

SCIENTIFIC PROCEEDINGS
THIRTY-SIXTH ANNUAL MEETING OF THE SOCIETY
OF AMERICAN BACTERIOLOGISTS
CHICAGO, ILLINOIS, DECEMBER 27, 28 AND 29, 1934
Headquarters: Drake Hotel

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ABSTRACTS*

Report of the Committee on Bacteriological Technic: Progress During 1934.

H. J. CONN, Chairman; VICTOR BURKE, IVAN C. HALL, M. W. JENNISON, J. A. KENNEDY, BARNETT COHEN AND ELIZABETH F. GENUNG, *Members*.

During 1934 the Committee has revised three leaflets of the Manual of Methods for Pure Culture Study of Bacteria and has issued a new index to the Manual. The leaflets revised have been Nos. IV, V and VI, dealing, respectively, with Staining Procedures, Routine Methods for the Descriptive Chart, and Biochemical Procedures. All of these revisions have been published in the journal *Pure Culture Study of Bacteria*, which is issued quarterly as a continuation service for the Manual.

Early this year a new member of the Committee, M. W. Jennison, was appointed and has been made primarily responsible for the Society's Descriptive Chart. Under his supervision, work is now under way looking toward a very considerable change in this chart. A preliminary draft of the new revision is now ready for the Society's consideration; how soon to put the new edition on sale will depend upon what further suggestions for revision are received.

In considering the business side of the Committee's work, one may well conclude that the depression is over. During the year 1933, 22,947 Descriptive Charts were sold and 294 copies of the Manual. During the 10 months of 1934 ending November 1, the number of Charts sold has been 25,308 and the number of Manuals 284,—in other words, more Charts and nearly as many Manuals as during the entire year of 1933. The royalty turned in to the Society during 1933 was \$333.70; while in 1934 the royalty, without including the last two months, has been \$345.00. One reason for the larger royalty is because in 1933 only 10 per cent was turned in on the journal, *Pure Culture Study of Bacteria*; but as this is now on a much better established basis, 25 per cent of the subscription receipts have been turned in, as well as 25 per cent of the sales of Charts and Manuals. The money thus turned into the Society's treasury amounts to about 50 cents for each member of the Society, and

* This number of the JOURNAL has been edited by the Chairman of the Program Committee. Authors of the abstracts in the Scientific Proceedings have not seen proof, due to restrictions of time imposed by the printing schedule.

it is hoped that the continued prosperity of this business may help make it possible for the Council of the Society to postpone still further the increase in dues which has been expected for the last few years.

GENERAL BACTERIOLOGY

G1. Bacteria in Travertine from the Yellowstone. CHAS. B. LIPMAN, University of California, Berkeley.

The work described in this paper concerns an extension of former studies of bacteria in rocks and in other old materials, such as adobe brick, old soils, etc., in which a search was made for microorganisms which have survived for long periods of time in a living condition. The method used for making the study on typical samples was to place a block of travertine from Terrace Mountain, which represents a long series of extinct calcareous hot springs, into molten paraffine at a temperature of about 200°C. for about 3½ minutes. The block was then broken open with sterile tools and pieces from the heart of the block were placed in a sterile moist chamber. The moist chamber was then transferred to a sterile inoculation chamber and pieces taken therefrom were flamed for 15 to 20 seconds in a flame with a temperature varying from 1300° to 1600°C. It was then instantly dropped into a sterile mortar and crushed. The crushed powder was then distributed into a variety of media and the bacteria were studied. Results of these studies show that there are filamentous bacteria of a remarkable and unique type in the travertine, which grow in travertine extract containing 1 per cent peptone and in travertine extract plus 1 per cent peptone plus soil extract. A variety of other media inoculated with the crushed travertine have not thus far yielded any growth. These bacteria are described, and photomicrographs accompany the paper.

G2. Stalked Bacteria, a New Order of Schizomycetes. ARTHUR T. HENRICI AND DELIA JOHNSON, University of Minnesota, Minneapolis.

A study of periphytic bacteria upon glass slides immersed in fresh-water habitats shows the general occurrence of a group of bacteria, hitherto almost unknown, which secrete stalks by which they are attached to a firm substrate. *Gallionella ferruginea* Ehrenberg and *Nevskia ramosa* Famintzin are stalked bacteria previously described which are quite distinct from the forms we have observed. *Pasteuria ramosa* Metchnikoff, or a very similar form, has been rediscovered. We can add to these a variety of new forms, and propose the creation of a