

by merely specifying the fruit, permits the latter to be gathered from wild plants which are admittedly inferior.

Ginger.—The activity of a ginger for medicinal as well as flavoring purposes, depends upon the amounts of oil and oleoresin present. Requirements for this extractive matter are omitted from the present Circular 19 definition and very low grades would meet the specifications there given.

Vanilla.—Vanilla cannot be thoroughly dried without injury to the desirable constituents, therefore the definition of Circular 19, if literally followed, would result in inferior grades. The dilute alcohol extractive materials are most valuable for flavoring purposes but the Circular does not specify any amount of such materials.

Volatile Oils.—In the case of the volatile oils, many of those mentioned in Circular 19 are entirely without standards. In prosecutions the Pharmacopoeial requirements are used in proving adulteration. It might be well to adopt the definite standards of the U. S. P. and N. F. to this class of materials, with exceptions for those intended for special uses.

Owing to disturbed commercial conditions of the past few years, merchants have been compelled to secure supplies from every possible source. Undoubtedly considerable material held by food manufacturers has found its way into drug channels. Citric and tartaric acids purchased by wholesale grocers and confectioners and used by them in food manufacture, have been resold to wholesale druggists presumably to supply their trade. These acids if sold by grocers and confectioners do not have to meet all the provisions of the Pharmacopoeia. If sold by a druggist, the same articles must conform to all official requirements or be sold as "technical" or "not U. S. P."

The situation may be summarized by the statement that the highest quality materials must be used for medicinal purposes, whereas lower grades may be sold as foods. In both instances the articles are intended for human consumption and in most cases enter the stomach in the same condition and have the same action there. Aside from the question as to whether these dual standards are unduly favorable to the food manufacturer and discriminatory toward the druggist, they tend to complicate the work of the analyst.

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SENNA BEANS.*

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A sample of Senna Beans was submitted recently for investigation as to their medicinal value. The species from which they were taken was not stated.

The beans were about 15 millimeters in length, about one-third as broad and one-fourth as thick, slightly kidney-shaped and very hard. Externally they were slate-colored, internally grayish white, resembling most beans in color. The taste was mucilaginous, slightly acrid and nauseous. They contained a large amount of proteid (probably legumin) and a small amount of sugar, but no starch.

Tests for alkaloids and glucosides were negative. Tests for anthraquinone bodies were also negative. The beans were entirely devoid of the cathartic principles which are found in senna leaves and pods. In other words the tests disclosed no medicinal value whatever in the beans.

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