

gineers for the year beginning August 1, 1931, as announced at the annual meeting of the institute held at Asheville, N. C., on June 22, during the annual summer convention of the institute. The other officers elected were: *Vice-presidents*, W. B. Kouwenhoven, Baltimore; W. E. Freeman, Lexington; Paul H. Patton, Omaha; A. W. Copley, San Francisco; L. B. Chubbuck, Hamilton, Ontario; *Directors*, L. W. Chubb, East Pittsburgh; B. D. Hull, Dallas; H. R. Woodrow, Brooklyn; *National Treasurer*, W. I. Slichter, New York (reelected).

These officers, together with the following hold-over officers, will constitute the Board of Directors for the next administrative year, beginning August 1: W. S. Lee (retiring president), Charlotte, N. C.; Harold B. Smith, Princeton, Massachusetts; H. V. Carpenter, Pullman, Washington; G. C. Shaad, Lawrence, Kansas; I. E. Moulthrop, Boston; H. P. Charlesworth, New York; T. N. Lacy, Detroit; J. Allen Johnson, Buffalo; A. M. MacCutehon, Cleveland; A. E. Bettis, Kansas City; J. E. Kearns, Chicago; F. W. Peek, Jr., Pittsfield; C. E. Stephens, New York; A. B. Cooper, Toronto; A. E. Knowlton, and R. H. Tapscott, New York.

The annual report of the Board of Directors, presented at the meeting, showed a total membership on April 30, of 18,334. In addition to three national conventions and five district meetings, 1,628 meetings were held during the year by the local organizations of the institute in the principal cities and educational institutions in the United States, Canada and Mexico.

AWARD OF THE PRIZES OF THE RESEARCH CORPORATION

THE Research Corporation prizes of \$2,500 have been awarded through the Smithsonian Institution to Dr. Andrew Ellicott Douglass, director of Steward Observatory of the University of Arizona, and Dr. Ernst Antevs, of the University of Stockholm. Each will likewise receive the Research Corporation plaque for outstanding contributions to science.

The prize is awarded to Dr. Douglass for his researches on the rings that mark the annual growth of trees which have thrown light on the past climate of the earth and on the correspondence between weather and solar activity. The award to Dr. Antevs was in recognition of his use of varves, layers of clay in ancient lake beds, as time-pieces of glacial activity.

The awards to Drs. Douglass and Antevs are the fourth and fifth of their kind made by the Research Corporation. The first, in 1925, went to Dr. John J. Abel, of the Johns Hopkins University, for his work on ductless glands, animal tissues and fluids. The second, in 1929, went to Dr. Werner Heisenberg, of the University of Leipzig, for his contribution to

matrix mechanics and for his exposition of the principle of indeterminance, and the third, also in 1929, to Dr. Bergen Davis, of Columbia University, for the double x-ray spectrometer and other achievements in the field of atomic physics.

The Research Corporation is the only organization of its kind. It sprang from the desire of a scientific man to have the fruit of his scientific labors capitalized for the promotion of research. In 1911, Dr. Frederick G. Cottrell, then chief physical chemist, later director of the U. S. Bureau of Mines, and his associates offered their invention for the electrical precipitation of suspended particles to the Smithsonian Institution, for the benefit of science. As the institution could not well undertake the development of a matter so likely to have commercial and legal complications, Dr. Charles D. Walcott, then secretary of the Smithsonian, undertook with Dr. Cottrell to enlist the aid of public spirited men of New York City to organize a non-profit sharing corporation for the development of the patents, and in 1912 the Research Corporation was formed.

Its purposes are to acquire inventions and patents and make them more available in the arts and industries, while using them as a source of income, and, second, to apply all profits from such use to the advancement of technical and scientific investigation and experimentation through the agency of the Smithsonian Institution and other scientific institutions.

THE HARVARD DEPARTMENT OF PHYSICS

THE *Harvard Alumni Bulletin* prints information concerning members of the department of physics as follows:

Professor Theodore Lyman is recuperating from a surgical operation for appendicitis, performed on May 10.

Professor William Duane also is convalescing from a serious illness. He will be able during the coming summer, however, to direct research in the x-ray laboratories of the new physics building and at the Huntington Hospital, Boston.

Professor P. W. Bridgman took part in a symposium on the physics of crystals, held at the first annual summer meeting of the American Association for the Advancement of Science, in Pasadena, on June 15. Later in the summer he will be engaged in writing at Randolph, New Hampshire. During his absence from Cambridge, his research on the properties of matter under high pressure will be carried on by his assistants.

After a short vacation in New Hampshire, Professor F. A. Saunders will go on with his research in spectroscopy at the physics laboratory.

Professor Otto Oldenberg will remain in Cambridge during the summer for work in atomic physics.

Professor J. C. Slater, chairman of the department of

physics at the Massachusetts Institute of Technology, and lecturer on physics at Harvard, will give courses in the summer school of the University of California.

Professors E. L. Chaffee and N. H. Black are on leave of absence in Europe. Professor Chaffee is completing his text-book on vacuum tubes, and Professor Black, who has attended courses at the University of Cambridge, will finish his study of the instruction in physics given at the English schools and colleges.

Professor E. C. Kemble will spend the summer in Vermont, writing on quantum mechanics.

Professor F. H. Crawford will take a brief vacation in Virginia and then return to Cambridge and continue his research on band spectra.

J. H. McLeod will teach in the summer school and carry on research in atomic physics; D. S. Muzzey will work on supersonics, F. V. Hunt on architectural acoustics and R. W. Hickman on gas tubes. H. P. Stabler will go to Williams College next year as an instructor in physics.

The remodeling of the Jefferson Physical Laboratory will be completed during the summer, under the direction of H. R. Mimno, instructor in physics, who will also do research on power amplifiers.

HONORARY DEGREES FOR SCIENTIFIC MEN

AMONG honorary degrees conferred by universities at their recent commencement exercises are the following:

Yale University: D.Sc. on Dr. Eugene Lindsay Opie, professor of pathology and director of the department

at the University of Pennsylvania, and director of the Henry Phipps Institute, Philadelphia; and on Mr. John Ripley Freeman, civil and mechanical engineer, Providence, Rhode Island.

Northwestern University: D.Sc. on Dr. Isaac Abt, member of the medical faculty of Northwestern University since 1894; and on Dr. Robert Bruce Preble, professor of medicine at Northwestern University since 1895.

The University of Pittsburgh: D.Sc. on Dr. Carl E. Seashore, professor of psychology and dean of the Graduate School of the State University of Iowa.

The University of Wisconsin: D.Sc. on Dr. Irving W. Bailey, professor of plant anatomy at Harvard University.

Middlebury College: D.Sc. on Dr. Albert W. Hull, of the General Electric Company.

Georgetown University: LL.D. on Dr. Felix Neumann, assistant librarian of the Army Medical Library at Washington, D. C.

Wilson College: D.Sc. on Miss Francis Wick, professor of physics at Vassar College.

Jefferson Medical College: LL.D. on Dr. Irving S. Cutter, dean, Northwestern University Medical School.

Earlham College: LL.D. on Mr. Orville Wright, of Dayton, Ohio, co-inventor of the airplane.

Brown University: D.Sc. on Mr. Ambrose Swasey, Cleveland, Ohio.

University of Toronto: D.Sc. on Dr. L. V. Redman, vice-president and director of research of the Bakelite Corporation and president-elect of the American Chemical Society.

SCIENTIFIC NOTES AND NEWS

THE Roosevelt Memorial Association, New York, has awarded a Roosevelt Medal to Dr. C. Hart Merriam, chief of the U. S. Biological Survey from 1885 to 1910, and since research associate of the Smithsonian Institution, who "brought the study of natural history out of the laboratory into the open spaces of field and wood and sky."

PROFESSOR DUGALD C. JACKSON, chairman of the electrical engineering department of the Massachusetts Institute of Technology, was on June 22 presented with the Lamme award for outstanding achievement in engineering teaching, at the annual dinner of the Society for the Promotion of Engineering Education at Purdue University. More than five hundred persons attended the dinner, over which Dr. Harold S. Boardman, president of the University of Maine and president of the society, presided as toastmaster.

Nature states that the portrait of Dr. G. Claridge Druce, which was subscribed for by members of the Botanical Society and Exchange Club of the British

Isles on the occasion of his eightieth birthday on May 23, 1930, has been painted by Mr. P. A. de Laszlo.

THE gold medal of the Royal College of Surgeons has been conferred on Mr. G. Buckston Browne, in recognition of his contributions to the surgery of the genito-urinary system, and of his gift of an endowment for an institution for surgical research.

DR. LÉCOMTE DU NOÛY, director of the department of biophysics of the Pasteur Institute, Paris, has been elected corresponding member of the Society of Biology of Vienna.

DR. CARL E. CORRENS, professor of botany at the University of Berlin, has been elected a foreign member of the Linnean Society, London.

M. H. LEBESGUE, professor of mathematics at the Collège de France, and Dr. A. F. Molengraaf, professor of geology at Delft, have been elected associates of the Royal Academy of Belgium.

THE Albert Medal of the Royal Society of Arts for 1931 has been awarded by the council to H. R. H. the