

Association of America. Professor Oswald Veblen, chairman of the section, presided.

The program comprised the following addresses:

1. *A mechanical analogy in the theory of equations*, by Professor D. R. Curtiss, retiring vice-president of Section A.
2. *The research information service of the National Research Council*, by Professor R. M. Yerkes, of the National Research Council.
3. *Subsidy funds for mathematical projects*, by Professor H. E. Slaughter.
4. *Algebraic guides to transcendental problems*, by Professor R. D. Carmichael, retiring chairman of the Chicago Section of the American Mathematical Society and vice-president of the Mathematical Association of America. In the absence of Professor Carmichael, an abstract of his paper was read by Professor Arnold Dresden.

At a meeting of the sectional committee preceding this program, the following nomination was made for chairman of the section, to preside as vice-president for Section A at Boston and to give his retiring address at Cincinnati: Professor G. A. Miller, of the University of Illinois. At a business meeting of the section following the program this nomination was approved, and Professor Miller was elected at a meeting of the council of the association, held on December 30.

A joint dinner for mathematicians and physicists was given at Burwash Hall on Friday evening, December 30.

WM. H. ROEVER,  
*Secretary*

#### SECTION B—PHYSICS—AND ASSOCIATED SOCIETIES<sup>1</sup>

SECTION B of the American Association held its session on Thursday morning, December 29, 1921, in conjunction with Section C of the American Association, the American Physical Society, the American Meteorological Society, and the Section of the Physical Science Committee of the National Research Council. Professor John C. McLennan, of the University of Toronto, retiring vice-president for Section B, delivered his address on "Atomic nuclei and

extranuclear electronic configuration." The vice-presidential address was followed by a symposium on the Quantum Theory, with the following speakers: (A) R. C. Tolman, director, Fixed Nitrogen Research Laboratory, Washington, representing Section C (Chemistry), A. A. A. S., "Review of the present status of the two forms of the Quantum Theory"; (B) H. B. Phillips, Massachusetts Institute of Technology, Cambridge, representing the American Mathematical Society, "Mathematical aspects of the Quantum Theory"; (C) Saul Dushman, The General Electric Company, Schenectady, N. Y., representing the American Physical Society, "Some recent applications of the Quantum Theory to Spectra." This meeting proved to be of very great general interest.

At the business meeting of Section B, C. A. Skinner, of the Bureau of Standards, was elected to be a member of the section committee, his term of office to end January 1, 1926. Dr. F. A. Saunders, of Harvard University, is the vice-president for Section B for 1922.

*The American Physical Society.*—This society held sessions beginning Wednesday, December 28, and continuing until Friday afternoon. The annual business meeting of the society was held on Friday, December 30, at which time the following officers were elected: *President*, Theodore Lyman, Harvard University, Cambridge, Mass.; *Vice-president*, Charles E. Mendenhall, University of Wisconsin, Madison, Wis.; *secretary*, Dayton C. Miller, Case School of Applied Science, Cleveland, Ohio; *treasurer*, George B. Pegram, Columbia University, New York, N. Y. The president of the American Physical Society gave an address on "The spectroscopy of the extreme ultra-violet." The physicists' dinner was held on Friday evening at Hart House. During the sessions of the society 77 scientific contributions were read.

*American Meteorological Society.*—Sessions were held beginning Wednesday morning, December 28, and continuing through Thursday afternoon. The annual business meeting was held on Thursday morning, and the following officers were elected: *President*, Sir Frederic Stupart, 315 Bloor Street, Toronto, Canada;

<sup>1</sup> Toronto, December, 1921.

*Vice-president*, W. J. Humphreys, U. S. Weather Bureau, Washington, D. C.; *Secretary and Treasurer*, Charles F. Brooks, Clark University, Worcester, Mass. On Thursday morning Professor Robert DeC. Ward, of Harvard University, gave his address on "Tendencies and progress in climatology during the past decade." The meteorological luncheon was held on Wednesday at 1 p.m. at Hart House. On Wednesday afternoon the society held a symposium on "Improvements in synoptic weather charts, especially on the reduction of atmospheric pressure observations," at which the following papers were read: (1) "The history of barometry in the United States," C. Leroy Meisinger, U. S. Weather Bureau, Washington, D. C.; (2) "Reduction of barometer to sea-level," C. F. Marvin, U. S. Weather Bureau, Washington, D. C.; (3) "Upper air pressure maps as possible aids in the solution of the barometry problem," C. LeRoy Meisinger, U. S. Weather Bureau, Washington, D. C.; (4) "Sea-level vs. the Megadyne base," Alexander McAdie, Harvard University, Blue Hill Observatory, Readville, Mass. (By title); (5) "Major wind streams vs. high and low pressure centers as the basis for weather forecasting," W. G. Reed, Philadelphia, Pa. (By title); (6) "Cloud movements as aids in forecasting," C. F. Brooks, Clark University, Worcester, Mass. Fifteen other scientific papers were read during these sessions.

*Section of the Physical Science Committee of the National Research Council.*—Meetings were held in Hart House, Prof. H. G. Gale acting as chairman.

It seemed to be the consensus of opinion that the Toronto meeting had been an exceptionally interesting and inspiring one. Contributing to the success of the meeting was the untiring work of the local committees and the cordiality of the members of the University of Toronto and the Royal Canadian Society. The international character of the Toronto meeting was noted by the presence of more Canadians than usual and by the distinguished visitors from abroad.

The secretary wishes to thank especially those who at the last minute took upon themselves the work of preparing papers for the

joint meeting of Section B with the Associated Societies.

S. R. WILLIAMS,  
*Secretary, Section B*

#### SECTION K—SOCIAL AND ECONOMIC SCIENCES

No separate session of Section K was arranged for the Toronto meeting on account of the recent death of the secretary, Dr. Loomis. A joint session of the section was held, however, with Section Q (Education) on Friday afternoon, December 30, 1921. At this meeting Dr. Frederick L. Hoffman, the recently elected secretary of the section, read an extended address on "The Organization of Knowledge," subsequently reprinted in *SCIENCE* of March 10 and March 17, 1922. Dr. Henry S. Graves of Washington was elected vice-president for Section K for 1922. Dr. Frederick L. Hoffman, dean of the Babson Institute, Wellesley Hills, Massachusetts, was elected secretary; his term of office will expire January 1, 1925. An understanding was arrived at under which the section, during the current year, will concentrate its efforts especially upon conservation problems. The American Metric Association, which is associated with Section K, held sessions on Friday morning and Friday afternoon, December 29. During this session, nine papers were read and much discussion was had suggestive of the slow but gratifying progress of the metric movement. On Friday evening the Metric Association held its annual dinner, participated in by a small but thoroughly interested group of members.

FREDERICK L. HOFFMAN,  
*Secretary*

WELLESLEY HILLS, MASS.

#### SECTION N—MEDICAL SCIENCES

SECTION N (Medical Sciences) held a symposium on the Health and Development of the Child. Professor A. B. MacCallum, of McGill University, presided. Dr. Joseph Erlanger of Washington University read his vice-presidential address on "The past and the future of the medical sciences," already published in *SCIENCE*, Vol. 55, page 135, February 10, 1922. The following papers were read:

*Hereditary factor in development*: C. B. DAVEN-