

District No. 1, W. B. Powell, St. Louis; District No. 2, Gardner S. Williams, Ann Arbor, Mich.; District No. 4, W. J. Fisher, York, Pa.; District No. 5, Paul Wright, Birmingham, Ala.; District No. 6, Lloyd B. Smith, Topeka, Kansas; District No. 7, O. H. Koch, Dallas, Texas.

ASSOCIATESHIP IN THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

IN the By-Laws and Rules of Procedure of the American Association, Article II, Section 2, is the statement that "Associates, on payment of five dollars, may be admitted to the privileges of a meeting, except voting." The associateship was planned for those who desire to attend a meeting of the association and to contribute toward the expenses of the meeting but who do not wish to join the organization permanently. Since the adoption of the new constitution, with the new by-laws and rules of procedure, there have been but two meetings, the Chicago meeting of the year 1920-21 and the recent meeting held at Toronto. No associates were registered for the Chicago meeting, but 247 were registered at the last meeting. These were mostly residents of Toronto.

The permanent secretary wishes to call the attention of all members and friends of the association to this, the first entry of associates upon the roll of the association. According to the prescribed rule, associates have all the privileges of the meeting for which they are registered, except voting. These privileges are considered to include the right to present papers at that meeting, but associates do not receive the journal *SCIENCE*, which is sent to members. The funds secured by the payment of associateship fees will be used partly to defray a portion of the expenses of the meeting and partly for sending circulars and invitations to prospective members during the following year. Members will not fail to appreciate the fine spirit shown by associates in making this contribution to the funds available for current expenses. This first roll of associates was secured through the very admirable work of the local subcommittee on mem-

bership, Mr. H. V. F. Jones, *chairman*, and the thanks of the association are especially due to Mr. Jones and the other members. It is planned that future publications of the membership list will include lists of the associates registered for each meeting.

BURTON E. LIVINGSTON,
Permanent Secretary.

SCIENTIFIC NOTES AND NEWS

AT the Amherst meeting of the Geological Society of America, Professor Charles Schuchert, of Yale University, was elected president. As vice-presidents were elected: Dr. Henry S. Washington, Geophysical Laboratory of the Carnegie Institution of Washington; Dr. Robert T. Hill, Los Angeles, California; Dr. W. D. Matthew, of the American Museum of Natural History, New York City; Professor T. L. Walker, of the University of Toronto, and Dr. Edmund Otis Hovey, of the American Museum of Natural History.

THE American Society of Zoologists, meeting at Toronto, elected as president Professor Harris Hawthorne Wilder, of Smith College. Professor Bennet M. Allen, of the University of Kansas, was elected vice-president.

AT the New Haven meeting of the American Association of Anatomists, Professor Clarence M. Jackson, of the University of Minnesota, was elected president, and Professor Harold D. Senior, of New York University, was elected vice-president.

JOHN RIPLEY FREEMAN, of Providence, R. I., was elected president of the American Society of Civil Engineers at the first session of its sixty-ninth annual meeting held in New York on January 18. Honorary memberships were conferred upon Charles Prosper Eugene Schneider of Paris, Luigi Luiggi of Rome, Samuel Rea, president of the Pennsylvania Railroad, Howard Swasey and Howard A. Carson.

DR. HIDEYO NOGUCHI, member of the Rockefeller Institute for Medical Research, was elected to honorary membership in the Society of Dermatology and Venereology of Moscow at its thirtieth annual meeting on October 16.

CHARLES W. GOODALE, of Butte, Montana, was awarded the gold medal of the Mining and Metallurgical Society of America at its annual meeting on January 10, for conspicuous services in safety and welfare work.

THE Crompton Medal, given annually by the Institution of Automobile Engineers for the best paper read during the session, has been awarded to Mr. H. L. Heathcote for his paper on "Ball Bearings."

DR. AUGUST PACINI, of Washington, D. C., was awarded the prize of \$1,000 for research work in roentgen-ray experimentation by the American Roentgen Ray Society at its recent meeting in Washington.

SIR GEORGE T. BEILBY, Sir John Cadman and Professor J. S. Haldane have been appointed to represent science on the advisory committee for coal and the coal industry set up under the British Mining Act of 1920.

DR. E. N. MILES THOMAS has resigned the keepership of the Department of Botany of the National Museum of Wales.

DR. S. K. LOY, chief chemist of the Standard Oil Company's refinery at Casper, Wyoming, has been appointed consulting chemist of the Bureau of Mines in connection with the oil shale work.

DR. EMILIUS CLARK DUDLEY has been given leave of absence from the Northwestern University Medical School to accept an invitation from Yale University to give a course in clinical surgical gynecology at the Hunan-Yale College of Medicine, Changsha, China. Dr. Dudley expects to return to Chicago about July 1.

E. F. BURCHARD has been granted a year's leave of absence by the U. S. Geological Survey to undertake private work in oil geology in South America.

PRESIDENT ARTHUR A. HAMERSCHLAG, of the Carnegie Institute of Technology, sailed for Europe on January 17 for three months vacation. During his absence Dr. Thomas S. Baker, the secretary of the institution, will be the acting president.

DR. A. S. HITCHCOCK, systematic agrostologist of the U. S. Department of Agriculture, has returned from a trip to the Orient where he went to study the grasses, especially the bamboos. He visited the Philippines, Japan, central and south China, including the island of Hainan, and Indo-China.

PROFESSOR W. H. HOBBS, head of the department of geology at the University of Michigan, who has been conducting in the Pacific area a study of mountain growth and of the formation of coral reefs and islands, has now reached Europe. As exchange professor with Professor H. A. Brouwer, he will begin his lectures at the University of Delft the first week in February. Dr. Brouwer sailed for America on January 18 and before going to Ann Arbor expects to give an address before the Washington Academy of Sciences.

At the meeting of the Federal Board of Surveys and Maps, held on January 10, at Washington, D. C., the following officers were elected: *Chairman*: William Bowie, chief, Division of Geodesy, U. S. Coast and Geodetic Survey, and chairman of the American Geophysical Union; *Vice-chairman*: A. D. Kidder, Cadastral Engineer, U. S. General Land Office; *Secretary*: C. H. Birdseye, Chief Topographic Engineer, U. S. Geological Survey; *Members of the Executive Committee*: Colonel G. S. Norvell, Military Intelligence Office, U. S. Army, and Commander W. D. Puleston, Hydrographic Office, U. S. Navy.

At a recent meeting of the executive committee of the American Astronomical Union, Dr. Ludwik Silberstein, of the Research Laboratory of the Eastman Kodak Company, was appointed chairman of a Committee on Relativity. Other members of this committee are Dr. Edward Kasner, Columbia University, Dr. A. A. Michelson, University of Chicago and Dr. D. C. Miller of the Case School of Applied Science. A meeting of the American Section of the International Astronomical Union will be called some time in the early spring before the delegates sail for Rome, where the National Conference opens on April 20. At this sectional meeting it is hoped to have a report

from each of the committees as a basis for instruction to the American delegates.

BEFORE the Philosophical Society of Washington on January 14, an address was given by the retiring president, R. L. Faris, on "Some problems of the sea."

DR. EDGAR F. SMITH, president of the American Chemical Society, addressed the Rochester section of the society, December 19, on "A Glance at Early Organic Chemistry."

RALPH H. MCKEE, professor of Chemical Engineering at Columbia University, spoke before the Franklin Institute, January 12, on "Gasoline from Oil Shale."

MR. JOSEPH BARCROFT, F. R. S., fellow of King's College, Cambridge, will deliver the sixth Harvey Society lecture at the New York Academy of Medicine on February 11, at 8:30. His subject will be "The *raison d'être* of the red corpuscle."

DR. CAMPBELL P. HOWARD, professor of medicine at the University of Iowa, gave a Mayo Foundation Lecture on December 30, his subject being "Personal Reminiscences of Sir William Osler."

THE *Journal* of the American Medical Association reports that Professor Gaffky, who for many years was the director of the Berlin Institute for Infectious Diseases, has been honored with a monument erected over his grave in Hanover, his native city, by his pupils and friends.

As has already been reported in *SCIENCE*, plans are under way in France for the celebration of Pasteur's centenary in 1923. The celebration will chiefly consist in an international exhibition of hygiene and bacteriology which will be held from May 1 to October 31, 1923, at Strasbourg where Pasteur began his epoch-making researches. A monument to Pasteur will be unveiled at the same time. The celebrations are in charge of the University and City of Strasbourg, the Pasteur Institute of Paris and the Pasteur family.

DR. WILLIAM FREAR, since 1887 agricultural

chemist at the Pennsylvania Agricultural Experiment Station, died suddenly of heart trouble at his home in State College, Pa., at the age of sixty-two years.

DR. JOSEPH MACDONALD, JR., founder and managing editor of the *American Journal of Surgery*, died suddenly of apoplexy on January 7, at his home in East Orange, N. J., at the age of fifty-two years.

MANY libraries doubtless contain duplicates of astronomical periodicals and books that are needed in other institutions. For the purpose of facilitating their purchase, exchange or gift, the National Research Council contemplates the compilation of a list of all duplicates that can be spared. This list will be mimeographed and widely distributed. Those who have duplicates to dispose of are asked to send a list of them to the National Research Council, Division of Physical Sciences, 1701 Massachusetts Avenue, Washington, D. C. It is desirable, but not essential, that it be indicated which of these will be sold, which exchanged, and which donated. A copy of the complete list will be sent on request.

THERE has recently been issued "A list of seismologic stations of the world" as Vol. 2, No. 15, of the *Bulletin of the National Research Council* (U. S. A.). It was compiled under the auspices of the Section of Seismology of the American Geophysical Union with the cooperation and assistance of the Research Information Service of the National Research Council. This list is incomplete, owing to conditions prevailing generally after the world war. It is desired to correct and complete the information in the files of the Research Information Service in preparation for a revised edition of the publication. To that end, a further, revised questionnaire is being distributed with the printed list. Extra copies of the questionnaire are available and will be freely sent to all who have additional information to contribute. It is requested that every one who notes errors or omissions in the "List" as issued bring these to the attention of the Section of Seismology of the American Geophysi-

eal Union, addressing communications in care of the Research Information Service, National Research Council, 1701 Massachusetts Avenue, N. W., Washington, D. C., U. S. A. It is hoped, further, that complete as well as accurate information may be supplied concerning all stations not now fully described.

THE Genetics Division of the California Agricultural Experiment Station is investigating the genus *Crepis* for the purpose of finding favorable material for genetic research. As many as possible of the species in this genus will be grown and tested. Incidentally material will be accumulated for a monograph on the genus. About 35 species from foreign countries are now being grown at Berkeley, but none that are native to North America. The object of this appeal is to interest American collectors in the work so as to secure viable seeds of American species during the present year. Seeds may be sent to Division of Genetics, University of California, Berkeley, California.

DR. C. E. RUBY is making a collection of verse of all varieties, whose subject matter relates to the sciences, with the ultimate purpose of publishing an anthology of such poetry. Readers of SCIENCE are invited to send any verses of this character, which may be available to them, or to send suggestions as to possible sources of such verse to Dr. Ruby, 7 St. Paul Street, Cambridge, Mass. In sending such contributions, it is desirable that the author's name, and other needful details, including the permission to publish the poem (if it is possible for the contributor to include this permission) accompany each poem.

FIRE during the night of January 9 in the laboratories of the department of anatomy, Loyola University School of Medicine, 706 S. Lincoln Street, Chicago, destroyed the collection of reprints and files of journals of Professor R. M. Strong. He writes that he would be grateful to authors who have sent him reprints in the past for any replacements which it may be convenient for them to make. The research material, unpublished drawings and loan collections of the department were essentially untouched.

UNIVERSITY AND EDUCATIONAL NOTES

THE Corporation of Yale University has received an anonymous pledge of \$100,000 for the establishment of the William H. Carmalt professorship fund in the School of Medicine. The president was authorized to designate annually a professor of the medical school as the William H. Carmalt professor.

DR. ALLEN FISKE VOSHELL, former resident orthopedist at the Johns Hopkins Hospital, has assumed charge of the department of orthopedic surgery at the University of Virginia Medical School and Hospital.

THE General Education Board has offered \$250,000 toward the one million dollars of the Radcliffe Endowment Fund provided that the rest of the million is raised by July 1.

DR. JOHN HEISLER is now carrying on the work of anatomy in the School of Medicine of the University of Pennsylvania, a position formerly filled by Dr. Piersol. Dr. G. P. McHoueh has been appointed a full-time instructor in physiology.

DR. AUSTIN BAILEY, who has recently been employed as superintendent of the apparatus division of the Corning Glass Works, has resigned his position to accept an assistant professorship in the department of physics at the University of Kansas.

MR. HUBERT H. NEWELL, of the Research Laboratory of the Westinghouse Electric and Manufacturing Company, has resigned to accept a position at the Worcester Polytechnic Institute.

E. A. ALLCUT has been appointed associate professor in the department of thermo-dynamics at the University of Toronto.

PROFESSOR J. W. NICHOLSON has been elected to a war memorial fellowship in physics and mathematics at Balliol College, Oxford.

DISCUSSION AND CORRESPONDENCE

DISCOVERY OF GIGANTIC FOOTPRINTS IN THE COAL MEASURES OF KANSAS

TECHNOLOGY still holds an important place in