

The state geologist was instrumental in securing the establishment by the last legislature of a State Highway Commission, of which he is *ex-officio* a member. He has given much time to the work of the commission, which is preparing plans for expending annually on road improvements a million and a quarter dollars.

The field work of Dr. Samuel Weidman in areal geology in northwestern Wisconsin was mainly confined to the study of the glacial geology. The moraines of the older drift sheets were traced out and the relation of these moraines to the alluvial deposits studied in detail. Besides the glacial geology, the structural features of the Paleozoic, the Potsdam, Lower Magnesian, St. Peter and Trenton formations were also special problems of investigation.

II. *Natural History*.—This division, under Director Birge and Mr. Juday, has given most of its time to beginning a series of careful quantitative chemical and biological studies on the plankton of Lake Mendota. During two weeks a party of eight were engaged in investigating the oscillations of the lower water of Green Lake as indicated by the temperature. Some 5,000 temperature readings were taken, which show regular oscillations of the water following strong winds. The survey installed in April a Callendar sunshine receiver and recorder for registering the vertical component of sun and sky radiation, and series of temperatures have been taken twice a day, in Lake Mendota, so as to correlate the gains and losses of heat in the lake with the heat received from the sky. In all of this work the survey has been assisted by the U. S. Bureau of Fisheries and the Wisconsin Fish Commission. Through an appropriation made by the latter body, Mr. J. N. Loshinski was enabled to devote a month to making additions to the survey's collection of Wisconsin fishes. He gave special attention to securing specimens of local species and varieties of whitefish.

III. *Soils*.—The Soil Survey has been continued in cooperation with the Agricultural College, under the direction of Professor A. R. Whitson. The survey is also cooperating with

the Bureau of Soils of the U. S. Department of Agriculture. During the summer the detailed field work of Fond du Lac, Kewaunee and Juneau Counties has been completed and is well under way in Columbia and Buffalo counties. The reconnaissance work in the northwestern part of the state is being continued and has now covered practically all of Bayfield and Douglas counties and a large part of Washburn and Burnett. The great value of this work, as preliminary to the extension and investigational work being carried on by the Agricultural College and Experiment Station, is becoming more and more obvious as the work progresses.

IV. *Publications*.—During the year the survey has issued a bulletin (No. XXI.) on the fossils and stratigraphy of the Middle Devonian, by H. F. Cleland; one (No. XXII.) on the dissolved gases of the lakes, by E. A. Birge and C. Juday; and one (No. XXIII.) on the soils of the northwestern area, by S. Weidman. The U. S. Department of Agriculture has also issued reports of a joint soil survey of Marinette County, by S. Weidman and P. O. Wood, and of Waushara County, by J. W. Nelson and G. Conrey. State editions of these bulletins will soon appear.

There is in press a general geological and road map of the state, by W. O. Hotchkiss and F. T. Thwaites, besides several reports on soils.

Two reports are nearly ready for the press: one on the Peat of Wisconsin, by F. W. Huels; and one on the Lake Superior Sandstone, by F. T. Thwaites.

THE WILL OF MR. JOSEPH PULITZER

By the will of Mr. Joseph Pulitzer, the gift of a million dollars to Columbia University to establish a school of journalism is confirmed. A second million dollars is to be paid to the university for the school of journalism and for prizes which it is instructed to award, if within seven years of his death the school shall in the opinion of his executors have been in successful operation for three years. In the meanwhile the income is to be paid to Barnard College for scholarships in memory of his daughter unless the deaths should have

occurred of the presidents of Columbia and Harvard Universities. In case Columbia University does not fulfil the conditions the bequest will go to Harvard University. Mr. Pulitzer has also bequeathed \$500,000 to the Metropolitan Museum of Art and \$500,000 to the Philharmonic Society. The income from the New York *World* and the St. Louis *Post-Dispatch* is to be divided in tenths, six tenths to be paid to his youngest son, who is now fifteen years of age, two tenths to his second son and one tenth to his oldest son, one tenth to be held for the benefit of the editors and managers of the newspapers. The income of the youngest son is, however, restricted to \$40,000 a year between the age of twenty-one and twenty-five and \$60,000 a year between the age of twenty-five and thirty. The income of the second son is restricted to \$60,000 a year. These incomes are to be doubled in case of the marriage of the sons. The balance, which may be very large, as the estimated value of the journals is twelve million dollars, is to be paid to Columbia University, the Metropolitan Museum of Art and the Philharmonic Society, subject to certain conditions which are not stated. Mr. Pulitzer also bequeathed \$250,000 to Columbia University for scholarships for young men educated in the public schools of the city of New York.

SCIENTIFIC NOTES AND NEWS

THE following awards have been made by the president and council of the Royal Society: a Royal medal to Professor George Chrystal, Edinburgh, whose death has meanwhile occurred, for his researches in mathematics and physics, especially his recent work on seiches and free oscillations in the Scottish lakes; a Royal medal to Dr. W. M. Bayliss, F.R.S., for his researches in physiology; the Copley medal to Sir George H. Darwin, K.C.B., F.R.S., for his scientific researches, especially in the domain of astronomical evolution; the Davy medal to Professor Henry E. Armstrong, F.R.S., for his contributions to chemical science; the Hughes medal to Mr. C. T. R. Wilson, F.R.S., for his investigations

on the formation of cloud and their application to the study of electrical ions.

It is now reported from Stockholm that Professor W. Wien, professor of physics in the University of Würzburg, is to receive the Nobel prize for physics.

SIR WILLIAM H. WHITE, former chief constructor of the British Navy, has received the John Fritz medal for notable achievement in naval architecture.

IN honor of Professor Wilhelm Waldeyer, the eminent anatomist, who recently celebrated his seventy-fifth birthday, a tablet has been placed on the house in which he lived while a student at Göttingen.

MR. WILLIAM HOBSON, professor of mathematics at the University of Cambridge, has been elected a member of the Halle Academy of Sciences.

THE Royal Geological Society of Cornwall at its annual meeting on October 31 presented the Bolitho gold medal to Mr. Clement Reid, F.R.S., in recognition of his work on the geological resurvey of the county.

PRESIDENT DAVID STARR JORDAN, of Stanford University, has returned to California from a visit to Japan made in the interest of the World Peace Foundation, of which he is head director. President Jordan expects to spend a part of the winter in Boston. He is on leave of absence from Stanford during this semester; in his absence Dr. John C. Branner, professor of geology, is acting president of the university.

THE Australian government is about to undertake measures for the settlement of the Northern Territory, and during the present year has sent several parties to make preliminary investigations in that region. The leadership of one party was entrusted to Professor Baldwin Spencer. They went to Port Darwin, and from there across to Melville Island; then they returned to Port Darwin and traveled south about two hundred miles, after which they crossed the continent to the Gulf of Carpentaria.