Dr. Howe was a student at Harvard in 1872 and 1873. He has been for nearly fifty years in charge of the Buffalo Eye, Ear and Throat Infirmary. For almost thirty years he has been professor of ophthalmology in the University of Buffalo.

RESEARCH BY FOREIGN SCHOLARS AT YALE UNIVERSITY

SIX foreign scholars will take up residence at Yale University next year to conduct research under the direction of the faculty of the Yale Graduate School. These include five research fellows of the International Education Board, Dr. Pasquale Pasquini, of the University of Rome, Italy; Dr. Stanislaw Hiller, of Cracow, Poland; Dr. Ernest Wolf, of the University of Heidelberg, Germany; Dr. B. M. Bergerson, of the University of Oslo, Norway, and Dr. Fritz E. Lehmann, of the University of Freiburg, Germany, who have been appointed to carry on research under the direction of Dr. Ross G. Harrison, of the department of zoology, and Dr. D. L. Watson, of Edinburgh, Scotland, who will work in physics.

In addition to these five foreign research fellows, ten other fellows have been appointed by the National Research Council and the National Tuberculosis Association to study specific problems under the direction of the graduate faculty. Nine of these assignments are made by the National Research Council as follows: Franklin Hollander, Ph.D., Columbia University, 1923, of Brooklyn, N. Y.; Olive M. McCay, Ph.D., University of California, 1925, of Berkeley, Calif.; Leopold R. Cerecedo, Ph.D., University of Freiburg, 1921, of San Juan, Porto Rico, and Howard J. Shaughnessy, B.S., Massachusetts Agricultural College, 1922, of New Haven, Conn., have been granted fellowships by the medical board of the council to continue work with Professor Lafayette B. Mendel, of the department of physiological chemistry. Dr. A. J. Gee, of the University of Toronto, who is a National Research Council fellow, will take up his work under the direction of the department of bacteriology. On similar appointments Ernest O. Lawrence, Ph.D., Yale University, 1925, of Springfield, South Dakota, and Dr. J. W. Beams, of the University of Virginia, will conduct their research under the direction of the department of physics. In addition the child development committee of the National Research Council has appointed as fellows Miss Edith Fisher Symmes, chief psychologist of the Boston Psychopathic Hospital, and Miss Viola May Jones, assistant superintendent of the child-placing department of the State Charities Aid Association of New York City to work under the direction of Professor Arnold Gesell, of the Yale psycho-clinic.

As a fellow of the National Tuberculosis Association, Robert DeWolf Coghill, Ph.D., Yale University, 1924, will continue his research on the tubercle bacilli under the direction of Professor Treat B. Johnson, of the department of chemistry.

It is expected that the facilities of the university will be used by a number of visiting members of the faculties of other institutions. Professor C. C. Chen, of Shanghai College, will undertake special research in bacteriology, and Professor Arthur T. Jones, of Smith College, and Professor Mildred Allen, of Mount Holyoke College, in physics.

BIOLOGICAL ABSTRACTS

IN his review of the activities of the Rockefeller Foundation for the last year, President George E. Vincent says concerning biology:

One special form of aid to the progress of biology calls for separate notice. The enormous number of scientific papers and volumes published annually through the world in every field of research creates the need for some kind of systematic organization of this material in a readily accessible form. A great library undertakes at least a part of this task. Such an institution has been likened to a social memory or brain.

But each library after all is only a section of a national and of a world memory or brain. The books and periodicals on its shelves come from all lands where new truth is discovered and then described in print. Thus in the field of biology alone it is estimated that each year 40,000 articles of at least some value appear in 5,000 journals, transactions of scientific societies, proceedings of congresses and the like. To be sure, these papers vary enormously in their importance. Probably in a given year only a small percentage is highly significant in fundamental ways. The bulk of them perhaps deal with useful details. A good many are likely to be trivial if not negligible. Yet if a scientific worker is to avoid duplicating the research of others, if he is to compare his methods with theirs, if he is to have his mind steadily fertilized by relevant ideas and suggestions, if he is to increase the chance of getting a happy illuminating flash upon his problems, he must have constant access to the world memory.

To meet this need abstract journals which give the gist of articles and papers have appeared in different countries. Elaborate indexes make reference easy and accurate. Some of the journals have attained international standing. Biology as a whole, however, has lacked satisfactory service of a world-wide sort. Recently eighteen American biological societies joined in a plan to publish a journal of biological abstracts on an international basis. The cooperation of individuals and organizations in foreign countries is being sought and in most cases secured. The National Research Councils of Japan and of Australia have responded warmly. The Royal Society of London and the French Federation of Natural Science Societies have expressed an interest. Arrangements for exchange of material with abstract journals in Europe are being worked out.

The details of the new plan have been carefully studied.

Eight sections of subject matter will be handled by eighty special editors. Cooperating foreign correspondents and libraries will help to scan the 5,000 serials for significant papers. Authors and editorial collaborators will prepare the abstracts. By the use of small but legible type and a thin opaque paper 1,030 large pages will occupy only an inch of shelf room. When once under way it is expected that twelve monthly numbers with elaborate annual indexes will run to between 3,000 and 3,500 pages. The entire enterprise will be directed by a small full-time central staff of editors.

THE FOURTH AMERICAN ASSOCIATION PRIZE

THE thousand-dollar prize that is to be awarded at the fifth Philadelphia meeting of the American Association for the Advancement of Science will be the fourth annual prize of the association. The prize is awarded each year to some one who presents at the annual meeting of the association and associated organizations a paper making a noteworthy contribution to the advancement of science. There is no formal competition for the prize and all papers on the program are to be considered. The winner of the prize need not necessarily be a member of the American Association nor of any of the associated organizations. The prize is awarded at the close of the annual meeting and disbursement from the treasury is made within about a week thereafter.

Funds for these annual American Association prizes were given to the association by one of its members who wishes his name withheld. There is now available sufficient money for two more prizes after the one to be awarded at Philadelphia. These will be awarded at the Nashville meeting (1927–28) and at the fifth New York meeting (1928–29).

The following is the roll of the American Association prizemen. The Washington prize was divided equally between two winners.

1. Dr. L. E. Dickson, professor of mathematics in the University of Chicago. Awarded the first American Association prize, at Cincinnati, January, 1924, for a noteworthy contribution on "Algebras and their Arithmetics." (See SCIENCE for January 25, 1924, p. 77.)

2a. Dr. L. R. Cleveland, research worker in medical zoology at the School of Hygiene and Public Health, the Johns Hopkins University. Awarded half of the second American Association prize, at Washington, January, 1925, for noteworthy contributions on "The Ability of Termites to Live Perhaps Indefinitely on a Diet of Pure Cellulose" and "The Effects of Starvation and Oxygenation on the Symbiosis between Termites and their Intestinal Protozoa, together with the Toxicity of Oxygen for Free-living and Parasitic Protozoa." (See SCIENCE for March 13, 1925, pp. 277–279.)

2b. Dr. Edwin P. Hubble, astronomer at Mt. Wilson Observatory, Pasadena. Awarded half of the second American Association prize, at Washington, January, 1925, for a noteworthy contribution on "Cepheids in Spiral Nebulae." (See SCIENCE for March 13, 1925, pp. 277–279.)

3. Dr. Dayton C. Miller, professor of physics in the Case School of Applied Science, Cleveland. Awarded the third American Association prize, at Kansas City, January, 1926, for a noteworthy contribution on "The Michelson-Morley Ether-Drift Experiment: its History and Significance." (See SCIENCE for January 29, 1926, pp. 105–106, and for April 30, 1926, pp. 433–443.)

By vote of the association council, the annual prizes are not to be divided in the future, the entire amount of the prize going each year to a single winner. The award is decided by a special committee on prize award. This committee for the fifth Philadelphia meeting has been named as follows:

C. E. Seashore, *chairman;* dean of the Graduate College, University of Iowa.
Otis W. Caldwell; director of the Lincoln School, Teachers College, New York City.
Charles B. Davenport; director of the Station for Experimental Evolution, Cold Spring Harbor, N. Y.
Lauder W. Jones; professor of chemistry, Princeton University.
C. F. Marbut; chief of the Division of Soil Survey, Bureau of Soils, U. S. Department of Agriculture.

The committee receives suggestions from the secretaries of the sections and societies that take part in the general program of the meeting, studies these suggestions and reports its decision to the permanent secretary, who announces the award through the daily and scientific press at the close of the annual meeting.

BURTON E. LIVINGSTON,
Permanent Secretary

SCIENTIFIC NOTES AND NEWS

THE degree of doctor of science has been conferred by the University of Oxford on Professor A. C. Seward, professor of botany, master of Downing College and vice-chancellor of the University of Cambridge; Sir William Bragg, Fullerian professor of chemistry and director of the Davy Faraday Research Laboratory of the Royal Institution, London, and Sir Walter Morley Fletcher, secretary of the British Medical Research Council.

THE degree of doctor of science will be conferred in October by the University of Cambridge on Sir Ernest Rutherford and on Professor W. S. Holdsworth on the occasion of the celebration by Trinity College of the Bacon Tercentenary.

THE bicentenary of the faculty of medicine of the University of Edinburgh was celebrated on June 10