

HYDROGEN SULPHIDE.

(Parts per 100,000).

Days incubated.	Sewage only.	Sewage + sulphate.
Start	0.00	0.00
1	0.04	0.04
2	0.10	0.10
3	0.30	0.35
4	0.35	1.20
7	0.10	2.50
8	0.10	2.50

One or two samples of filter effluents decolorized all of the dyes in four days without the production of hydrogen sulphide or odor, and, on the other hand, one sample showed a considerable development of hydrogen sulphide and odor without decolorizing in 7 days. These two or three results were, of course, abnormal and simply show that absolute reliance cannot be placed on incubation results obtained by the methylene-blue test; in fact, these studies have shown (1) that the degree of putrescibility of such effluents as experimented with can probably be better estimated by odor and appearance after incubation than by the time required to decolorize dyes; (2) the hydrogen sulphide formed comes very largely from albuminous compounds in the effluents and the amount formed is, to some degree, a measure of the putrescibility of the sample tested; (3) on the whole, it would seem that if a putrescibility test of the methylene blue kind is to be adopted, equally good results can be obtained in a shorter time by the use of indigo carmine or methylene green.

LABORATORY OF THE LAWRENCE EXPERIMENT STATION,
LAWRENCE, MASS.

NOTE.

The Quantitative Determination of Arsenic by the Gutzeit Method.—In the issue of *Chemical Abstracts* for April 10, 1908, p. 976, is an abstract of a note by T. F. Harvey on the estimation of arsenic by the Gutzeit test. As this immediately follows the abstract of an article by Sanger and Black on the quantitative determination of arsenic by the Gutzeit method, the casual reader may be led to infer that Sanger and Black were anticipated by Harvey in the method published by them.

I have already called the attention of the editor of the *Journal of the Society of Chemical Industry* to the misleading nature of Harvey's article, and Mr. Harvey himself has assured me that it is quite clear to him that his work had not come to our notice. The Harvey method, however, is merely a quantitative treatment of the ordinary Gutzeit test, while the paper of Sanger and Black not only introduces a different

principle into the procedure, but also includes a detailed study of the conditions of the reaction.

CHARLES ROBERT SANGER.

HARVARD UNIVERSITY, CAMBRIDGE, MASS.

April 30, 1908.

NEW BOOKS.

Lehrbuch der Gerichtlichen Chemie. BAUMERT, DENNSTEDT UND VOIGTLÄNDER. In zwei Bänden. Zweite gänzlich umgearbeitete Auflage. 8°-xvi, 490. Braunschweig. F. Vieweg und Sohn. 1907. Price, 12 Marks, bound 13 Marks.

The first volume of the new edition of this manual by Dr. Baumert of the University of Halle is devoted to the detection and determination of poisons and noxious substances in the cadaver and excretions, in foods and beverages, household articles, water, air and soil and to chemico-legal problems in general. Volume II will be written by Drs. Dennstedt and Voigtländer, of Hamburg, and will be confined to the methods for the examination of inks, writings, signatures, forgeries, etc., and to the examination of blood, blood and spermatic stains and materials of a similar nature.

Dr. Baumert is entitled to the thanks and gratitude of analysts for having placed in their hands a manual of legal chemistry truly worthy of the name. Although a book of only 490 pages, it is a marvel of compactness and thoroughness. A reader, glancing over the table of contents, would be apt to form the opinion that the treatment, in general, must be incomplete, elementary and unsatisfactory, but upon careful study it becomes apparent that this is not true and that we have here one of those rare cases where an author has been able to do justice to his subject in remarkably few words, and that contrary to the verbosity of so many German writers we have in this book an exceptionally terse style.

While it is evident that the manual has been written to meet the needs of German chemists, the discussions are of such a nature and the reference to legal points and practice of such a character that it may be consulted with profit by all experts. At the present time this little book is unique in its field, being much more than a manual of determinative toxicology.

The author confines himself strictly to the chemistry of the materials discussed, all questions involving physiological effects, etc., being avoided so far as possible on the ground that such questions are not legitimately those of the chemist but rather of the medical expert, and that when the chemist has reported that in his judgment a substance is or is not present his work is done. Any subsequent questions as to whether the material found caused death, or could have caused death or was present contrary to law are not within the province of the chemico-legal expert.

The introduction is devoted to a very brief statement of fundamental facts relating to poisons and noxious substances, much space being