Prepare three slides of a fresh culture of a diphtheria organism; stain one slide in each of these three solutions for two or three seconds only, *i.e.*, just as briefly as the stain can be poured on and poured off, and wash each slide immediately. Examined under the microscope all three of these preparations should show deeply stained bacteria with the characteristic metachromatic granules sufficiently distinct to insure accurate diagnosis.

(5) The sample should prove satisfactory for histological use. No exact method for determining this can be given, but the sample must be submitted to one or two experts in histological technic in order to get their judgment.

(6) It must be understood that these standards refer to samples to be used for ordinary bacteriological and histological staining. Special standards for methylen blue used in vital staining will undoubtedly be necessary. These standards, however, have not yet been determined.

Approval for bacteriological and general staining has been given samples of methylen blue submitted by the following concerns:

Dye Stuffs Laboratory Co., Cleveland, O. Empire Biochemical Co., N. Y. City. Harmer Laboratories Co., Lansdowne, Pa. Hartman-Leddon Co., Philadelphia. National Aniline and Chemical Co., N. Y. City. Providence Chemical Laboratories, Providence, R. I.

In every case the manufacturer has given assurances that there is a sufficient stock of the batch tested to meet the ordinary demand for several years; the certification applies only to the batch tested. These lots of methylen blue are now on the market by all the companies just mentioned and will soon be obtainable from any supply house. In obtaining them it should always be stated that the methylen blue certified by the commission is desired.

All inquiries concerning the certification or reports of unsatisfactory results with them should be addressed to the chairman of the commission, Lock Box 299, Geneva, N. Y. Further work on methylen blue is already in progress, especially as to the type necessary for certain histological purposes for which the grade represented by these six samples seems to be partly unsatisfactory.

Now that the work on stains has reached a point where certification has begun, it seems appropriate to express acknowledgment to one concern whose assistance has been invaluable from the beginning. The Will Corporation, of Rochester, N. Y., through the personal interest of its treasurer, Mr. R. T. Will, has put much time and facilities at the disposal of the commission, without which the early stages of the work would have been almost impossible. The services of this company have been entirely disinterested, and it has even proved that the work of the commission, in calling attention to the specialists in biological stains, has considerably diminished the sales of the Will Corporation in this line. For this reason a public acknowledgment of their services to the work seems to be the least return that can be offered them.

> H. J. CONN, Chairman, Commission on Standardization of Biological Stains

GENEVA, N. Y.

## THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE THE PHILOLOGICAL SCIENCES

In conformity with action taken by the council of the association at the recent Boston meeting, Professor W. A. Oldfather, professor of classics in the University of Illinois, has been asked to accept and has accepted the chairmanship of a special committee to study and report on ways and means by which the association may be able to assist in the progress of the philological sciences. Professor Mark H. Liddell, professor of English in Purdue University, has accepted the secretaryship of this special committee.

Since its birth seventy-five years ago it has been the consistent endeavor of the American Association for the Advancement of Science to foster and coordinate all scientific investigations which have for their end the correlation of observed facts under demonstrable laws. But in 1848 the phenomena of language did not come within the scope of this aim. For language was then generally regarded either as a reflection of metaphysical categories beyond the ken of science, or as an ingenious invention designed to facilitate human intercourse.

Later, when the study of the biological and psychological phenomena that include those of language had become subject to rigorous scientific method, the study of language continued to be popularly regarded as possessing only pedagogical or pedantic value. Its fundamental criteria were supposed to be morphological and practical rather than scientific, and its scientific conceptions were subsumed under the head of comparative philology, or historical grammar.

The organizations which fostered this study have thus developed somewhat independently of the scientific stimulus which is the conspicuous feature of our modern intellectual life. They have hitherto chiefly depended for their growth upon special interests in the classics, or in the Oriental languages and literatures, or in archeology, or in anthropology, or in the practical study of foreign languages.

There is no reason for this isolation. For it is now generally admitted that man's language is subject to laws of development over which he has as little control as he has over those that determine his stature. It is also beginning to be apparent that his skill in employing his language as a developed means of thinking definitely conditions his efficiency in using it as a practical means of communication. Upon this efficiency depends the ultimate value of all human knowledge; for, though the truth of science may be attained in the first instance by forms of thinking in which actual words play an insignificant rôle, the attained truth to become a potent factor in the intellectual life of mankind must be put into those thinking forms which the laws of developing language have determined for it.

It is therefore very desirable that philological science shall become more consciously correlated with the other branches of scientific endeavor.

With these considerations in mind the American Association for the Advancement of Science is endeavoring to mark its 75th anniversary by encouraging a concerted effort on the part of American scholars to stimulate cooperative research in the linguistic sciences, and by inviting those representatives of these sciences whose scientific training gives promise of fruitful endeavor in this field to take a prominent part in its scientific activities. The association already includes in its various sections a considerable number of such persons, whose scientific work is increasingly contributing to the efficiency of the organization. The appended circular has recently been sent to a large number of those who may be interested in the organization of the philological sciences in the association. Suggestions are asked for in this connection, especially in regard to the following points: (1) The best way to advance the interests of American philological science. (2) The most practical method of stimulating research in this field. (3) Assuming these sciences to be represented in a special section of the American Association for the Advancement of Science, the most practical mode of organizing and conducting such a section. (4) Suggestions as to how philology may be advantageously represented at the 75th anniversary meeting of the association, to be held at Cincinnati, December 27, 1923, to January 2, 1924.

> BURTON E. LIVINGSTON, Permanent Secretary

## THE PHILOLOGICAL SCIENCES IN THE AMERI-CAN ASSOCIATION FOR THE ADVANCE-MENT OF SCIENCE

The Executive Committee of the American Association for the Advancement of Science at its last meeting authorized a special survey of the philological sciences with a view to fostering philological research as a cardinal feature of the Association's activities. This leaflet is sent to those interested in the philological sciences, with the hope of enlisting their support for this movement.

Philology has long been a field of scientific research whose principles and methods are as clearly formulated and definitely organized as those of chemistry or biology. American contributions to the progress of this science have been conspicuous in their quality and extent. The scientific study of language, moreover, apart from its relation to literature, has played an important rôle in the history of American culture.

The fundamental data of language are also fundamental data in other fields of scientific study. For in its physical aspects language depends upon certain forms of sound-waves which are significant in the determination of its fundamental elements; in its biological aspects it depends upon certain types of organic development which make the production and reception of these stimuli natural to the functional activities of the human species; in its psychological aspects it depends upon the generic sensitivities of the human ear to speech-sound impulses in association with conceptual processes, and upon other psychic reactions induced by them, thus forming the most highly developed function of the individual consciousness; and in its social aspects, once unified and generalized by various groups of peoples, it records in permanent form their developing generic concepts and ideals with a clearness and definiteness not to be found in other records of ethnic activities.

The essential significance of these phenomena is to be ascertained from the scientific study of language itself in its various actual conditions and in its various developmental stages during the period since it has been a matter of record. A clear recognition of their interdependencies and a successful solution of the fundamental problems which grow out of them will surely be facilitated by an organization whose work is closely associated with progress and research in the related fields already well represented in the American Association for the Advancement of Science.

We therefore regard the effort of the American Association for the Advancement of Science to organize and foster research in the philological sciences as being likely to conduce to the advancement not only of philology but of science as a whole.

- M. H. LIDDELL,
- Professor of English, Purdue University G. L. KITTREDGE,
- Professor of English, Harvard University C. H. GRANDGENT,
  - Professor of Romance Languages, Harvard University
- W. A. OLDFATHER,
- Professor of Classics, The University of Illinois L. J. PAETOW,
  - Professor of Mediaeval History, The University of California

A. V. W. JACKSON,

Professor of Indo-Iranian Languages, Columbia University

C. D. BUCK,

Professor of Indo-European Comparative Philology, The University of Chicago