

been recorded seems to have a cause peculiar to itself. This may be either connected with mating or it may have nothing to do with it, as seems to be the case with the form described as occurring about the university campus. As a possible explanation of the movement in the present case, it may be offered that it is a preparation for winter. The adults live over the winter under logs, leaves, etc. Their eggs are laid in low, damp areas. Such localities are unfit for hibernation, and hence the migration to more dry and protected localities.

MAX MORSE.

DEPARTMENT OF ZOOLOGY,
OHIO STATE UNIVERSITY.

RECENT ZOOPALEONTOLOGY.

STEGOCERAS AND STEREOCEPHALUS.

This review of the above-named genera of dinosaurs, by the able paleontologist Franz Baron Nopcsa (*Centralblatt für Mineralogie*, etc., 1903, No. 8), is a highly important one and is, at the same time, suggestive of our limited knowledge of the Dinosauria generally and of the great results to be looked for from the study of this group of reptiles in the future. These animals were recently described by the writer from the Belly River formation of the Red Deer River region. One has a solid horn in the front part of the skull, the other a solidly plated head.

Nopcsa's interpretation of the *Stegoceras* skull elements is noteworthy and accentuates the necessity of having more material for study before definite or final determinations can be made. He comes to the conclusion that the *Stegoceras* specimens that were supposed to be from 'the median line of the head in advance of the nasals'* are to be interpreted rather as representing the frontal and nasal elements of the skull.

In support of this decision attention is called to the frontal of *Camptosaurus prestwichi*, as figured by Hulke in the *Quarterly Journal of the Geological Society* for 1880. In this figure the strong, general structural resemblance to the *Stegoceras*

* Geological Survey of Canada. Contributions to Canadian Palæontology, Vol. III. (quarto), pt. II., p. 69, pl. xxi, figs. 1-5.

specimens, particularly noticeable on the under surface, is pointed out with emphasis. Reference is also made to a similarly shaped, but as yet undescribed, frontal of *Mochlodon*.

According to the above interpretation, *Stegoceras* brings to our notice an entirely new type—a unicorn dinosaur, of especial interest in that heretofore a form having an unpaired horn springing from the fronto-nasal region was unknown.

It is still considered problematical whether *Stegoceras* should be assigned to the Ceratopsidae or to the Stegosauridae.

Stereocephalus, the second genus, is referred by Nopcsa to the Acanthopholididae, and is regarded as a new and important type capable of throwing additional light on the modification of the skull of the Ceratopsidae.

It is hoped that further contributions to our knowledge of the Cretaceous dinosaurs may be forthcoming from the pen of this sympathetic writer and gifted observer.

OTTAWA,

LAWRENCE M. LAMBE.

May 26, 1903.

SCIENTIFIC NOTES AND NEWS.

THE remaining separata of the late Professor Edward D. Cope have been arranged in sets and are ready for free distribution to students and institutions willing to pay express charges on them. Application should be made to Mrs. E. D. Cope, Haverford, Pa.

WESLEYAN UNIVERSITY has conferred its LL.D. on William D. Brewer, professor emeritus in the Sheffield Scientific School of Yale University.

THE ex-resident physicians and associate physicians of Johns Hopkins Hospital gave a dinner on May 15, at the Maryland Club, Baltimore, in honor of Dr. William Osler, at which he was presented with a copy of the 'Dictionary of National Biography.'

THE Zoological Society of London has confirmed the action of the council in granting a pension of £700 to Dr. P. L. Selater, F.R.S., in consideration of his services to the society for forty-three years.

PRESIDENT W. G. TIGHT, of the University of New Mexico, is with the Annie S. Peck

expedition in South America to climb Mt. Sorata and to make geological observations.

DR. DOUGLAS H. CAMPBELL, professor of botany in Stanford University, is on a vacation trip to New Zealand and Australia.

MR. ALBERT P. MORSE, curator of the Zoological Museum of Wellesley College, is spending the summer studying the geographical distribution of locusts in the south.

DR. CLEVELAND ABBE, JR., has recently returned to Washington, after spending two years with Professors Julius Hann and Albert Penck in the study of the climatology and glacial phenomena of Europe. He has accepted temporarily a short engagement in the U. S. Weather Bureau, working on the climatology of Guam, for publication in a forthcoming report by Mr. A. E. Safford.

Nature, quoting from the *Victoria Naturalist*, reports the retirement of Sir James Hector, K.C.M.G., from the directorship of the Geological Survey of New Zealand and of the Colonial Observatory.

COMMANDER DON JULIAN IRIZAR, Naval Attaché to the Argentine Legation in London, has been appointed to command the vessel *Uruguay*, which will be sent by the Argentine Government in October to the Antarctic regions in search of Dr. Otto Nordenskjöld's South Polar expedition, which was joined at Buenos Ayres in 1901 by an officer of the Argentine Navy.

Nature states that Professor Steinmann, of Freiburg, and two of his fellow geologists of the same university, have arranged an expedition to the Central Andes of Bolivia. The party will start in August for Buenos Ayres, whence the route to be taken is *via* Jujuy, Tarija, Sucre, to Cochabamba. After a prolonged stay in the mountains the explorers will probably work their way to Antofagasta *via* La Paz.

DR. IRA REMSEN, president of the Johns Hopkins University, gave the commencement address at the Armour Institute of Technology.

We learn from the *British Medical Journal* that at the meeting of the Zoological Society

of London on June 16 Mr. F. E. Beddard, F.R.S., exhibited on behalf of the memorial committee a bust of the late president of the society, Sir William Henry Flower, K.C.B., who before he became director of the Natural History Museum was curator of the museum of the Royal College of Surgeons. The bust has been executed by Mr. Thomas Brock, R.A., and will be placed in the Natural History Museum.

A MEETING was held at London on June 29 to consider the erection of a memorial to Sir Henry Bessemer, to which we have already called attention. It is said that the king is interested in the plan and that Mr. Andrew Carnegie will make a substantial subscription. One of the addresses was made by Professor H. M. Howe, of Columbia University.

MR. GEORGE SHATTUCK MORRISON, one of the most eminent of civil engineers, died in New York on July 1, at the age of sixty years. He was born at New Bedford, Mass., and graduated from Harvard in 1863. Mr. Morrison was especially known for the large number of bridges he constructed, including some fifteen across the Mississippi and Missouri Rivers. He was a member of the Isthmian Canal Commission.

MISS LILLIE SULLIVAN, chief illustrator in entomology in the department of agriculture, died on June 26.

THE deaths are also announced of Carl Gussenbauer, professor of pathology and rector of the University of Vienna; of Dr. Josef de Smeth, formerly professor of psychiatry in the University of Brussels, at the age of seventy-seven years, and of Professor Luigi Cremona, director of the Engineering School of the University of Rome.

THE park commissioners of Chicago have approved the transfer of the Field Columbian Museum from Jackson Park to Grant Park, which is on the lake front in the center of the city. It is understood that Mr. Marshall Field has agreed to give \$5,000,000 for the construction and endowment of the museum.

THERE will be a civil service examination on August 1, for the position of consulting

engineer in the U. S. Geological Survey at a salary of \$300 a month. The results will depend on experience and previous work, it not being necessary for applicants to appear at any place for examination. There were no applications for this position when the examination was announced on July 1.

THE Department of Commerce and Labor was formally organized on July 1. In addition to the Bureaus of Corporations and Manufactures created by the new law, it embraces the Census Bureau, formerly under control of the Interior Department; the Lighthouse Establishment, Steamboat Inspection Service, Bureau of Navigation, United States Shipping Commissioners, National Bureau of Standards, Coast and Geodetic Survey, Bureau of Immigration and Bureau of Statistics from the Treasury Department, the Bureau of Labor, Fish Commission, and the Bureau of Foreign Commerce, the last being transferred from the State Department.

EFFORTS are being made towards the organization of a society for horticultural science, which would meet in connection with some kindred society, such as the American Association for the Advancement of Science or the American Pomological Society. If there is sufficient interest in the plan the first meeting will be held in conjunction with that of the American Pomological Society at Boston on September 10 to 12. Further information may be obtained from Mr. S. A. Beach, New York Agricultural Experimental Station, Station, Geneva, N. Y.

THE American Forestry Association will hold its summer meeting at Minneapolis on August 25 and 26.

THE Royal Institute of Public Health will hold a congress at University College, Liverpool, from July 15 to 21, under the presidency of the Earl of Derby.

THE International Congress of Applied Chemistry has adjourned to meet in Rome in 1906.

THE *National Geographic Magazine* states that at a conference of representatives from the several geographic societies in the United

States, held Saturday, June 20, 1903, in the American Geographical Society Building, 15 West Eighty-first Street, New York city, to arrange for the meeting of the Eighth International Geographic Congress, to be held in this country in 1904, the organization of the committee of arrangements was perfected by the election of Professor W J McGee, of the National Geographic Society, Washington, D. C., chairman, and Dr. J. H. McCormick, secretary. It was formally voted to hold the congress in Washington in September, 1904, adjourning to St. Louis, Missouri, to meet in connection with the International Congress of Arts and Sciences. In addition to the formal sessions of the Congress in Washington, it is planned to hold informal sessions or social meetings in other cities. After the final session in St. Louis, a trip is planned to the City of Mexico, the Grand Canyon, Yosemite Valley, Yellowstone Park, and other points of interest to the members of the congress. The following subcommittees were appointed: *Program*, Mr. C. C. Adams, of the American Geographical Society; *Exhibits*, Mr. Henry G. Bryant, of the Geographical Society of Philadelphia; *Invitations*, Mr. A. L. Rotch, of the Appalachian Mountain Club; *Transportation*, Dr. G. B. Shattuck, of the Geographic Society of Baltimore; *Finance*, Messrs. C. J. Bell, David T. Day and John Joy Edson. The appointment of other committees was deferred till the next meeting of the committee of arrangements. A formal prospectus will be issued in a few days.

THE Australasian Association for the Advancement of Science will meet at Dunedin, New Zealand, in January next under the presidency of Professor T. W. E. David, of the University of Sydney, Captain F. W. Hutton, F.R.S., Canterbury Museum, Christchurch, being the retiring president. The sections and their presidents are: A—astronomy, mathematics, physics and mechanics, Professor W. H. Bragg; B—chemistry, Mr. J. Brownlie Henderson; C—geology and mineralogy, Mr. W. H. Twelvetrees; D—biology, Colonel W. V. Legge; E—geography, Pro-

fessor J. W. Gregory, F.R.S.; F—anthropology and philology, Mr. A. W. Howitt; G—(1) social and statistical science, president not yet appointed; G—(2) agriculture, Mr. J. D. Towar; H—architecture, engineering, and mining, Mr. H. Deane; I—sanitary science and hygiene, Dr. Frank Tidswell; J—mental science and education, Mr. John Shirley.

Nature states that in connection with the meeting of the International Meteorological Committee at Southport during the British Association week in September next, it is proposed to make arrangements for an exhibition of meteorological appliances and other objects of meteorological interest. Upon the initiative of the Meteorological Council, with the cooperation of the Royal Meteorological Society and the Scottish Meteorological Society, a committee has been formed to carry out this proposal. It is proposed to group the exhibits into four classes: (A) meteorological statistics; (B) weather telegraphy; (C) atmospheric physics, including (a) meteorological photography; (b) instruments and instrumental records; (c) high level stations, balloons and kites, observations and records; (d) experimental illustrations; (D) the relation of meteorology to other branches of physics.

THE Royal Statistical Society announces that the next competition for the Howard medal will close on June 30, 1904. In addition to the medal, a grant of £20 will be awarded to the writer who may be the successful competitor. The subject is 'The effect, as shown by statistics, of British statutory regulations, directed to the improvement of the hygienic conditions of industrial occupations.'

THE Department of Public Improvement of the Mexican government has under consideration the advisability of establishing commercial museums in connection with the more important consulates in foreign countries. Through the efforts of the Mexican consul at Liverpool, England, an exposition of the products of Mexico is about to be inaugurated at that place. The governors of the several states have been requested to forward samples

of the principal productions of their respective sections. Precious woods, fibers, cereals, vanilla beans, coffee, sugar, etc., are to be sent at once to the consulate at Liverpool. The Mexican exposition at Milan, Italy, is in complete working order.

WE learn from *Nature* that for the first time for about forty years the Royal Society of Edinburgh, on the evening of June 6, held a conversazione. Lord and Lady Kelvin and Sir William Turner received the guests. There were many interesting exhibits from several departments of the Universities of Edinburgh, Glasgow, and St. Andrews, from the Geological Survey of Scotland, the Scottish Antarctic Expedition, etc. Professor McIntosh, of St. Andrews, sent a large collection of pearl shells and animals, living and dead, and great interest was taken in Professor Ewart's exhibition of hybrid ponies. Some of the lantern exhibits were particularly attractive, notably the projection on the screen of tanks of living worms, crustacea, etc., and a fine selection of slides made from Piazzi Smyth's 'cloud' negatives. Among the inventions and novelties exhibited, Dr. Halm's instruments for mechanically correcting stellar observations and for solving Kepler's problem in any given case, and Dr. Hugh Marshall's petrol incandescence lamp are worthy of mention.

DR. MORRIS, the Commissioner of the Imperial Department of Agriculture for the West Indies, who has been visiting British Guiana at Mr. Chamberlain's request, addressed a meeting of the members of the Royal Agricultural and Commercial Society of Georgetown on cotton cultivation and other minor industries. With regard to cotton, according to a report from Reuter's agents, he expressed the opinion that at first only light machinery should be introduced for its treatment. Addressing the Board of Agriculture, Dr. Morris expressed his admiration at the great amount of progress which had been made in the colony since he had visited it six years ago. There was evidence of quite a new feeling. Quite a new energy seemed to have taken hold of the leading planters and also the lead-

ing officials. He had not the slightest hesitation in saying that the board of agriculture was doing most excellent work. It was keeping in contact with all classes of the community; it was, fortunately, in sympathy with small cultivators as well as large cultivators. If the people interested themselves in the work of the board and benefited by its advice, he had no doubt that the colony would in a few years be in a very much better position than it was at present. With reference to the sugar-cane experiments, under the direction of Professor Harrison, the commissioner stated that the work carried on was not surpassed in any part of the world where the sugar-cane was cultivated.

UNIVERSITY AND EDUCATIONAL NEWS.

It is said that the trustees of the Rush Medical College, the medical department of the University of Chicago, have collected \$1,000,000 for the institution. The newspapers and medical journals state, we hope correctly, that this assures a gift of \$6,000,000 to the school by Mr. John D. Rockefeller.

MR. H. O. PEABODY, of Boston, inventor of the rifle that bears his name, has bequeathed the greater part of his estate, which is valued at about \$1,000,000, for the establishment of a school for girls, to be situated at Westwood, Mass.

THE supreme court of Indiana has decided the Donaldson case in favor of the state. this gives the Indiana University about 200 acres of primitive forest land, abounding in sink holes, valleys and numerous dry and wet caves, including entrance to an underground stream which can be followed for more than a mile and which is the richest locality for blind fishes in North America.

LORD IVEAGH has given £34,000 to Dublin University for the erection of laboratories for the physical and natural sciences, on condition that an endowment of £100,000 is provided within three years.

PLANS are being urged in London for the establishment of a scientific and technological institute for advanced work. Subscriptions

are being secured, and the London County Council has been asked for an annual grant of \$150,000.

MRS. STERN and Mrs. Hardy, daughters of the late Sir George Jessel, formerly master of the rolls and vice-chancellor of the university of London, have offered to present to the university a sum of £2,000 for the establishment, in memory of their father, of a scholarship in law or higher mathematics, to be held at University College.

APPOINTMENTS at Brown University have been made as follows: Arthur H. Blanchard, assistant professor of civil engineering; Dr. Leonard W. Williams, assistant professor of biology; Dr. Michael X. Sullivan, instructor in chemical physiology; J. Ansell Brooks, instructor in drawing.

PROFESSOR WILLIAM CALDWELL, of Northwestern University, has been appointed professor of philosophy at McGill University.

DR. R. M. PEARCE, of Philadelphia, has been appointed director of the Bender Hygienic Laboratory and adjunct professor of pathology and bacteriology in Albany Medical College.

DR. RAYMOND H. POND has been elected professor of botany and pharmacognosy and director of the microscopical laboratories at the Northwestern University.

DR. JOHN C. HEMMETER, Ph.D. (Johns Hopkins University, 1890), M.D. (University of Maryland, 1885), graduate of the Royal Gymnasium, Wiesbaden, has been elected to the professorship of physiology in the University of Maryland, vice Professor Francis T. Miles, resigned. A new laboratory for physiology and pathology will be erected during the summer for which the sum of \$75,000 has been appropriated. Professor Hemmeter has also been elected a regent of the University of Maryland.

DR. A. F. DICKSON, now of University College, Cardiff, has been elected professor of anatomy at Dublin University.

DR. K. J. V. ORTON has been appointed professor of chemistry at the North Wales University College at Bangor.