

*Drugs: Analysis of Drugs and Medicines.* Henry C. Fuller. 1072 pp. Illustrated. Price, \$10.00, net. New York: John Wiley & Sons.

*Enzymes: The Chemistry of Enzyme Actions.* K. George Falk. (American Chemical Society Monographs.) 140 pp. Price, \$2.50. New York: The Chemical Catalog Co., Inc.

*Medicinals: The Qualitative Analysis of Medicinal Preparations.* H. C. Fuller. 2d edition, rewritten. 191 pp. Price, \$2.25. New York: John Wiley & Sons, Inc.

*What Are Vitamines?—And Why?* By Benjamin Harrow, Ph.D. New York: E. P. Dutton & Co.

#### PUBLICATIONS RECEIVED.

*Michigan—An Important Source of Raw Vegetable Products.* By Henry Kraemer. A report to the Michigan Academy of Science

from College of Pharmacy, University of Michigan.

*Report on Medicinal Plants.* By Arno Viehoever (Bureau of Chemistry, Washington, D. C.). Reprint from *Journal of the Association of Official Agricultural Chemists*, Vol. IV, No. 1, August 1920.

The report is divided into four parts:

I. A method for the determination of volatile oil in mustard seed and substitutes.

II. Methods for the hydrolysis of linamarin and the subsequent determination of hydrocyanic acid.

III. The effect of abnormal conditions on trade in crude drugs.

IV. The value of weight of unit volumes in the analysis of crude drugs and spices.

*Report of the Committee on Drug Market.* Reprint from Proceedings of Pennsylvania Pharmaceutical Association, 1920 meeting; compliments Geo. E. Éwe.

#### METHYL ALCOHOL VERSUS "WOOD" ALCOHOL.\*

The untoward consequences to human life which have followed the intake of fluids containing methyl alcohol in the last few years, and particularly since the prohibition laws went into effect, ought to leave an indelible impression of the danger of methyl alcohol to man. The more remote effects of this substance, notably the peculiar danger of ensuing blindness which differentiates methyl alcohol from the closely related ethyl alcohol or grain spirits, represent a subtle menace which is rarely suspected until the damage produced is beyond repair. The relative toxicity of the two alcohols is not adequately expressed by their immediate or acute effects; they differ in their behavior in metabolism, in the comparative readiness with which they can be disposed of in the organism, as well as in the permanent damages which they may initiate when the dosage is adequate. The comparison is not favorable to methyl alcohol. Nevertheless, in the repeated attempts made to justify the introduction of methyl alcohol for the less readily obtainable and now specifically prohibited ethyl alcohol, the dangers of the substitution are sometimes minimized by those to whom the change represents a trade advantage. It is claimed, for example, that the unfortunate properties of "wood alcohol" are

attributable to "impurities" of some kind or another, and that pure or refined methyl alcohol is devoid of the larger dangers. In view of this insidious propaganda it is important to note the latest evidence which Sollmann,<sup>1</sup> of Western Reserve University, has contributed. He substantiates the contention that both purified methyl alcohol and "wood" alcohol are markedly more toxic than ethyl alcohol. In bringing out the deleterious effects of chronic alcoholism, Sollmann's new experiments on growing animals emphasize the greater dangers of methyl than of ethyl alcohol; but above all they demonstrate that the alleged "impurities" of ordinary wood alcohol play only a minor part in chronic intoxication. The methyl alcohol, which is the essential ingredient, is likewise the dominant toxic agent. Those who attempt surreptitiously or otherwise to foist the highly dangerous methylated spirits in any guise or under any pretext on the public can no longer hide behind the shield of the asserted "purity" of the alcohol used. We should warn the public to beware of the dangers of methyl alcohol, whether it is labeled pure or impure—or perchance whether or not it is labeled at all.

\* Editorial, *Journal American Medical Association*, January 1, 1921, p. 42.

<sup>1</sup> Torald Sollmann, "Studies of Chronic Alcohol Intoxication on Albino Rats, II, Alcohols (Ethyl, Methyl and 'Wood') and Acetone," *J. Pharmacol. & Exper. Therap.*, 16, 291, Nov. 1920.