men have thought so long and so effectively on the problems in which they are interested and have observed so accurately that an understanding of the fundamental phenomena has become part of their very being. Their instinct is like the instinct of an experienced helmsman, the result of long training and practise. It has sometimes seemed to me that not the least significant fact in regard to Professor Thomson's work is the fact, known to those who have had the pleasure of seeing him in his home, that his laboratory is built right into the home and is an integral part of it. Probably thoughts on scientific problems are never wholly absent from his mind, although he may be consciously thinking of quite other matters. It can hardly be necessary to say that a man who has achieved what Thomson has done must be more than I have pictured, an unselfish, generous, well-trained, wellrounded, well-balanced man of science. Above all and pervading all must be imagination, not necessarily the imagination of a poet, but something akin to that in quality and in power, and it is of course mainly because Thomson is a man of imagination in the highest sense that he has achieved so much success and earned so much respect not only in this country, but throughout the scientific world. He has been literally showered with honors and it must be almost a unique thing to obtain two great national medals within almost a week, one from the Royal Society of London, and the other the great honor of the Fritz medal that is now to be awarded. Ι heartily congratulate the board of award on having found a man worthy to be placed beside the greatest whose names have already given distinction to their selections, like Graham Bell, Edison and Kelvin. Such a one undoubtedly is Elihu Thomson. Long may he be preserved to us.

RICHARD C. MACLAURIN MASSACHUSETTS INSTITUTE OF TECHNOLOGY

THE CONVOCATION-WEEK MEETINGS OF SCIENTIFIC SOCIETIES

THE American Association for the Advancement of Science and the national scientific societies named below will meet at New York City, during convocation week, beginning on Tuesday, December 26, 1916:

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.—President, Charles R. Van Hise, president of the University of Wisconsin; retiring president, Dr. W. W. Campbell, director of the Lick Observatory; permanent secretary, Dr. L. O. Howard, Smithsonian Institution, Washington, D. C.; general secretary, Professor W. E. Henderson, Ohio State University; secretary of the council, Dr. C. Stuart Gager, Brooklyn Botanical Garden.

Section A—Mathematics and Astronomy.—Vicepresident, Professor L. P. Eisenhart, Princeton University; secretary, F. R. Moulton, University of Chicago, Chicago, Ill.

Section B—Physics.—Vice-president, Professor H. A. Bumstead, Yale University; secretary, Dr. W. J. Humphreys, U. S. Weather Bureau, Washington, D. C.

Section C—Chemistry.—Vice-president, Professor Julius Stieglitz, University of Chicago; secretary, Dr. John Johnston, Geophysical Laboratory, Washington, D. C.

Section D—Mechanical Science and Engineering. —Vice-president, Dr. H. M. Howe, Columbia University; secretary, Professor Arthur H. Blanchard, Columbia University, New York City.

Section E—Geology and Geography.—Vice-president, Professor R. D. Salisbury, University of Chicago; secretary, Professor George F. Kay, University of Iowa.

Section F-Zoology.-Vice-president, Professor G. H. Parker, Harvard University; secretary, Professor Herbert V. Neal, Tufts College, Mass.

Section G-Botany.-Vice-president, Dr. C. Stuart Gager, Brooklyn Botanical Garden; secretary, Dr. A. F. Blakeslee, Cold Spring Harbor, N. Y.

Section H—Anthropology and Psychology.— Vice-president, Dr. F. W. Hodge, Bureau of American Ethnology; secretary, Professor George Grant MacCurdy, Yale University, New Haven, Conn.

Section I—Social and Economic Science.—Vicepresident, Louis F. Dublin, Metropolitan Life Insurance Company; secretary, Seymour C. Loomis, 69 Church Street, New Haven, Conn.

Section K—Physiology and Experimental Medicine.—Vice-president, Professor Edwin O. Jordan, University of Chicago; secretary, Professor C.-E. A. Winslow, Yale University. Section L—Education.—Vice-president, Dr. L. P. Ayres, The Russell Sage Foundation; secretary, Dr. Stuart A. Courtis, Detroit, Mich.

Section M-Agriculture.-Vice-president, Dr. W. H. Jordan, director of the New York Agricultural Experiment Station; secretary, Dr. E. W. Allen, U. S. Department of Agriculture, Washington, D. C.

AMERICAN MATHEMATICAL SOCIETY.—December 27 and 28. President, Professor Ernest W. Brown, Yale University; secretary, Professor F. N. Cole, 501 West 116th St., New York, N. Y.

MATHEMATICAL ASSOCIATION OF AMERICA.—December 28, 29 and 30. President, Professor E. R. Hedrick, University of Missouri; secretary, W. D. Cairns, 5465 Greenwood Ave., Chicago, Ill.

AMERICAN ASTRONOMICAL SOCIETY.—December 26 to 30. President, Dr. E. C. Pickering, Harvard College Observatory; secretary, Dr. Philip Fox, Dearborn Observatory, Evanston, Ill.

AMERICAN FEDERATION OF TEACHERS OF THE MATHEMATICAL AND THE NATURAL SCIENCES.— Council meeting. Secretary, W. A. Hedrick, Central High School, Washington, D. C.

AMERICAN PHYSICAL SOCIETY.—December 26 to 30. President, Professor R. A. Millikan, University of Chicago; secretary, Professor Alfred D. Cole, Ohio State University, Columbus, Ohio.

OPTICAL SOCIETY OF AMERICA.—December 28. President, Dr. Perley G. Nutting, 3 Kodak Park, Rochester, N. Y.

AMERICAN CHEMICAL SOCIETY.—President, Dr. Charles H. Herty, New York City; secretary, Dr. C. L. Parsons, U. S. Bureau of Mines, Washington, D. C.

AMERICAN ELECTROCHEMICAL SOCIETY.—Chairman, New York Section, Dr. Colin G. Fink, Edison Lamp Works, Harrison, N. J.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION.—President, Professor H. S. Jacoby, Columbia University; secretary, Professor F. L. Bishop, University of Pittsburgh, Pittsburgh, Pa.

ILLUMINATING ENGINEERING SOCIETY.—President, W. J. Serrill; chairman, Committee on Reciprocal Relations, Clarence L. Law, Irving Place and 15th St., New York, N. Y.

ASSOCIATION OF AMERICAN GEOGRAPHERS.—December 28 to 30. President, Dr. Mark Jefferson, Michigan State Normal College, Ypsilanti, Mich.; secretary, Professor Isaiah Bowman, Yale University, New Haven, Conn. AMERICAN ALPINE CLUB.—December 30. President, H. G. Bryant; secretary, Howard Palmer, New London, Conn.

AMERICAN SOCIETY OF NATURALISTS.—December 29. President, Dr. Raymond Pearl, Maine Agricultural Experiment Station; secretary, Professor Bradley M. Davis, University of Pennsylvania, Philadelphia, Pa.

AMERICAN SOCIETY OF ZOOLOGISTS.—December 27, 28 and 29. President, Professor D. H. Tennent, Bryn Mawr College; secretary, Professor Caswell Grave, Johns Hopkins University, Baltimore, Md.

ENTOMOLOGICAL SOCIETY OF AMERICA.—December 26 and 27. President, Dr. E. P. Felt; secretary, J. M. Aldrich, West Lafayette, Ind.

AMERICAN ASSOCIATION OF ECONOMIC ENTOMOL-OGISTS.—December 28, 29 and 30. President, Dr. C. Gordon Hewitt, Department of Agriculture, Ottawa, Canada; secretary, Albert F. Burgess, Melrose Highlands, Mass.

AMERICAN GENETIC ASSOCIATION.—December 26, 27 and 28. President, David Fairchild, U. S. Department of Agriculture; secretary, George M. Rommel, 511 11th St., Washington, D. C.

EUGENICS RESEARCH ASSOCIATION.—President, Professor Adolf Meyer, The Johns Hopkins University; secretary, William F. Blades, 191 Haven Ave., New York, N. Y.

ECOLOGICAL SOCIETY OF AMERICA.—December 27, 28 and 29. President, Professor V. E. Shelford, University of Illinois; secretary, Forrest Shreve, Desert Botanical Laboratory, Tucson, Ariz.

BOTANICAL SOCIETY OF AMERICA.—December 27 to 30. President, Professor R. A. Harper, Columbia University; secretary, Dr. H. H. Bartlett, University of Michigan, Ann Arbor, Mich.

AMERICAN PHYTOPATHOLOGICAL SOCIETY.—December 27 to 30. President, Dr. Erwin F. Smith, U. S. Department of Agriculture; secretary, Dr. C. L. Shear, U. S. Department of Agriculture, Washington, D. C.

AMERICAN FERN SOCIETY.—December 29. President, Dr. C. H. Bissell, Michigan Agricultural College; secretary, C. A. Weatherby, 920 Main St., East Hartford, Conn.

SULLIVANT MOSS SOCIETY.—December 29. President, Mrs. Elizabeth G. Britton, N. Y. Botanical Garden; secretary, Edward B. Chamberlain, 18 West 89th St., New York, N. Y.

SOCIETY OF HORTICULTURAL SCIENCE.—December 28, 29. Secretary, C. P. Close, U. S. Department of Agriculture, Washington, D. C. ASSOCIATION OF OFFICIAL SEED ANALYSTS.—Will meet on dates to be announced. Secretary, John P. Helyar, New Brunswick, N. J.

SOCIETY OF AMERICAN FORESTERS.—Meets on Friday, December 29. President, Dr. B. E. Fernow, University of Toronto; secretary, C. R. Tillotson, U. S. Forest Service, Washington, D. C.

MID-WEST FORESTRY ASSOCIATION.—President, Fred W. Smith, State School of Forestry, Bottineau, N. Dak.

AMERICAN MICROSCOPICAL SOCIETY.—Business sessions. President, Professor M. F. Guyer, University of Wisconsin; secretary, Professor T. W. Galloway, Beloit College, Beloit, Wis.

AMERICAN ANTHROPOLOGICAL ASSOCIATION.—December 26 to 29. President, Dr. F. W. Hodge, Bureau of American Ethnology; secretary, Professor George G. MacCurdy, Yale University Museum, New Haven, Conn.

AMERICAN FOLK-LORE SOCIETY.—December 27. President, Dr. R. H. Lowie, American Museum of Natural History; secretary, Charles Peabody, Harvard University, Cambridge, Mass.

AMERICAN PSYCHOLOGICAL ASSOCIATION.—December 27 to 30. President, Professor Raymond Dodge, Wesleyan University; secretary, Professor R. M. Ogden, Cornell University, Ithaca, N. Y.

AMERICAN PHILOSOPHICAL ASSOCIATION.—December 27, 28 and 29. President, Professor A. O. Lovejoy, The Johns Hopkins University; secretary, Professor E. G. Spaulding, Princeton University, Princeton, N. J.

AMERICAN SOCIETY OF BACTERIOLOGISTS.—December 29. Secretary, A. P. Hitchens, Glen Olden, Pa.

AMERICAN ASSOCIATION OF ANATOMISTS.—December 27, 28 and 29. President, Dr. H. H. Donaldson, Wistar Institute of Anatomy; secretary, Professor C. R. Stockard, Cornell Medical School, New York, N. Y.

AMERICAN PHYSIOLOGICAL SOCIETY.—December 27, 28, 29 and 30. President, Professor W. B. Cannon, Harvard Medical School; secretary, Professor Charles W. Greene, University of Missouri, Columbia, Mo.

AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS.— December 27, 28 and 29. President, Professor Walter Jones, The Johns Hopkins University; secretary, Dr. Stanley R. Benedict, Cornell Medical College, New York, N. Y.

AMERICAN SOCIETY FOR PHARMACOLOGY AND EX-PERIMENTAL THERAPEUTICS.—December 28, 29 and 30. President, Professor Reid Hunt, Harvard Medical School; secretary, Dr. John Auer, Rockefeller Institute, New York, N. Y.

AMERICAN SOCIETY FOR EXPERIMENTAL PATHOL-OGV.—December 28, 29 and 30. President, Simon Flexner, The Rockefeller Institute; secretary, Dr. Peyton Rous, Rockefeller Institute, New York, N. Y.

(The above four societies compose the Federation of American Societies for Experimental Biology. Executive Secretary, Dr. Peyton Rous.)

AMERICAN NATURE-STUDY SOCIETY.—December 27. President, Professor L. H. Bailey, Ithaca, N. Y.; secretary, E. R. Downing, University of Chicago, Chicago, Ill.

SCHOOL GARDEN ASSOCIATION OF AMERICA.—December 29 and 30. President, Van Evrie Kilpatrick, 124 West 30th St., New York, N. Y.

GAMMA ALPHA GRADUATES SCIENTIFIC FRATER-NITY.—Will meet on dates to be announced. President, Professor W. J. Meek, University of Wisconsin; recorder, L. C. Johnson, 2018 Madison St., Madison, Wis.

SOCIETY OF THE SIGMA XI.—December 27. President, Dr. Charles S. Howe, Case School of Applied Science; secretary, Professor Henry B. Ward, University of Illinois, Urbana, Ill.

AMERICAN ASSOCIATION OF UNIVERSITY PRO-FESSORS.—December 29 and 30. President, Dr. John H. Wigmore, Northwestern University; secretary, Dr. H. W. Tyler, Massachusetts Institute of Technology.

MEETINGS OF SECTIONS OF THE AMERICAN ASSOCIATION

As already announced, there will be a symposium "On the Structure of Matter" in a joint meeting of Sections B and C of the American Association for the Advancement of Science, the American Chemical Society, and the American Physical Society, on Wednesday, December 27, 10 A.M. and 2 P.M., in Room 309, Havemeyer Hall, Columbia University. The topics and speakers, arranged for to date, follow:

"Radiation and Atomic Structure," by Robt. A. Millikan. (The address of the president of the American Physical Society.)