recent article in SCIENCE. There is no way in which the endowment of research can be more successfully carried out than by saving for a scientific career those students who have already shown distinguished capacity for work. Not to save them, when they are already an expensive as well as a rare product, is a lamentable piece of wastefulness. The Sarah Berliner Fellowship Fund is therefore calculated to do more certain and more effective good than many a larger endowment.

C. L. F.

NEW YORK,
November 3, 1911

A FIELD SCHOOL OF GEOLOGY

DURING the month of September a party of eleven advanced students from the Department of Geology of the University of Chicago undertook a careful examination and geologic survey of a portion of the Montrose Quadrangle of southwestern Colorado. The work was done under the direction of Dr. Wallace W. Atwood, and was the opening season of the Field School of Geology which has been established in connection with the advanced work in geology at the University of Chicago.

The headquarters during the season was Ouray, Colorado. The party lived in camp, and the work was conducted as nearly as was practicable in conformity with the requirements of the National Survey. The area selected for work was west of the Ouray Quadrangle and north of the Telluride Quadrangle. It was at the north side of the San Juan Mountains where a large variety of formations and of structural and stratigraphic problems was presented.

During the first few days the party worked as a single group, visiting typical exposures of the formations as they had been mapped in the adjoining quadrangles, in an excursion into the interior of the range for an appreciation of the mountain mass adjoining the area to be surveyed and in an examination of certain of the more accessible mines and mills in the vicinity of Ouray. At the close of this introductory work the party was broken up into "teams" of two or three each, and each "team" was given a separate portion of the unmapped area for which that "team" was held responsible. When the work accessible to one camp had been completed, the camp was moved into the adjoining area and the new territory divided among the various "teams." Special care was given in the redistribution of work that the men received as wide a range of experience in field work as was possible. During the four weeks the party surveyed with care about 160 square miles, and had opportunity of examining a somewhat larger area. The problems met with involved many in stratigraphy, some in faulting, folding, intrusion, extrusion, glaciation and a complex erosion history. The region selected was one of great scenic beauty and of diverse human interests, so that the season in camp was a most pleasant and agreeable one. The average expense for the student, including the tuition at the university and all traveling and camp expenses, was $150. The University of Chicago has purchased a camp outfit and it is proposed that the work of this Field School of Geology be continued in Colorado for a number of seasons. It may then be moved to some other region where there is an unsurveyed field that presents a wide range of geologic phenomena.

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY

THE work of the survey, during the season just closed, has been carried on in three divisions.

I. *Geology.*—State Geologist W. O. Hotchkiss, has been in charge of a party of six men, completing the field work begun in 1910 on the Florence Iron District. This district is the western extension of the Menominee Iron Range of Michigan and connects that range with other districts to the northwest. Its geology has long been a puzzle to geologists, as well as to those interested in mining, and the results of the survey are awaited with much interest. The territory has been very carefully studied and the survey will show a considerable area in which it will be worth while to prospect for iron ore.

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 Devonic, 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