

ured and described by Dr. Abel, had any connection with the living *Zeuglodon*. The ossicles above referred to are not symmetrical and, therefore, did not lie in the median line, while they are entirely too large to have been attached to the paddles. If a few scattered ossicles on a creature sixty feet long constitute armor, then *Zeuglodon* was a mail-clad animal; otherwise he seems to have been unprotected.

It may not be amiss once more to call attention to the fact that *Zeuglodon* was so highly specialized that it could not have been in the line of descent of modern whales; also that the same strata which contain remains of *Zeuglodon* have yielded half a dozen vertebræ, quite like those of a true whale, and indicating some animal from thirty to forty feet long. When more of this animal comes to light we shall probably have better information on the phylogeny of the cetacea than we have at present.

F. A. L.

FOSSIL FISHES IN THE AMERICAN MUSEUM OF NATURAL HISTORY.

UNDER an agreement with the trustees of Columbia University the American Museum has recently received on deposit the John Strong Newberry collection of fossil fishes. And this acquisition is noteworthy, in view of the fact that during later years the museum has been securing other important collections of fossil fishes. Among these are the Cope collection, consisting largely of North American forms, from the devonian of Pennsylvania, permian of Texas, carboniferous of Illinois and Ohio, and a very rich series from the Green River shales; the Jay Terrill collection from the devonian of Ohio, a gift of the late Mr. William E. Dodge; and the collection of cretaceous fishes from Mount Lebanon, secured from the American College in Syria by the president of the museum, Mr. Morris K. Jesup. The Newberry collection itself is probably the most important representation of American forms extant; its catalogue includes nearly six thousand numbers, and among these are many of the type specimens described in the 'Monograph on the Paleozoic Fishes of

North America' and on the 'North American Triassic Fishes.'

An exhibition of fossil fishes has become, therefore, a need of the museum. And for its installation the director has recently set aside the corner circular room opening out of the reptile gallery. Its arrangement will be in charge of a new curator, Dr. Bashford Dean, a former student of Professor Newberry. The new gallery will include recent forms side by side with their fossil kindred, and will contain special guide cases to illustrate the structure and evolution of the more prominent groups.

SCIENTIFIC NOTES AND NEWS.

SIR JOHN MURRAY has been awarded the Lütke gold medal of the Russian Geographical Society.

DR. H. STRUVE, director of the Observatory at Königsburg has been appointed director of the Observatory at Berlin.

THE following fifteen candidates have been selected by the council of the Royal Society to be recommended for election into the society: Dr. Thomas Gregor Brodie, Major Sidney Gerald Burrard, Professor Alfred Cardew Dixon, Professor James Johnstone Dobbie, Mr. Thomas Henry Holland, Professor Charles Jasper Joly, Dr. Hugh Marshall, Mr. Edward Meyrick, Dr. Alexander Muirhead, Dr. George Henry Falkner Nuttall, Mr. Arthur Everett Shipley, Professor Morris William Travers, Mr. Harold Wager, Mr. Gilbert Thomas Walker and Mr. William Whitehead Watts.

DR. FREDERICK PETERSON has resigned the position of chairman and medical member of the New York State Lunacy Commission.

DR. L. E. DICKSON, assistant professor of mathematics in the University of Chicago, editor of *The American Mathematical Monthly* and associate editor of the *Transactions of the American Mathematical Society*, has been appointed research assistant to the Carnegie Institution. The object of his investigation is the application of group theory to certain problems in geometry and function-theory.

THE *N. Y. Evening Post* states that the grant to the Department of Astronomy, of Princeton University, has been increased by

the Carnegie Institution at Washington, on the application of Professor William Maxwell Reed, to \$1,200. "This renders possible the use of the telescope on all clear nights in measuring the brightness of certain standard stars." The same newspaper reports that the Carnegie Institution has made a grant of \$500 in aid of research work in the Department of Physical Chemistry of the University of Toronto.

S. I. FRANZ, Ph.D. (Columbia), instructor in physiology in the Dartmouth Medical College, has been appointed physiologist at the McLean Hospital for the Insane, Waverly, Mass.

A DINNER in honor of Dr. D. B. St. John Roosa and to celebrate the twenty-first anniversary of post-graduate medical instruction was given in New York on March 2. A cup was presented to Dr. Roosa by Dr. A. H. Smith, and speeches were made by Dr. William Osler, Dr. C. A. Blake, Dr. W. W. Keen and others.

DR. SIMON SCHWENDENER, director of the Botanical Garden of the University of Berlin, celebrated on February 10 his seventy-fifth birthday.

DR. EDWIN KLEBS, the eminent pathologist, celebrated his seventieth birthday on February 6.

It is reported that Professor E. von Behring will succeed Professor Robert Koch as head of the Berlin Institute for Infectious Diseases.

DR. ROBERT BELL, F.R.S., acting-director of the Geological Survey, Canada, has been appointed a companion of the Imperial Service Order.

DR. ABBE, professor of physics at Jena, and Dr. Neumann, professor of mathematics at Leipzig, have been appointed members of the Bavarian Maximilian Order for Science.

A GOLD medal engraved by M. Chaplain has been presented to Professor Bouchard, the eminent French pathologist.

At the annual meeting of the Geological Society of London on February 19, officers were elected as follows: *President*, Mr. John E. Marr; *vice-presidents*, Professor T. G. Bonney, Sir Archibald Geikie, Mr. E. T. Newton

and Mr. H. B. Woodward; *secretaries*, Mr. R. S. Herries and Professor W. W. Watts; *foreign secretary*, Sir John Evans; *treasurer*, Mr. W. T. Blanford, C.I.E. Sir Archibald Geikie, vice-president, delivered the anniversary address, which dealt with 'Continental Elevation and Subsidence.' Medals and funds were awarded in the manner already announced.

THE Sedgwick prize, for 1903, at Cambridge University, is adjudged to Herbert Henry Thomas, B.A., Sidney Sussex College, for an essay on 'The Petrology of some Groups of British Sedimentary Rocks.'

PROFESSOR CHARLES L. PARSONS, New Hampshire College, secretary of Section C of the American Association, who was prevented from attending the St. Louis meeting on account of a severe attack of corneal ulcers, will completely recover his sight. He has been granted three months leave of absence to recuperate in the south.

PROFESSOR E. W. MACBRIDE, D.Sc., of McGill University, has been requested to represent the university at the approaching jubilee of the University of Wisconsin.

REAR-ADMIRAL RIXEY, surgeon-general of the Navy, and Colonel W. C. Gorgas, U.S.A., are expected to proceed to the Isthmus of Panama to study the sanitary conditions.

THE medical journals state that Drs. E. Marchoux and P. L. Simond, of the Paris Pasteur Institute, arrived in Rio Janeiro, February 17, to study yellow fever. A fund has also been raised by the merchants and wharf owners of Hamburg to send Drs. Otto and Neumann of the Institute for Tropical Diseases to South America to study these diseases on the spot.

MR. JAMES HORNELL has been appointed marine biologist to the government of Ceylon with special reference to the pearl beds.

DR. HERMANN KLATSCH, professor of anatomy of Heidelberg, has undertaken a scientific expedition to Australia.

DR. ROBERT ABBE, of New York City, is to deliver the medical alumni lecture at Yale University, on March 9, on the 'Present Status of Radium as regards its Therapeutic Utility.'

A BRONZE statue of the late Professor Sedgwick, by Mr. Onslow Ford, has been unveiled in the newly erected geological museum of the University of Cambridge.

MR. RUSSELL WHEELER DAVENPORT, a well-known metallurgist, died at Philadelphia, on March 2, at the age of fifty-five years.

THE death is announced of Mr. Henry Michaelson, supervisor of Pike's Peak forestry reserve and a writer on irrigation and forestry matters.

GENERAL CHARLES ALEXANDER McMAHON, F.R.S., died in London, on February 21, at the age of seventy-four years. After performing distinguished military and civil service in India, he took up the study of geology at the age of forty years and studied at the Royal School of Mines under Professors Judd and Huxley when fifty years of age. He subsequently carried on important geological studies of the rocks of the Himalayas and in other directions.

SIR EDWARD SIEVEKING, a well-known physician and author of important works on nervous diseases, died in London on February 24, at the age of eighty-eight years.

DR. V. RODELLA, professor of chemistry at the Technical Institute at Novara, has died as the result of poisoning in the course of chemical experiments.

THE death is also announced of M. Callandreaux, member of the Paris Academy of Sciences in the section of astronomy.

THE common council of the city of Detroit has declined Mr. Carnegie's offer of \$750,000 for library buildings.

THE Washington *Evening Star* states that congress has appropriated \$25,000 for the continuation of Dr. S. P. Langley's experiments on aerial flight.

THE women of the Marine Biological Laboratory at Woods Hole are making an organized effort to raise \$5,000 for a dormitory for women students. All those who are interested in this work are earnestly requested to send their subscriptions to the treasurer, Mr. D. Blakely Hoar, 220 Devonshire Street, Boston, Mass.

KING EDWARD has offered one hundred guineas to the proposed London Institute of Medical Sciences.

WE learn from the *Chemical News* that the Chemical, Metallurgical and Mining Society of South Africa has decided to make six awards annually of fifty pounds each, accompanied by a gold medal and diploma, for the following subjects: mining, milling, cyaniding, chemistry (pure and applied), metallurgy (other than milling and cyaniding), and agricultural chemistry. These prizes are open to the members, associates and students of the society. Papers dealing with the South African mining industry are to have precedence in the awards.

THE American Society of Civil Engineers, by a vote of 1,139 to 662, has decided not to become one of the constituent societies in the occupancy and control of the proposed union engineering building, for the erection of which Mr. Andrew Carnegie has promised to give \$1,500,000. The civil engineers own a building on West Fifty-seventh Street near Seventh Avenue.

Nature states that an astronomical society has been formed at Newcastle-upon-Tyne under the presidency of the Rev. T. E. Espin, who will give the first lecture, at the Literary and Philosophical Society's rooms, on March 11, on 'The Work of an Amateur Observatory.' The honorable secretary of the society is Mr. J. D. Hastings, Warkworth House, Tynemouth.

THE Prussian Government will take over the serum institutions founded in the neighborhood of Marburg by Professor Behring.

REUTER'S Agency is informed that an expedition left England, on February 26, by the steamship *Olenda* for West Africa, under the leadership of Lieutenant Boyd Alexander, who is accompanied by his brother, Lieutenant C. Alexander and Captain G. Gosling. The object of the expedition is to conduct a survey of part of the eastern portions of the Northern Nigerian Protectorate and also to make zoological collections. The expedition will proceed direct up the Niger to Lokoja, whence it will travel along the Benue, afterwards

striking northeast to Lake Chad. The objective of the expedition is Kuka, on the shores of Lake Chad, and it is unlikely that this point will be reached before the end of the year. Lieutenant Alexander's movements after reaching that town are uncertain, as it has not been settled whether the explorers shall seek to penetrate the Great Desert or return *viâ* the German Cameroons. Some specially constructed steel boats for the navigation of the shallow rivers in the Lake Chad region have been made in England. The expedition will probably not return for two years.

Nature states that some considerable rearrangements have been made in the museums at the Royal Botanic Gardens, Kew. A new gallery 130 feet long by 16 feet wide at the back of museum No. III. was opened on February 1. To this the entire collection of Gymnosperms (Conifers, Cycads and Gnetaeae, including Welwitschia) has been transferred. The space in museum No. I. thus set free has been utilized in making a more effective display of its contents, which had become very crowded. The well-lighted wall space in the new gallery has enabled the collection of maps and plans of the establishment at various periods to be brought together. Several of these have been contributed by the late Queen and by His Majesty's Office of Works, and are of considerable historical interest. A set of the fine photographs of Kew in its various aspects which were sent by the government to the Paris Exhibition of 1900 are also shown, as well as an extensive series of photographs of coniferous trees in their native countries.

UNIVERSITY AND EDUCATIONAL NEWS.

HARVARD UNIVERSITY has received a gift of \$250,000 from Mr. David Sears, of Boston, a graduate of the class of '47.

MRS. WILLIAM E. DODGE has offered the University of Virginia \$40,000 for a Young Men's Christian Association building provided other friends of the institution raise an endowment of \$20,000.

It is announced that the bequest of James Woolson to Boston University, most of which

will not be paid for a long time, will amount to \$325,000.

G. H. MYERS has given the Forest School of Yale University the library of the late Professor Robert Henry, of Munich, containing about 1,500 books and pamphlets on forestry.

It is announced that Mr. P. N. Russell, who for many years carried on extensive engineering works in Sydney, but has latterly resided in London, has made a further donation of £50,000 for an additional endowment to the School of Engineering at the University of Sydney. Mr. Russell originated this school some seven years since by an endowment of £50,000.

THE legislature of the state of Ohio has passed an emergency bill for the temporary relief of the departments of chemistry, pharmacy and metallurgy, the building for which was, as we have already announced, burned to the ground on February 19 at a loss of \$125,000.

DENNY HALL, a brown stone building belonging to Dickinson College, was destroyed by fire on March 3. The loss is estimated at \$60,000, which is said to be covered by insurance.

THE University of Toronto has asked the government to provide a new physical laboratory.

KING EDWARD opened the new buildings of the University of Cambridge on March 1. These included a geological museum, a botanical institute, new medical buildings, comprising laboratories and lecture rooms for the departments of medicine, surgery, pharmacology, and pathology and the Humphry museum of anatomy and pathology.

DR. ALEXANDER SMITH, B.Sc. (Edinburgh), who has for some years been associate professor of chemistry in the University of Chicago, has been appointed a professor of chemistry and director of general and physical chemistry in that institution.

MR. WILLIAM HARPER DAVIS, fellow in psychology at Columbia University, has been appointed instructor in philosophy in Lehigh University.