

and Professor George Darwin. The Astronomer Royal exhibited photographs of the corona taken at Ovar, Portugal, compared with those taken in India, under similar conditions, in 1898. Other work reported upon was the observations and photographs taken with the 28-inch refractor and the Thompson equatorial, including observations of Capella, with a view to determining whether it could be observed as a double star.

It appears from a recent report of the British Museum that the visitors to the natural history collections at South Kensington rose from 419,004 in 1898 to 422,290 in 1899. In 1899 the weekday visitors numbered 366,572 and the Sunday visitors 55,718, as compared with 368,572 and 50,432 in the previous year. The visits paid to the particular departments for the purpose of study fell from 20,177 in 1898 to 19,120 in 1899. The trustees have agreed to co-operate with the Egyptian Government in a survey of the Nile to determine the species of fishes inhabiting the river. A scientific expedition is to be dispatched to Lake Tanganyika. Particulars are given of the expedition to Sokatra undertaken by Mr. Ogilvie-Grant and Dr. H. O. Forbes, and of Dr. J. W. Gregory's exploration of West Indian Islands.

THE Boston Appalachian Mountain Club held its 35th field meeting from June 30th to July 7th. Professor C. H. Hitchcock, of Dartmouth College, was one of the guides and was the principal speaker at the evening meeting.

THE large flying cage of the New York Zoological Park, built at a cost of \$8000, has been completed and numerous birds have been placed in it. It is the largest cage ever constructed, being 150 feet long, 75 feet wide and 55 feet high.

AN institute for the study of oceanography is to be established at Berlin. Among questions proposed for special study is the mixing of the waters of the Baltic and the North Sea in the canal connecting them. The Baltic, owing to the numerous rivers flowing into it, is less salt than ocean water and its fauna becomes modified as it passes along the canal.

THE daily papers report that Baron E. von

Toll will head a Russian expedition which is to search the Arctic coast of Europe and Asia for traces of Andrée. It will start from Norway, proceed by way of Nova Zembla, pass the ensuing winter at Cape Chelyuskin, Taimyr Peninsula, and, searching the Siberian coast during the summer of 1901, endeavor to reach Bering Strait. This dangerous passage has not been attempted since its accomplishment by Baron Nordenskjöld in 1871-3. Capt. W. Bode will this summer take a party of Germans to Franz Josef Land and communicate with the Italian expedition under the Duke of Abruzzi. A Swedish and a Russian expedition will operate in Spitzbergen. Three expeditions, one Swedish, under Professor Vatthoff; a Danish one under Professor Amdrup, and an English one, under Capt. Robertson have already started for the east coast of Greenland.

THE University of Pennsylvania has issued a directory of its graduates in engineering which will be sent on application. The graduates number 469, of whom 445 are living. Of these, about seventy-one per cent. are engaged in engineering practice, twelve per cent. lines in related to engineering, thirteen per cent. in other professions and pursuits, and the addresses of the remaining four per cent. are unknown.

THE *British Medical Journal* reports that the German Government proposes to establish special plague laboratories at Freiberg and Heidelberg for the diagnosis of any suspicious cases of the plague that may occur, and for the prosecution of researches as to the cause of the disease.

UNIVERSITY AND EDUCATIONAL NEWS.

BY the will of Captain George S. Towle, U. S. A., Wellesley College receives practically the whole of his estate which is said to amount to about \$100,000. The income establishes a fund to assist worthy students.

BY the will of the late Mrs. Rebecca Reyburn of Baltimore, \$20,000 is bequeathed to the Catholic University of America.

BEREA COLLEGE has secured subscriptions for \$150,000 which makes available Dr. Pearson's gift of \$50,000.

A JESUIT priest of Mindanao has presented to the Roman Catholic College, at Georgetown, a

collection of corals said to be of much value. The collection also contains shells, opals, etc.

THE University of Michigan has established two new courses, namely Higher Commercial Education and Public Administration, which will be open to students this fall. The aim of these courses will be to train men and women for the larger commercial, industrial, political and social opportunities which are now offering themselves to the younger generation. These courses are semi-professional in character and, within the limits of sound scholarship, may be arranged with especial reference to the careers that individual students have in view. Instruction will begin with the opening of the University, September 25, 1900. In connection with these courses six non-resident lecturers have been added to the faculty of the University of Michigan. They are: E. D. Jones, Ph.D., assistant professor in the University of Wisconsin, lecturer on Industrial Resources of the United States; O. M. W. Sprague, Ph.D., instructor in Harvard University, lecturer on International Division of Labor; Lyman E. Cooley, C.E., Chicago, lecturer on the Industrial Significance of Deep Waterways; Robert T. Hill, B.S., United States Geological Survey, Washington, D. C., lecturer on the Industrial Significance of the West Indies to the United States; Thomas L. Greene, manager Audit Company of New York, New York City, lecturer on the Function of the Financier in Industrial Organizations, and W. F. Willoughby, Ph.D., Department of Labor, Washington, D. C., lecturer on the Function of Trades-Unions in Industrial Organizations.

At the commencement exercises of Alma College in Michigan the new Francis Hood Museum of Natural History was dedicated, and it was announced that the geological collection of the late Alexander Winchell had been presented to the college. In connection with the dedication of the museum, Professor Jacob Reighard, of the University of Michigan, gave an address entitled 'Biology and Education.' Dr. A. C. Lane, the State geologist, said, in connection with the presentation of the Winchell collection, that it was one that a university would be glad to possess and that it must be visited by all students of the paleontology of Michigan.

THE new physical laboratory at Owens College, Manchester, was opened on June 29th by Lord Rayleigh. The new laboratory will have a larger floor area than that of any other similar institution in the world, with the exception of the Johns Hopkins and the Strasburg laboratories. The equipment includes the most modern apparatus for use in every branch of science. Research laboratories are an important feature of the new buildings. The electro-technical wing constitutes a John Hopkinson memorial, and on the occasion of the opening ceremonies was formally handed over by the relatives of the late Dr. John Hopkinson. Professor A. Shuster, the director of the new laboratory, will be assisted by Dr. C. H. Lees, and Mr. R. Beatie has been appointed lecturer in electro-technics.

THE Board of Governors of McGill University has made the following appointments in the faculties of applied science and medicine. Neville N. Evans to be assistant professor of chemistry, Dr. James Henderson to be senior demonstrator in chemistry, Fred. Soddy, B.A., Douglas McIntosh, B.Sc., Ph.D., and Charles F. Lindsay, B.Sc., to be demonstrators in chemistry; Dr. N. D. Gunne to be lecturer in histology, S. B. Allan to be demonstrator in civil engineering, E. Andrews to be demonstrator in mining, P. W. K. Robertson to be Dawson fellow in metallurgy.

At Baldwin University, Berea, Ohio, E. W. Berger has been re-elected to the chair of natural science.

OLIVER J. LODGE, F.R.S., professor of experimental physics, at University College, Liverpool, has been appointed principal of the newly established university at Birmingham. Professor Lodge, born in 1851, who has held the chair at Liverpool since 1880, is well known for his researches on electric waves and other physical subjects and as a brilliant writer on theoretical physics.

IN the same university Dr. W. D'Este Emery has been appointed lecturer on bacteriology.

MR. L. LEWTON-BRAIN, of St. John's College, and Mr. A. W. Hill, of King's College, Cambridge, have been appointed university demonstrators in botany.