Dr. Henry Norris Russell, research professor of astronomy at Princeton University, will deliver on December 31 his address as retiring president of the American Association, on "The Atmospheres of the Planets." Dr. C. J. Davisson, of the Bell Telephone Laboratories, will give the address of the retiring vice-president of Section B—Physics—of the American Association at the Carnegie Institute of Technology at the joint session with the American Physical Society on Thursday afternoon at 2:30 o'clock. The subject of his address will be "Electron Optics." The Willard Gibbs lecture will be given by Dr. Albert Einstein on December 28 at 4:30 o'clock.

On Friday morning from 10:00 to 12:30 o'clock and again on Friday afternoon from 2:00 to 4:00 o'clock there will be held a symposium of invited papers on "Heavy Hydrogen and its Compounds" as a joint session with the Section of Physics, the Section of Chemistry and the American Association of Physics Teachers. The speakers at the morning session for physics will be G. H. Dieke, of the Johns Hopkins University; R. C. Gibbs, of Cornell University; Otto Stern, of the Carnegie Institute of Technology, and M. A. Tuve, of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington. At the afternoon session for chemistry the speakers will be John R. Bates, of Princeton University; F. G. Brickwedde, of the Bureau of Standards; Herrick L. Johnston, of the Ohio State University, and Hugh S. Taylor, of Princeton University. The presiding officers will be Karl K. Darrow, of the Bell Telephone Laboratories, for the physics session and Harold C. Urey, of Columbia University, for the chemistry session.

On Saturday afternoon, from 1:30 to 4:00 o'clock, there will be a joint symposium with the American Mathematical Society on "Group Theory as Applied to Quantum Mechanics." The speakers will be G. Breit, of the University of Wisconsin, John von Neumann, of the Institute for Advanced Study, J. H. Van Vleck, of Harvard University, and E. P. Wigner, of Princeton University. A joint session with the Acoustical Society of America also will be held at the University of Pittsburgh on Saturday afternoon from 2:00 to 4:30 o'clock.

The annual dinner will be held at the Webster Hall Hotel, headquarters for the society, on Friday evening at 7:00 o'clock. This will be a joint dinner with the American Association of Physics Teachers.

WORK OF THE SCIENCE ADVISORY BOARD

DR. KARL T. COMPTON, chairman of the Science Advisory Board and president of the Massachusetts Institute of Technology, has prepared for Science Service the following statement concerning the work of the Science Advisory Board.

The Science Advisory Board, appointed by President Roosevelt on July 31, 1933, represents a new form of cooperation of the nation's scientific personnel with the government in its varied scientific services. It supplements and cooperates with the National Academy of Sciences and the National Research Council, which were established during the national emergencies of the civil war and the great war, respectively, to aid the government, and which play an important rôle in the organization of the nation's scientific forces for increased effectiveness in ordinary times and particularly in times of stress.

The Science Advisory Board has submitted to the President of the United States a report on its work from the date of appointment to September 1, 1934. While the details of this report can only be made public subject to release by the President, there is no impropriety in disclosing the general scope of the subjects which have engaged the study of the board and its committees. Important among these subjects have been the program of the U. S. Weather Bureau, with particular reference to methods of weather forecasting and the cooperation of other governmental services; cooperation with a committee of railroad presidents to determine fundamental aspects of policy and organization, for insuring to the railroads the best contributions from modern science; questions of organization and program in the U. S. Geological Survey and the U. S. Bureau of Mines, with particular reference to the need for more adequate handling of mineral statistical information; redefinition of the functions of the U. S. Bureau of Standards, with detailed consideration of its program and needs and particularly its method of cooperation with industry in the establishment of trade and commercial standards; a study of the surveying and mapping activities of the government distributed through 28 government bureaus, with particular consideration of efficiency in mapping and efficient service of mapping agencies to organizations which need maps for their operations; the formulation of a scientific basis for studies and administration of problems of land use, including soil erosion; preliminary studies of the chemical services of the government and also of certain features of a program for stimulation of new and preferably non-competitive industries.

In handling each of these and similar problems, the board has established committees of prominent scientists and administrators who are preeminently competent in their respective fields, and including on each committee one or more members of the board. These committees have carried on the detailed studies and formulated recommendations which have then been presented to the board, forming the basis of the board's reports to the department secretaries or other

administrative officers of the government. This procedure has worked effectively and rapidly, and the response of leading scientists and engineers to requests by the board for their services on these committees has been uniformly gratifying and has demonstrated the eagerness and effectiveness with which such men are willing to devote their time and energy to government service for the sake of the most efficient operation of the government services which relate to their particular fields of interest. These committees, as well as the members of the board, have served entirely without compensation.

The Science Advisory Board was appointed by the President "with authority, acting through the machinery and under the jurisdiction of the National Academy of Sciences and the National Research Council, to appoint committees to deal with specific problems in the various departments." This board consists of the following members:

Karl T. Compton, chairman, president of the Massachusetts Institute of Technology.

W. W. Campbell, president of the National Academy of Sciences.

Isaiah Bowman, chairman of the National Research Council; director of the American Geographical Society.

Gano Dunn, president of the J. G. White Engineering Corporation.

Frank B. Jewett, vice-president of the American Telephone and Telegraph Company; president of the Bell Telephone Laboratories, Inc.

Charles F. Kettering, vice-president of the General Motors Corporation; president of the General Motors Research Corporation.

C. K. Leith, professor of geology at the University of Wisconsin.

John C. Merriam, president of the Carnegie Institution of Washington.

R. A. Millikan, director of the Norman Bridge Laboratory of Physics and chairman of the executive council, California Institute of Technology.

Roger Adams, professor of organic chemistry and chairman of the department of chemistry at the University of Illinois (president-elect of the American Chemical Society).

Simon Flexner, director of the laboratories of the Rockefeller Institute for Medical Research, New York City.

Lewis R. Jones, professor of plant pathology at the University of Wisconsin.

Frank R. Lillie, Andrew MacLeish distinguished service professor of zoology and embryology and dean of the division of the biological sciences, University of Chicago.

Milton J. Rosenau, Charles White professor of preventive medicine and hygiene at the Harvard Medical School and professor of epidemiology at the Harvard School of Public Health.

Thomas Parran, Jr., state commissioner of health for New York.

SCIENTIFIC NOTES AND NEWS

AN extended article concerning the Pittsburgh meeting of the American Association for the Advancement of Science, which opens on December 27, prepared by Dr. Henry B. Ward, permanent secretary of the association, will be found in the issue of SCIENCE for November 30. Dr. Edward L. Thorndike, professor of educational psychology at Teachers College, Columbia University, presides, and the address of the retiring president will be made by Professor Henry Norris Russell, research professor of astronomy at Princeton University, on "The Atmospheres of the Planets." There have been arranged for the meeting many addresses of more than ordinary interest, including one by Professor Albert Einstein. Pittsburgh is not far from the center of scientific population of the country and a large attendance and a successful meeting are assured.

SECTIONAL presidents of the British Association for the Advancement of Science have been appointed as follows: Mathematical and Physical Sciences, Dr. F. W. Aston; Chemistry, Professor W. N. Haworth; Geology, Professor G. Hickling; Zoology, Professor F. Balfour Browne; Geography, Professor F. Debenham; Economic Science and Statistics, Professor J. G. Smith; Engineering, J. S. Wilson; Anthropology, Dr. Cyril Fox; Physiology, Professor P. T. Herring; Psychology, Dr. Ll. Wynn Jones; Botany, F. T. Brooks; Educational Science, Dr. A. W. Pickard-Cambridge; Agriculture, Dr. J. A. Venn. The annual meeting will be held next year in Norwich from September 4 to 11, under the presidency of Professor W. W. Watts, emeritus professor of geology in the Imperial College of Science and Technology, South Kensington.

THE Chandler Medal for 1934 for "conspicuous work in the field of chemistry" was conferred by Columbia University on December 14 on Dr. Jacob Goodale Lipman, dean of agriculture in Rutgers University and director of the New Jersey Agricultural Experiment Station, for "his outstanding achievements in the field of agricultural chemistry." Dean Howard Lee McBain, of the graduate faculties of Columbia University, made the presentation before nearly four hundred scientific men. Mrs. Charles F. Chandler was present.

DR. OTIS W. CALDWELL, professor of education and director of the Institute of School Experimentation