

and the bones of the tarsus were broken and healed during life, the accompanying exostosis soldering them together. It is most unfortunate that this wilful error should be perpetuated, but like Richardson's figure of the pouched rat, it will probably endure for generations to come.

The most generalized penguins are placed by Ameghino in the family *Cladornidae* including but two species, *Cladornis pachypus* and *Cruschedula revolve*. The figure of this last is poor and from this alone it is not quite evident why it should be placed with the penguins at all. Wiman and Ameghino agree in considering that the penguins originated in the Southern Hemisphere and that they have always had much the same distribution as at present. Ameghino further believes they descended from species that inhabited the vicinity of fresh water. The known facts bear out the first conclusion, but in view of the little we know regarding the history of birds it will be best to accept it subject to further revision.

The above notes had just been sent in when Dr. Abel's paper from *Centralblatt für Mineralogie* \* \* \* was received. In this Dr. Abel discusses the bones described by me in 1900 as the pelvis of *Zeuglodon* and concludes that they are really the coracoids of a gigantic bird which he names *Alabamornis gigantea*.

The paper seemed so clear and convincing that this conclusion was at once accepted and a brief review begun on that basis. As this proceeded it became evident, with my knowledge of the bones in question, that if they were the coracoids of a bird, that bird was extraordinary not say exceptional in many particulars. It has, therefore, seemed best to postpone the review of Dr. Abel's paper until later in order to better examine certain details and if possible, reexamine the bones themselves. This is not for the sake of mere argument as to whether the bones are those of a bird or beast but because, if they are from a bird, they are most important.

The bearing on this particular article lies in the fact that Dr. Abel finds the nearest resemblance to these bones in the coracoid of

*Anthropornis*, described by Dr. Wiman, although the differences between the two are great.

F. A. LUCAS.

#### SCIENTIFIC NOTES AND NEWS.

DR. A. A. MICHELSON, professor of physics at Chicago, has been elected a foreign member of the Accademia dei Lincei, Rome.

DR. L. A. BAUER has been elected a corresponding member of the Göttingen Royal Academy of Sciences.

IN connection with the recent meeting of the British Medical Association in Toronto, McGill University, Montreal, will confer the degree of LL.D. *in absentia* on Sir Thomas Barlow, Sir William Broadbent, Professor Allbutt and Sir Victor Horsley.

THE Graefe medal of the German Ophthalmological Society has been awarded to Dr. Ewald Hering, professor of physiology at Leipzig.

DR. KUNO FISCHER has retired from the professorship of philosophy at Heidelberg.

DR. SIMON SCHWENDENER, professor of botany at Berlin, has celebrated the fiftieth anniversary of his doctorate.

*Nature* states that Mr. William Lutley Selater has resigned the directorship of the South African Museum, Cape Town, which he has held for the last ten years, and has returned to England. He has accepted the post of director of the museum of Colorado College.

FROM the same journal we learn that Mr. Michael John Nicoll, who recently returned from accompanying the Earl of Crawford as naturalist during his winter voyage in the *Valhalla*, R.Y.S., round Africa, has accepted the post of assistant director of the Zoological Gardens at Giza, near Cairo, and has left England to take up the duties of his appointment.

DR. FRIDTJOF NANSEN, the Norwegian minister to Great Britain, has accepted the presidency of the Social and Political Education League in succession to Professor F. W. Maitland.

DR. E. GROSSMANN, assistant in the Observatory of Kiel, has been made an observer for the Commission of International Geodesy under the Munich Academy of Sciences.

MR. JOHN EVERSHED, has been appointed assistant director of the Kodaikáanal Observatory.

DR. KAUNHOWEN has been appointed geologist in the Geological Bureau at Berlin.

CAPTAIN LENFANT, the French explorer, is about to leave on another expedition to West Africa in order to discover, if possible, a navigable waterway connecting Lake Chad with the coast of the Atlantic.

PROFESSOR A. GRUVEL, formerly of Bordeaux, has been appointed to examine and report on the sea and river fisheries of the French possessions in West Africa.

PROFESSOR W. KÜKENTHAL, of Breslau, will this winter make a zoological expedition to the West Indies under the auspices of the Berlin Academy of Sciences.

THE committee of the Pettenkofer foundation at Munich has awarded its annual prize of 1,200 Marks to the late Dr. Fritz Schaudinn, for his researches on the protozoa. The prize will be given to his widow. A movement has been set on foot to raise a memorial fund to be applied for the benefit of Dr. Schaudinn's widow and children.

A PORTRAIT of Robert Bunsen by Herr Trübner, of Karlsruhe, is to be presented to the German Museum of Munich by the Grand Duke of Baden.

THE portrait of Dr. A. J. Evans, F.R.S., to be painted by Sir W. B. Richmond, R.A., is to be placed in the Ashmolean Museum, Oxford, in commemoration of his services to archeology.

THE Swedish Geographical Society is about to erect at Stockholm a monument in memory of Andrée and his companions Strindberg and Fraenkel.

WILLIAM BUCK DWIGHT, professor of geology at Vassar College since 1878, died on August 29 at Cottage City. He was born at Constantinople in 1833, the son of an Amer-

ican missionary, and graduated from Yale University and the Union Theological Seminary. Professor Dwight was a fellow of the American Association for the Advancement of Science and one of the original fellows of the Geological Society of America. He was the author of researches on Cambrian and Ordovician geology.

DR. ALEXANDER BOGDANOW, professor of pathology at Odessa, has died at the age of fifty-two years.

DR. HANS JAHN, associate professor of physical chemistry in the University of Berlin, died on August 7, at the age of fifty-three years.

THE death is announced of M. Léon Adrien Prunier, professor of pharmacology at Paris, at the age of sixty-five years.

THE late Professor Tarnowski, the Russian dermatologist, has bequeathed his estate for the establishment of a sanatorium for physicians.

It is reported from Yokohama, Japan, under date of August 27, that the magnetic survey yacht *Galilee*, which sailed from San Francisco about a year ago under the auspices of the department of terrestrial magnetism of the Carnegie Institution, was driven on the breakwater at Yokohama during a typhoon on August 24. It was considerably damaged, but has been refloated and docked for repairs. The crew and scientific men are safe.

AT a conference of the International Geodetic Association to be held at Budapest on September 20, the principal topics considered will be the accurate surveying of mountain chains subject to earthquake, with a view to ascertaining whether these chains are stable or whether they rise and sink, and the taking of measures of gravity so as to throw light upon the distribution of masses in the interior of the earth and upon the rigidity of the earth's crust. The drawing up of preliminary reports on these two questions has been entrusted to M. Lallemand, director of the general survey in France, and Sir George Darwin.

THE fifth biennial meeting of the International Commission for Scientific Aeronautics

will be held this year at Milan, from September 30 to October 7. A program for continuing the meteorological exploration of the atmosphere will be adopted, and it is expected that the president of the commission, Professor Hergesell, will state the results of soundings of the atmosphere, which he has just executed near Spitzbergen from the Prince of Monaco's yacht, and that Messrs. Teisserenc de Bort and Rotch will give an account of the second Franco-American expedition which they sent last winter to the tropical Atlantic for a similar purpose. This country will be represented at the meeting by Mr. A. Lawrence Rotch, director of Blue Hill Observatory, who is the American member of the commission.

We learn from *Nature* that the Otago University Museum has been enriched by a valuable collection of eggs of New Zealand birds presented by Dr. Fulton, and also by the gift of a large series of ethnological objects from Mr. and Mrs. James Mills. The latter, which are chiefly weapons, are mostly Polynesian, and were collected some twenty-five years ago.

THE work of the State Geological Survey on the coal fields of Illinois is going rapidly forward. A large number of mines already have been visited, and careful samples taken for laboratory study, 160 such samples being now on hand. Director Bain recently visited the Livingston and La Salle County fields, preparatory to making careful surveys. J. A. Udden is now engaged in working out the faults near Peoria, which have been such a constant source of annoyance and expense to operators in that vicinity. T. E. Savage is making a detailed study of the Springfield mines. J. J. Rutledge has taken up an investigation of the coals of the East St. Louis-Belleveille area and F. W. De Wolf is about to begin work in Saline and Gallatin counties. His work, as also that of David White, who is making collections of fossil plants throughout the field, is carried on by the U. S. Geological Survey in cooperation with that of the state. Topographic surveys preparatory to next season's work are being carried on near

Harrisburg, Marion, Herrin, Murphysboro, Trenton, Edwardsville, Alton and Talhula. A preliminary report upon the composition and character of Illinois coals is in press.

In his report on the general progress at the British Museum (Natural History), Dr. E. Ray Lankester, director and acting keeper of zoology, states, according to an abstract in the *London Times*, that in 1905, for the first time since the opening of the Natural History Museum, the number of visits paid to the galleries by the public in any one year exceeded half a million, the total number recorded being 566,313, an increase of 95,756 over the total in 1904 and of nearly 80,000 over that of any previous year. The number of visits recorded as having been made on Sunday afternoons was 70,084, as against 60,909 in 1904. The average daily attendance for all open days during the year was 1,560.09; for week-days only, 1,600.73; and for Sunday afternoons, 1,322.34. The total number of visits paid during the year to the department of zoology by students and other persons requiring assistance and information amounted to 11,811, as compared with 11,824 in 1904 and 11,627 in 1903.

AN exhibition of apparatus useful in the teaching of regional geography was held in the Outlook Tower, Edinburgh, from July 6 to 14. The exhibition had special reference to the region immediately round Edinburgh.

It is said that Staten Island has been practically freed from mosquitoes by the expenditure of an appropriation of \$17,000. An area of salt marshes equal to twenty square miles has been drained. It is estimated that 230 miles of ditches, ten inches wide by two feet deep, have been dug this summer. Literature giving directions for the care of private premises directed toward the prevention of the propagation of mosquitoes has been distributed.

THE fourteenth International Congress of Hygiene and Demography will be held in Berlin from September 23 to 29, 1907. The work of the congress will be distributed among eight sections, as follows: (1) Hygienic Microbiology and Parasitology; (2) Hygiene of

Nutrition and Hygienic Physiology; (3) Hygiene of Childhood and School Life; (4) Industrial Hygiene; (5) The Prevention of Infectious Diseases and the Cure of Patients suffering therefrom; (6) *a*, Hygiene of the Dwelling and the Community; *b*, Hygiene of Traffic; (7) Military, Colonial and Marine Hygiene; (8) Demography. An exhibition is to be held in connection with the congress.

THE Academy of Sciences of Berlin has received the preliminary report of the mission which went to Abyssinia last spring to explore the ruins of the ancient city of Aksum.

It is said that valuable documents relating to Volta were destroyed in the fire at the Milan International Exposition, which caused a loss of some \$2,000,000.

FOREIGN journals announce that Dr. W. J. Goodhue, medical superintendent of the Molokai Leper Settlement, has, after several years of research, succeeded in demonstrating the bacillus of leprosy in the mosquito (*Culex pungens*) and the common bed-bug (*Cimex lectularius*).

THE British home secretary has appointed a departmental committee to inquire and report what diseases and injuries, other than injuries by accident, are due to industrial occupations, are distinguishable as such, and can properly be added to the diseases enumerated in the third schedule of the Workmen's Compensation Bill, 1906, so as to entitle to compensation persons who may be affected thereby. The chairman of the committee is Mr. Herbert Samuel, M.P., parliamentary under-secretary of state for the Home Department; and the members are Professor Clifford Allbutt, F.R.S., regius professor of physics at Cambridge University; Mr. H. H. Cunynghame, C.B., assistant under-secretary of state, Home Office; and Dr. T. M. Legge, medical inspector of factories.

#### UNIVERSITY AND EDUCATIONAL NEWS.

By the will of the late Theodore Kearney, of Fresno, his entire estate, amounting to about \$1,000,000, is bequeathed to the department of agriculture of the University of California. It is said that the will will be contested by a

cousin, under the provisions of the California law that not more than one third of an estate shall be bequeathed to charity when there are legal heirs. The will takes cognizance of this section of the code, and appoints four prominent men to inherit any portion of his estate which can not legally go to the university. It is also claimed that the State University is not a charitable institution, but part of the state government.

ACCORDING to *The Athenæum* the number of matriculated students at the German universities during the summer term is 44,942, an increase of over 3,000 on last year. Of these 6,569 are at Berlin, 5,734 at Munich, 4,147 at Leipsic, 3,275 at Bonn, 2,350 at Freiburg, 2,128 at Halle, 1,925 at Göttingen, 1,922 at Heidelberg, and 1,362 at Jena, while the rest are distributed among various universities. There are 12,413 students of law; 10,752 are studying philosophy, philology or history, 6,584 medicine, and 6,212 mathematics or natural science. The number of students has nearly trebled during the last thirty years, the returns for 1876 showing that in that year the entries amounted only to 16,812.

MR. LEROY ABRAMS, of the Smithsonian Institution, a former instructor in Stanford University, has been made assistant professor of systematic botany at Stanford.

M. CARLO BOURLET has been appointed professor of descriptive geometry in the Paris National Conservatory of Arts.

DR. MÖLLER has been appointed director of the Forest School at Eberswalde.

DR. DAVID VON HAUSSMANN, of Berlin, has been called to the chair of pathology at Marburg.

DR. KARL HINTZE, professor of mineralogy at Breslau, has been called to Bonn.

DR. ARNOLD SOMMERFELD, professor in the Technical Institute at Aachen, has accepted the chair of theoretical physics at Munich.

PROFESSOR RÖNTGEN, of Munich, having declined the offer of the chair of physics at Berlin University in succession to the late Professor Paul Drude, the direction of the physical institute has been temporarily placed in the hands of Professor Nernst.