

extract and syrup, neither, alone, seeming to represent the qualities obtained by the officinal cold infusion.

In the old fluid extract the cyanhydric acid was dissipated, and the attempt to restore it by the emulsion of almonds proved to be only adopting a quite unsatisfactory substitute for that developed by the emulsine and amygdaline afforded by the bark, and in the present officinal formula no effort is made to resupply it; so neither formula reaches my wishes, and I regard a satisfactory fluid extract of Wild Cherry a desideratum to be yet attained.

With the syrup our success has been better. The solvent power of glycerine enables us to secure much richer percolates than was afforded when water was used as the only menstruum. But even with glycerine the coarse powder usually employed is very seldom, if ever, entirely exhausted of its medicinal constituents, and in consequence the syrup does not represent full officinal strength. To obviate the difficulties besetting this preparation, I sought a remedy in a fine powder, one about No. 60 seeming to come the nearest to my wishes. This I packed tightly in a large glass funnel, without moistening (a favorite idea of mine with many preparations), and then poured one-half of the water gradually on a paper diaphragm to prevent disturbing the powder, closed the funnel, and set it aside for forty-eight hours; then removed the plug from the lower opening, and permitted the percolate to drop slowly until it had passed, and set this portion aside; added the glycerine, sugar, and the remainder of the water, and continued the process until the entire amount was obtained. I also set this aside, waited four days, and mixed the two solutions together. Experience has taught me that I obtained a syrup much richer in cyanhydric acid, and of a darker color, by this delay, than I did when the sugar and glycerine were at once added to the entire percolate;—reason—these prevent the reaction between the emulsine and amygdaline. I find a temperature of at least 86° required to give the best result, and it is also important to exclude both light and air from the first portion of the percolate, these rapidly decomposing the cyanhydric acid. I also consider the idea advanced by Mr. Rother, that the presence of tannic acid, which is quite abundant in the percolate, prevents the disruption of the amygdaline by emulsine, is not sustained by experience, or at least mine is at variance with that conclusion.

The precipitate, which appears in a few days, may depend in some degree upon the unfriendly relation of the emulsine and tannin, which the presence of sugar promptly removes, as the turbidness found in the first percolate soon disappears after its admixture with the last, and forms a clear, rich syrup, quite superior to that made in the officinal manner. By my method the atmospheric exposure incident to maceration, before packing in a percolator, is avoided,