in 1909 he became its head and was at the same time made acting dean of the College of Medicine, a position that he held until 1914. Up to that date two years of the work of the College of Medicine had been given in Lincoln and the clinical years in Omaha. When the growth and development of the college rendered the transfer of all the work to Omaha advisable, he elected to remain at Lincoln, continuing as head of the department of zoology and dean of the Junior Medical College there.

He served several years as a member of the summer faculty at the University of Minnesota and later for a number of seasons as a member of the staff of the Puget Sound Biological Station.

Dr. Wolcott was throughout his life an enthusiastic field naturalist. Year after year he followed the migrations of the birds with great exactitude. Winter and summer he roamed about the fields in the vicinity, taking voluminous notes on the conditions he observed. These items were constantly introduced into his lectures and discussions with students, who found in the rich fund of information regarding nature and life a stimulus to their own interest and activity in college courses and outdoor studies. He rarely went alone and always was a genial and inspiring companion on these excursions.

His early publications on the water mites gave Wolcott the position of final authority on this group, a rank widely recognized by workers here and abroad. His book on the birds of Nebraska, in the preparation of which he had the assistance of Professors Bruner and Swenk, was a most careful record as well as one of the earliest studies of the local avifauna in a region which lies in the center of the migration route of a large and varied bird population. His latest book, a text on animal biology for beginning college classes, was published in the summer of 1932. He wrote numerous articles on a variety of special topics in zoology and related fields as distant as soil conservation. These, coupled with his friendly personality and wide contacts, especially in the state, made him a significant factor in the development of biology in the university and the extension of its influence throughout Nebraska.

Scientific societies were to Dr. Wolcott deserving of active attention. He was secretary and editor of the American Microscopical Society from 1904 to 1908; president of the Nebraska Academy of Science; active in founding the Nebraska Ornithologists Union, which he later served as president for several years, and a constant worker in numerous other organizations, especially in ecology and ornithology. He was a fellow of the American Association for the Advancement of Science and also a member of Sigma Xi.

In 1897 Dr. Wolcott was married to Miss Clara Buckstaff, of Lincoln, who with a daughter, Mrs. Gerald Carpender, and a son, Allen, both of Lincoln, and a brother Samuel of Minneapolis survive him.

HENRY B. WARD

SCIENTIFIC EVENTS

INDUSTRY AND THE RESEARCH ASSOCIATIONS OF GREAT BRITAIN[1]

ON March 22, the Department of Scientific and Industrial Research convened an important conference at the Institution of Civil Engineers, at which Lord Rutherford presided, and more than one hundred representatives of the twenty-one research associations formed under the auspices of the department were present. The object was to provide an opportunity for frank discussion with officers of the department and members of its Advisory Council on the present position of the research association movement and its future.

On the eve of the conference, Sir Kenneth Lee, who is a member of the Advisory Council closely identified with the work of the research associations, and whose firm belief in industrial research is well known, entertained the representatives at dinner. Mr. Runciman represented the government, and many prominent men in industry, finance and in the Civil Service were present. Among the speakers were Mr. Runciman, Lord Rutherford and the Right Hon. Reginald McKenna. In the course of his remarks, Mr. Runciman read a statement from the Lord President of the Council, in which Mr. Baldwin said that those present no doubt shared the opinion of the Advisory Council that the present scale of operations of the research associations is totally inadequate if they are to serve their full purpose. He looked forward, with confidence, to industrialists improving matters in that respect, especially now that the prospects of trade are more promising. If they do so, Mr. Baldwin's message continued, they can rely on the government on its side being prepared to play some part in the forward movement and to help in extending the scale of operations.

The views expressed at the conference left no doubt that the Advisory Council of the Department is right in believing that the time is ripe for a great development in the research association movement. The associations have already made a deep impression on British industry, not only in producing practical results of great monetary value, but also in bringing

[1] *Nature*.

about a more sympathetic attitude towards the usefulness of scientifically trained men in the works. Several speakers emphasized the paramount duty of research associations of carrying out long-range investigations essential to widening the boundaries of knowledge. Reference was made to the benefits conferred on the consumer by the improvement in products as regards utility and price and to the raising of the standard of living resulting therefrom, and for this reason it was urged that a continuation of a substantial contribution from government sources is fully justified. Attention was also directed to the importance of achieving stability of finance for the research associations as a means of securing the best work from those employed by them, or ensuring that the best scientific brains are available for that purpose and of making possible the planning of long-distance programs.

At the conclusion of the proceedings, Lord Rutherford referred to the statement made by Mr. Runciman the previous night on behalf of the Lord President as to the willingness of the government to afford increased financial help, and urged that as a next step the councils of the research associations should consider the scale of work required to meet the needs of their particular industries and submit proposals for the consideration of the department, in order to bring about at the earliest possible date a very different scale of operations.

THE NEW WEATHER FORECAST PROGRAM

ACCORDING to an announcement made by W. R. Gregg, chief of the Weather Bureau, with the cooperation of the War, Navy and Commerce Departments, the Weather Bureau of the U. S. Department of Agriculture, on July 1, 1934, will initiate part of its new program for increasing the accuracy of its forecasts. This new program calls for more stations for upper air soundings by airplanes and for more frequent daily forecasts. The part covering more airplane observations can now be put into effect.

The air-mass method of forecasting, long recognized as an aid to accuracy and to longer forecasts, has not hitherto been practicable because of the difficulty of getting the needed upper-air observations. Facilities offered by Army and Navy pilots at more than a dozen selected stations, at six specially-equipped Weather Bureau airway stations, and at one cooperative station at the Massachusetts Institute of Technology, now remove this difficulty. The Department of Commerce will provide for the transmission of the observations from the points where they are taken to the forecasting stations.

According to the present plan, Mr. Gregg says, observation flights will be confined to one a day, each beginning about half past five (E.S.T.) in the morning and reaching a maximum height of 17,000 feet above sea level. These flights will be made by Army and Navy pilots and by commercial aviators employed for the purpose by the Weather Bureau. Meteorologists of the Weather Bureau assigned to the air-observation stations will compute, code and transmit to forecast stations the information brought down by the meteorographs. Forecasters will thus be supplied with an important supplement to the morning surface observations in drawing the weather maps to be used in making the daily forecasts.

The Weather Bureau expects to maintain special airplane observation stations at the following airports: Nashville, Tenn., with La Crosse, Wis., as an alternate; Omaha, Neb., Cheyenne, Wyo.; Billings, Mont.; Fargo, N. Dak., and Oklahoma City, Okla.

The War Department will assign planes for this work at Mitchell Field, Long Island, N. Y.; Selfridge Field, Detroit, Mich.; Wright Field, Dayton, O.; Scott Field, East St. Louis, Ill.; Kelly Field, San Antonio, Tex.; Maxwell Field, Montgomery, Ala.; and, during the hurricane season, at Fort Crockett, Galveston, Tex. The National Guard unit at Spokane, Wash., has assumed the responsibility for collecting the needed information there.

The Navy Department will make the observations at the following stations: Anacostia, D. C.; Norfolk, Va.; Pensacola, Fla.; San Diego, Calif.; Pearl Harbor, Hawaii; and, on alternate days, at Philadelphia, Pa., and Lakehurst, N. J. Observation flights at Sunnyvale, Calif., and Seattle, Wash., because of darkness at the hour set for the flights, will be made at some daylight hour. Occasional flights may be made also from Quantico, Va., Dahlgren, Va., and Coco Solo, C. Z.

Certain battleships, when in port and sometimes at sea, send up planes to observe weather conditions. Although they are not expected to order routine flights, the following ships will contribute information useful to Weather Bureau forecasters at San Francisco, Calif., or at Washington, D. C., depending on the fleet's location: *Saratoga, Lexington, Langley, Ranger, Wright, California* and *Chicago.*

REPORT OF THE DIRECTOR OF THE FIELD MUSEUM

THE annual report of the director of Field Museum of Natural History to the Board of Trustees has been issued. How the museum is continuing to withstand the effects of the long-continued depression on its financial resources is described by Director Stephen C. Simms, in part as follows:

Like the preceding year, 1933 was marked by severely adverse financial conditions, which caused a further decline in the value of securities held in Field Museum's