

defined, being also mixed with many impurities. After several attempts to get them, the work was given up. It seems very probable, however, that they can be obtained pure, and will be a subject for further study.

CONCLUSION.

The formulas as given above cannot be looked upon as being definite. The writer is well aware that other views and interpretations may be given to his results, but as even these cannot be absolutely demonstrated, he regards the written formulas as wholly tentative. They will receive further study. They may be multiples of the same, or perhaps not so complicated as would appear. As there is no method, at present, to determine the molecular magnitude of such bodies, the only recourse was the result of analysis. It will be readily seen, that a slight error in the percentage of arsenic or phosphorus would alter the whole formula. It can only be claimed that such compounds exist, and that the constitution assigned to them remains open to correction.

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NOTES.

Additional Note on Filtration of Crude Fiber.—The method of filtering crude fiber described by Mr. Thatcher in the December Journal is one which, I believe, is practiced in a number of laboratories in this country. There is, however, one serious objection to this process. It frequently happens that it is desirable to make a chemical examination of the crude fiber and in such cases the method described by Mr. Thatcher would not answer at all, owing to the contamination of the material with asbestos.

A method eliminating all these difficulties is found in the use of a Büchner funnel, using well-fitting filters of hardened paper. These filters are perfectly resistant to the boiling acid and alkaline solutions. In the König method it is advisable to dilute the boiling glycerol-sulphuric acid with an equal volume of hot water before filtering. Using suction, the filtration is very rapid, owing to the large surface exposed. After washing the fiber with hot water, it is treated with a little alcohol and, after sucking as dry as possible, scraped or brushed from the paper into a weighing-

bottle, where it is dried and weighed. The fiber obtained in this way is in excellent condition for further examination (microscopic, ash, pentosans, cellulose, etc.). There is no danger of contamination with fiber from the hardened filters; in fact the latter may be re-used many times.

C. A. BROWNE, JR.

NEW BOOKS.

NOTIONS FONDAMENTALES DE CHÉMIE ORGANIQUE. PAR CH. MOUREAU, Professor agrégé a l'École supérieure de Pharmacie de l'Université de Paris. Paris: Gauthier-Villars. 1902. 286 pp.

This book may be useful under French conditions as a syllabus or memorandum in connection with a course of lectures on theoretical organic chemistry to mature students, but it is difficult to see in what way it can serve American teachers or American elementary students.

The book is clearly written but has grave faults in the selection and arrangement of material for a book intended for beginners. Its preface indicates that it is an introduction to organic chemistry. But elementary students could hardly avoid being overwhelmed by the first 60 pages which are devoted to an outline of theory which includes atoms, molecules, isomerism, valence, radicals, bonding, saturation and unsaturation, homology, nomenclature and the stereochemistry of carbon, nitrogen, and sulphur; and all this before a substance is described or its mode of occurrence or preparation are indicated. In a book of reference and if accompanied by original references, this outline would be admirable but in this place it seems excessive.

In the body of the book, substances are treated together which contain the same substituted radical, which have the same kind of functional activity. The treatment is clear and the classification has its advantages but it is questionable whether in an elementary book it is not better to take up first methane and its homologues and their derivatives, each class of which is made up of members so nearly alike that a full study of one is a nearly complete study of all, and then turn to the other hydrocarbons to study them and their derivatives by illustration and in the mass.

The absence, in the majority of cases, of any statement of the sources of substances which are found in nature is quite noticeable especially in a book written by a professor in a school of phar-