

may be more conveniently studied. But in general there is no good reason why the zoological collections of the world should not be adapted to the needs of students of natural history who should have advantages analogous to those already enjoyed by workers in botany and in the fine arts.—*The N. Y. Evening Post*.

THE WILL OF ALFRED BEIT.

THE public bequests made by Alfred Beit, who died on July 16, were made public in London on July 20, and have been cabled to this country.

The most notable bequest is \$6,000,000 to his partners to constitute a fund, the income of which is to be devoted to the construction, equipment or furtherance of any such methods of communication or transportation in Rhodesia, Portuguese Southeast Africa or the German possessions, and any parts of Africa that may be traversed by the Cape-to-Cairo Railway. The trustees are to have absolute discretion, and if two thirds decide that the fund is no longer required for furthering the work of communication or transportation, they can apply the proceeds to educational, charitable or other public purposes in Rhodesia.

One million dollars is left to the University of Johannesburg to build and equip buildings on the land previously given by Mr. Beit; one million dollars for educational or charitable purposes in Rhodesia and other territories within the field of the British South Africa Company; \$125,000 to the Rhodes University, Grahamstown, Cape Colony; \$100,000 for educational or charitable purposes in the Transvaal, and \$75,000 for similar purposes in Kimberley and in Cape Colony.

To the College of Technology, London University, the sum of \$250,000 and 1,000 shares in the DeBeers Company are bequeathed, and to the research fund of London University \$125,000.

Two hundred thousand dollars is to be distributed equally in London and Hamburg for educational or charitable purposes. To King's Hospital and Guy's Hospital, London, the sum of \$100,000 each is given. Mr. Beit's

property near Hamburg, which was his birthplace, is left to that city, and his art collections are left to the galleries in London, Berlin and Hamburg.

SCIENTIFIC NOTES AND NEWS.

THE Lavoisier medal of the Chemical Society of Paris and the Hofmann medal of the German Chemical Society are to be presented to Dr. W. H. Perkin, on the occasion of the celebration this week of the jubilee of the coal-tar industry.

THE eightieth birthday of Dr. Georg von Neumayer, late director of the Deutsche Seewarte, which occurred on June 21, was celebrated at Neustadt, where he now lives. An address was presented by Dr. S. Günther, of Munich. It is proposed to establish a foundation for the encouragement of research by geographical students, and arrangements may be made for the painting of a portrait of Dr. Neumayer, to be placed in the Historical Museum at Speier.

Professor Carl Vogel, director of the Astrophysical Observatory at Potsdam, has been elected a correspondent of the Paris Academy of Sciences, in succession to the late Dr. S. P. Langley.

PROFESSOR JULIUS FRANZ, director of the Breslau Observatory, has been elected an associate of the Royal Astronomical Society.

DR. EMIL FISCHER, professor of chemistry at Berlin; Dr. Stanislaw Canizzaro, professor of chemistry at Rome, and Dr. Daniel Oliver, lately keeper of the herbarium of the Royal Botanical Gardens, Kew, have been elected foreign members of the Royal Society of New South Wales.

A NUMBER of foreign scholars and men of science have been invited to take part in the opening of the main building of the Carnegie Institute, Pittsburg, in April next. Among those who have accepted are Sir William Huggins and Sir William Preece.

MR. S. F. EMMONS, geologist of the U. S. Geological Survey, in charge of the section of metalliferous deposits, will personally supervise investigations made this summer by members of the survey in various mining re-

gions in the west. He will visit Butte, Mont., and adjoining districts, Ely, Nev., and other camps.

GEOLOGIC surveys in the crystalline rocks of northern New Jersey will be carried on this summer by Mr. W. S. Bayley of the U. S. Geological Survey. This work will extend into the Greenwood Lake and Ramapo quadrangles. When it is completed, the entire state of New Jersey will have been surveyed.

THE granite deposits and granite quarrying industry of New England will be investigated this summer by Mr. T. Nelson Dale, geologist of the U. S. Geological Survey.

MR. HOMER R. DILL, Gardiner, Me., the state taxidermist, has been appointed chief taxidermist in the new Museum of Natural History of the Iowa State University.

PROFESSOR UHLENHUTH, of Greifswald, has been appointed director of the newly-established bacteriological department of the Imperial Bureau of Health, Berlin.

DR. H. ROSENBUSCH, professor of mineralogy and geology at Heidelberg, celebrated, on June 24, his seventieth birthday.

THE Mackinnon studentships for the year 1906-1907 have been awarded by the Royal Society to Mr. W. G. Duffield, 'for the study of arc spectra of metals under high pressures'; and to Dr. F. H. Scott, 'for the continuation of studies on the nature of the process of excitation of nerve cells.'

DR. J. BISHOP TINGLE, assistant in organic chemistry at the Johns Hopkins University, has received a grant from the C. M. Warren fund of the American Academy of Arts and Sciences, to aid in the purchase of chemicals for use in continuation of his investigations of certain derivatives of camphor-oxalic acid.

THE Prussian Academy of Sciences has made a grant of 5,000 Marks to Dr. F. Mertens, professor of mathematics at Vienna.

SIR DANIEL MORRIS, commissioner of agriculture for the West Indies, delivered a lecture at the West India Committee Rooms on July 19, on 'The Present Position and Prospects of the Sea-Island Cotton Industry.'

THE following popular lectures have been arranged by the Royal Society of New South Wales:

June 21.—'Some Results of Archeological Work in Jerusalem,' by Professor Anderson Stuart, M.D., LL.D.

July 19.—'Our Water Supply from Source to Distribution,' by J. M. Smail, M.Inst.C.E., engineer-in-chief, board of water supply and sewerage, and E. S. Stokes, M.B., D.P.H., medical officer, board of water supply and sewerage.

August 16.—"Sir Joseph Banks, the 'Father of Australia,'" by J. H. Maiden, F.L.S., director, Botanic Gardens.

September 20.—'Recent Developments in Long Distance Electrical Transmission,' by T. Rooke, Assoc.M.Inst.C.E., city electrical engineer.

November 15.—'Chapters in Early Australian History,' by F. M. Bladen, F.R.G.S., F.R.H.S. (Lond.).

Nature states that a special meeting was held in the Great Hall of the University of Athens on May 20 to celebrate the fortieth anniversary of Dr. A. C. Christomanos's appointment as professor of chemistry in the university. A large audience, including the Greek minister of education, the university professors and students and many of the general public, was present. Dr. A. C. Dambergis, the professor of pharmaceutical chemistry, referring to the great work which Professor Christomanos has done in the forty years, asserted that the greatest has been the pioneer work in the introduction of scientific chemistry into Greece with the provision for laboratory work in chemistry and the other sciences, and more particularly in organizing so successfully the large chemical department of the university with its laboratory accommodation for 130 students. Professor Christomanos was the recipient of numerous honors, including several from foreign countries.

THE students and friends of the late Professor A. Kekulé, the eminent chemist, have contributed about \$8,000 to establish a scholarship at the University of Bonn in his memory.

THE death is announced of the Rev. John Frederick Blake, formerly professor of natural science in University College, Nottingham, and at one time president of the Geological Association.

DR. A. HÖRMANN, professor in the Technical Institute at Charlottenburg, died on June 30, at the age of seventy-one years.

JUDGE EDOUARD PIETTE, noted for his writings on prehistoric archeology, died at the Château de la Cour des Prés, Rumigny, Ardennes, on June 5, in his eightieth year. Some years ago he gave his valuable collection, chiefly from the caverns of southern France, to the Museum of National Antiquities at St. Germain-en-Laye, near Paris.

THERE will be on August 8 an examination for the position of fish culturist in the Bureau of Fisheries at salaries ranging from \$540 to \$900.

THE *Experiment Station Record* states that lands have been set aside at Hamakua, Hawaii, for a tobacco farm. Experiments to cover three years are planned, which will be carried out under the direction of the Federal station. The funds for carrying on the farm are to be supplied by private parties.

As a result of the passage of the bill allowing the sale of alcohol without the internal revenue tax, the Department of Agriculture has decided to publish a bulletin on the first of January, 1907, when this law goes into effect, giving the public a collection of the best obtainable data on the use of alcohol in small engines. For this purpose Professor Charles E. Lucke, of Columbia University, has been retained by the department as expert to conduct these investigations in the laboratories of the university. This bulletin will contain all the work done on the subject, both here and abroad, a complete bibliography, together with the results of experiments and the conclusions drawn therefrom on American engines. Those who have patents on the subject or vaporizers, carburetors or complete engines are invited to submit them for tests. These tests will be conducted without expense, except the transportation of the apparatus, and the reports will be published in the bulletin.

THE French government has undertaken to publish the results of Dr. Jean Charcot's antarctic expedition. The Naval Department is to publish the following: (1) Narrative of the voyage; (2) hydrographical results, com-

prising nautical instructions, description, with views and photographs, of the coasts surveyed, maps and charts; (3) astronomical observations; (4) observations on terrestrial gravity; (5) analyses of samples of sea-water; (6) meteorology; (7) terrestrial magnetism; (8) atmospheric electricity; (9) medical report. Further, the Department for Public Instruction is to guarantee the publication of reports on the geology, glaciology, zoology, bacteriology and botany of the expedition. The two parts will constitute one work, which will be entitled 'The Cape Horn Scientific Mission.'

DR. JOSEPH W. RICHARDS, of Lehigh University, is making an extended journey through central Mexico and will later attend the International Geological Congress.

WE learn from *Nature* that arrangements have been completed for the erection of a commodious laboratory for the study of marine biology at Cullercoats, on the Northumberland coast. A much smaller laboratory, which had been provided by Alderman Dent, the chairman of the County Council's fisheries committee, was accidentally burnt down some few years ago, and the proposed building is designed to carry out, not only fishery research, but also general biological studies. The gift of the site and the cost of erection of the building will be borne by Mr. Wilfrid Hudleston, F.R.S., the management being under the control of the Armstrong College at Newcastle.

The *British Medical Journal* states that the University of Vienna has delegated several of its geologists, together with two professors of chemistry, to join a body of men of science now at work at Carlsbad, to devise means for securing the springs against telluric and seismic disturbances. Once previously, in 1775, when the great earthquake in Lisbon occurred, the waters disappeared for three days, only to return turbid and changed in taste and temperature. But these changes soon passed off.

UNIVERSITY AND EDUCATIONAL NEWS.

ALL-YEAR-ROUND investigation of problems in fresh-water biology is made possible by a recent provision for a division of limnology in the department of invertebrate zoology in