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NOTES ON EXTRACTION AND PRESERVATION OF FLUIDEXTRACT OF CASCARA.*

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Attention was drawn to a statement that sugar, if used in the extraction of Cascara, resulted in better extraction and in order to determine whether such treatment was advantageous, a series of percolations were conducted; as follows:

Four thousand grams of drug were divided in four portions of one thousand Gm. each:

- Portion A.—One thousand grams moistened and extracted with boiling water according to U. S. P. directions.
- Portion B.—One thousand grams moistened and extracted with a menstruum consisting of boiling water in which was dissolved 10% of sugar.
- Portion C.—One thousand grams treated with Magnesium Oxide for debitterization and extracted with boiling water as directed by U. S. P. method.
- Portion D.—One thousand grams treated in same manner as C except a menstruum consisting of boiling water containing 10% of sugar.

The preparations so obtained by the four outlined experiments were examined analytically to determine relative extractive properties of boiling water and boiling water containing sugar. The total solid content as shown upon examination of all four samples indicated results so closely analagous to each other that the fractional per cent of variation was not beyond the experimental error of the analytical procedure. The color of comparative preparations also indicated no marked difference over the official method.

Further attempts to determine by physiological experiments any marked difference also resulted in failure. While it is admitted that such physiological tests are not thoroughly reliable, the work accomplished could readily be interpreted as indicating no marked advantage which would be sufficiently valuable to warrant any suggestion of sugar addition to menstruum.

It occurred to us that possibly some benefit might be derived with respect to keeping quality of the preparations in which sugar had been used in the menstruum, hence the four previously enumerated experiments were set aside for subsequent observation as to relative stability.

Fourteen months later an examination of the stored samples showed equality with respect to degree of precipitation and other physical criteria used in judging pharmaceutical elegance.

A point of interest in the foregoing work, which it seemed worth while recording, was that all the preparations made were finished or preserved with 10% of alcohol, which is one half the quantity now prescribed for Fluidextract of Cascara and Fluidextract of Cascara Aromatic.

CONCLUSIONS.

That the use of sugar in the menstruum is not an aid to extraction. That 10% alcohol is sufficient for preservation of Fluidextract of Cascara

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and might well be given consideration in the forthcoming revision work of the U. S. P.

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EPIPHYTIC, NOT PARASITIC.*

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All who successfully pass the Board examinations for licensure are presumably capable of practicing pharmacy in its professional sense, but many licensees practice very little or not at all. The reason is obvious: the fifty-four thousand or so drug stores in the United States are too many to afford practice for all registered pharmacists. Strictly pharmaceutical service needs are fairly constant; at any rate they are not increased as drug stores multiply. One-fourth the number of drug stores now existing would be ample to care for all pharmaceutic needs. In other words, according to an estimate based on several reliable sources of information, the totality of business done in the retail drug stores of the entire country is twentyfive per cent or less professional and seventy-five or more commercial (of which the culinary represents of late a respectable proportion). In still other words it may be said professional practice has been diluted or attenuated three hundred per cent or more by commerce or trade. There is as much pharmacy as ever or more and the development of pharmacy in its scientific and arts aspects has never been at a higher point and is keeping pace with development in all other fields of science, which proves that pharmacy is sound and virile despite the commercial obscuration under which its functional aspect has been somewhat hidden. The high state of development pharmacy has reached despite its many handicaps, indicates that drug store commercialism isn't parasitic but epiphytic and that its separation from pharmacy, or vice versa, is easily possible. Pharmacy and trade have not ever coalesced. Pharmacy is still pharmacy and in essence is incompatible with trade and in due time will have entirely extricated itself from its temporary entanglement. The separation is already well under way. It is working from both ends, because trade is retreating from pharmacy concurrently with the withdrawal of pharmacy from commerce. The fortunate thing about it all is that nobody seems alarmed or displeased and all affected seem rather complacent. The head of a chain of commercial drug stores recently said that if the Pennsylvania ownership law is upheld by the Supreme Court, his company will turn their eighteen stores in a Pennsylvania city into purely commercial stores and that the change would be hardly noticeable. Another chain manager is reported as having said his chain is doing less than ten per cent of pharmaceutical business and yet the Boards treat them as though they were doing a hundred per cent, and that they are ready to get away from pharmacy law regulations and requirements, which only annoy them.

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