expect, move the great mass, as it has done all the others, to the capital, its exact weight will be finally and definitely known. Whichever meteorite shall, after accurate calculation, prove to be the heavier, it will ever remain of interest that the two largest meteorites known to our earth should have fallen on the North American Continent; one far toward its northern end, the other toward its southern.

HENRY A. WARD.

## SCIENTIFIC NOTES AND NEWS.

LORD AVEBURY has been made a member of the Prussian order 'pour le merite.'

Dr. Wilhelm Wundt, the eminent psychologist and philosopher, celebrated his seventieth birthday on August 16. A volume of researches carried out by his former students was presented to him on the occasion.

It is announced from Berlin that the strength of Professor Virchow is unmistakably failing.

Dr. EMIL TIETZE has been appointed director of the Imperial Geological Institute at Vienna.

An international marine laboratory is to be established at Christiania under the directorship of Dr. Fridjof Nansen.

Professor Albert Gaudry, the eminent paleontologist, has retired from his chair in the Paris Museum of Natural History, and has been made honorary professor.

A CABLE despatch to the daily papers from Samoa states that President David Starr Jordan was in serious danger owing to the capsizing of a boat, but was rescued by natives. He left for home on August 11. Dr. Vernon Lyman Kellogg, head of the department of entomology at Stanford University, who accompanied Dr. Jordan, has returned to the university.

ASTRONOMER WILLIAM H. WRIGHT, of the Lick Observatory, has been chosen to take charge of the D. O. Mills expedition, now being outfitted at Mount Hamilton, to spend two years in Chile in making special study of the stars of the Southern hemisphere. Director W. W. Campbell will go with the party to personally direct the erection of the observing

station and the beginning of the two years' astronomical campaign. Mr. Harold K. Palmer, fellow in the Lick Observatory, will act as assistant.

A REPORT on the occurrence of copper in the vicinity of Clifton, in southern Arizona, is being prepared by Mr. W. Lindgren, of the U. S. Geological Survey.

ONE of the three Royal prizes of the Accademia dei Lincei, at Rome, has been awarded to Professor Cantone, of Pavia, for his researches in the phenomena of elastic equilibrium outside the limits of Hooke's Law. The ministerial prize for mathematics has been divided into two prizes of 1,300 lire, awarded to Professors Giuseppe Bagnera (Messina) and Domenico de Francesco (Naples), and a premium of 700 lire has been assigned to Professor Michele de Franchis (Melfi).

Dr. Max Wolf has been appointed director of the astrophysical department of the observatory at Heidelberg.

Dr. William Osler, of Johns Hopkins University, will deliver a memorial address on 'William Beaumont, the first and greatest American Physiologist,' under the auspices of the St. Louis Medical Society on October 4.

The Berlin Academy of Sciences has granted 15,000 Marks to Professor A. Voeltzkow for an expedition to East Africa.

On the occasion of his retirement from the curatorship of the Royal Gardens at Kew, Mr. George Nicholson has been presented by his friends with a suitably inscribed salver.

THE topographic branch of the United States Geological Survey will continue this season the mapping of the forested regions of Washington in the Cascades, under the general oversight of Mr. Richard U. Goode, geographer.

Professor Barbosa Rodrigues, director of the Botanical Garden of Rio Janeiro, is at present in England.

Dr. Cady Staley, who has retired from the presidency of the Case School of Applied Science after sixteen years of service, has gone abroad, where he expects to remain for several years.

The London board of trade has commissioned Lieutenant Colonel Horatio A. Yorke, chief inspecting officer of railways for the board of trade, to prepare a report on the workings of American railways. He will sail for New York on September 19.

THE centenary of the birth of the eminent mathematician, Abel, is being celebrated at Christiania this week.

A MONUMENT in memory of Cassini de Thury, the French astronomer, was unveiled at Clermont on July 27.

A BUST of the French naturalist, Ramond, known for his explorations in the Pyrenees, was unveiled at Bagnères-de-Bigorre on August 3.

THE Reverend Dr. Thomas Gallaudet, widely known for his work on behalf of the care of the deaf and dumb and until recently pastor of a church for deaf mutes, died on August 27, at the age of eighty years. Dr. Gallaudet's father, the Reverend Thomas Hopkins Gallaudet, founded the first permanent school for deaf mutes in 1817, and his brother, Dr. Edward Miner Gallaudet, has since 1864 been president of the Gallaudet College for the deaf at Washington.

The death is announced of General A. Ferrero, of Rome, known for his contributions to geodesy and mathematics.

Professor A. N. Beketow, the Russian botanist, has died at the age of seventy-seven years. Dr. Johann Janko, director of the Ethnographical Division of the National Museum at Budapesth, has died at the age of thirtyfour years.

Through the will of the late John Dolbeer, of San Francisco, the Astronomical Society of the Pacific will receive the sum of five thousand dollars. Mr. Dolbeer had been a member of the Society since 1891 and was one of its past presidents. He took an active interest in astronomy and defrayed the expenses of the expedition sent out from the Chabot Observatory of Oakland, to Georgia, to observe the total solar eclipse of May 28, 1900. This is the second bequest to the society by deceased members. Mr. Marvin Reimer, of Chi-

cago, left the sum of five hundred dollars. These funds will bear the names of the givers and will be invested. The income will be used by the society in diffusing astronomical knowledge.

An exhibit to illustrate the state of education in the British Empire will be sent by the government to the St. Louis Exposition.

It is stated in *Nature* that Messrs. Cook, the tourist agents, have put forward a proposal to run an electric railway to the cratef of Vesuvius from the Naval Arsenal in Naples to take the place of the funicular railway now used. The faculty of science in the University of Naples has forwarded a strong protest against the scheme to the Italian government, on the grounds that it would interfere with the seismic and magnetic observations and records which are made at the university.

In the House of Commons, as we learn from Nature, the decision to close the observatories at Ben Nevis and Fort William has been brought forward, and the first lord of the treasury was asked whether he would order an inquiry to be made into the distribution by the meteorological council of the annual grant of 15,300l., so as to secure that an adequate allowance be made to these observatories. his reply, Mr. Balfour referred to an inquiry held about twenty years ago, at the close of which the committee recommended that the inquiry should be repeated from time to time. a recommendation that has not been followed. In the circumstances he thought it would be right to have an investigation and to repeat it from time to time. This would involve no slight on the scientific committee which allocates the funds.

The Baldwin-Ziegler Antarctic excursion can scarcely be regarded as a scientific expedition. We may, however, quote the following information, which Mr. Baldwin has given the Rueter's Agency: This year's work has been successful. An enormous depot of condensed foods has been established by sledge on Rudolf Land within sight of the Italian expedition's headquarters. A second depot has been formed in lat. 81° 33′, and a third depot at Kane Lodge, Greely Island, which has been newly charted

as near the 81st degree of latitude. These large depots, together with the houses and stores left at Camp Ziegler, as well as provisions for the five ponies and 150 good dogs now on board, besides the pack itself, will afford means for a large Polar dash party next year. The fact that all the channels through Franz Josef Land remained blocked by ice during the autumn of 1901 prevented the establishment of depots by steamer last year. breaking up of the ice early in June compelled us to use our reserve supply of coal, and hence our departure from Camp Ziegler on July 1 in order not to imperil the expedition. We dispatched 15 balloons with 300 messages in June. We have obtained the first moving pictures of Arctic life. We discovered Nansen's hut, recovering the original document left there and securing paintings of the hut. We have also secured marine collections for the National Museum, new charts, etc. Thirty men, with 13 ponies, 170 dogs and 60 sledges, were employed in field work from January 21 to May 21, this severe work resulting in the destruction of the sledges; this and the depletion of the food for the ponies and the dogs rendered a return imperative.

THE water resources of the Great Plains will be the subject of continued investigation this summer by the United States Geological Survey. For the last two or three years Mr. N. H. Darton, of the Survey, has been engaged in tracing the source of the copious underground waters which appear in the wells of North Dakota and South Dakota. From careful studies of well borings and other geological phenomena of the region, it has been discovered that extensive water-bearing strata underlie the whole plains region and are bent upward and reach the surface on the eastern flanks of the Rocky and Bighorn Mountains and in the Black Hills uplift. This season Mr. Darton, assisted by Mr. C. A. Fisher, is engaged in continuing the survey of the water-bearing rocks in the Black Hills and Bighorn Mountains, and in a reconnaissance of the Great Plains for the preparation of a map showing the general geology and the location of the water-bearing beds of the whole region. The map will also indicate the distance at which the sandstones lie beneath the surface, and the probable depths of the wells necessary to reach them.

## UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Francis B. Loomis, of Cincinnati, has been sustained by the courts, and the Ohio Wesleyan University will receive \$150,000.

Dr. Howard A. Kelly, professor of gynecology in the Johns Hopkins University, has given \$10,000 for an extension of the gynecological ward of the Johns Hopkins Hospital.

THE University of Nebraska has adopted a course of study in forestry, which will be open to students this year for the first time. It is four years in length, and the conditions for admission to the freshman year are the same as for admission to other university courses.

THE University of Nebraska Medical College will be opened this fall. It provides for two courses, one six years, and the other four years, in length, the first leading to the degrees B.Sc. and M.D., and the second to M.D. Entrance to these courses requires the work of four years in a good high school or academy.

A course in practical physiology, commencing on October 10, 1902, is offered to public school teachers at the University and Bellevue Hospital Medical College (26th street and First avenue). The course includes much experimental work on nervous physiology which is of advantage for the comprehension of psychology. An exercise of two hours or more is given once a week for thirty weeks. The exercise commences at half past three on Fridays and may last until six o'clock. The students perform the experiments themselves. A short talk precedes each exercise and a conference over the results obtained follows the completion of the day's work. This course is one authorized for obtaining a degree in the graduate school of the New York University. It is identical with the course prescribed for second year medical school students. It will not be given to more than thirty applicants. The course is conducted by Professor Graham Lusk.