as to whether it is made from cheap or expensive tea, the added lemon masking any differences distinguishable to a connoisseur. Tea siftings, which are always obtainable at a very low price, have been used by us and in the preparation of the samples illustrating this paper. The procedure is as follows for a plain tea syrup, which seems to be the most permanent and satisfactory:

Tea siftings.....1 pound (av.)

Place in a glass percolator after moistening slightly with cold water, pack firmly, and pour boiling water over the tea until 64 fluidounces of percolate has been obtained. Place $7\frac{1}{4}$ pounds of dry granulated sugar in 1 gallon bottle, add sufficient of the tea infusion to fill the container and dissolve the sugar by agitation, subsequently sterilizing the finished preparation in the customary manner. As it is a little difficult to dissolve the sugar by agitation, the sugar may be dissolved during the sterilization.

This plain tea syrup, when served in the proportion of about 2 fluidounces to the glass (the tall iced tea glass is meant), flavored by adding a slice of freshly cut lemon and diluted with ice water (adding a piece of ice to the glass as well) makes a very satisfactory and enjoyable preparation with a minimum of trouble.

It is possible to make a lemon flavored and acidulated syrup as well, although these variations require more trouble to prepare on account of the subsequent clouding and precipitation due to the added ingredients. Several of these modified syrups are shown, all of which require clarification and reesterilization, as may be readily seen. They were prepared as follows:

No. 2 was prepared in the same manner as No. 1, except that the grated rind of 16 lemons was mixed with the tea siftings before percolation and 600 grains of citric acid in solution added to each gallon.

No. 3 was prepared in the same manner as No. 1, except that the grated rind of 16 lemons was mixed with the tea siftings before percolation and a pint of lemon juice was added to the sugar before adding the tea infusion.

No. 4 was prepared in the same way as No. 1, except that 200 drops of oil of lemon were sprinkled over the tea siftings before percolation with the boiling water and 600 grains of citric acid was added to each gallon.

The effect of the citric acid is to markedly lighten the color of the preparation, as may be seen by the samples shown (at Association meeting).

A very attractive preparation in odor and taste can be made by flavoring the plain tea syrup with a blend of soluble extracts of orange, lemon and lime made for the purpose.

The tea syrup should be a popular and profitable article for sale during the summer months, either prepared as described above or by some modification developed after experimentation, according to taste.

The hours will come, and come to every man, when task-work quivers and palpitates with life; but perhaps they only come because we have been faithful, with a certain grimness, through the days of gloom. Let a man hold to his life-work through mood and melancholy. Let him hold to it through headache and through heartache. For "He that observeth the wind will never sow; and he that regardeth the clouds will never reap."—G. H. MORRISON.
