

fragment of skin is 1 cm. thick covered, externally with coarse, dirty yellowish hair, and internally so thickly set with rounded ossicles as to suggest a cobblestone pavement. The inner surface of the larger piece does not show any ossicles, but in the freshly-cut margin they are apparent, although small and completely imbedded in the skin; the hair on this fragment is from 5 to 9 cm. long. Under the microscope a transverse section of this hair is seen to be solid, lacking the central pith usually present, and on comparison with the hairs of various South American edentates its greatest likeness is found in the central axis of the hair of *Bradypus*. The microscopical structure of the ossicles, which is described at length by Dr. Lönnberg, is strikingly like that of the ossicles of the true fossil *Myiodon*. The claw, 104 mm. long by 34 wide, is considered to belong to *Neomyiodon*, as there is no existing South American mammal provided with similar claws, and is believed to have belonged on a hind foot. The animal is estimated to have been at least 6 feet long and 4 feet or so high at the shoulder. After a careful consideration Dr. Lönnberg comes to the conclusion that, while *Neomyiodon* was contemporaneous with early man and was used as food, it certainly does not exist at present, because it is absolutely impossible for it to have eluded the sharp eyes of the native Indians; neither is it identical with the animal that Ramon Listai is said to have shot at. It will be noted that the conditions under which the skin was preserved are very similar to those which led to the preservation of portions of the skin and feathers of *Dinornis*.

F. A. L.

#### SCIENTIFIC NOTES AND NEWS.

THE Second International Conference on a Catalogue of Scientific Literature requested the delegates from the countries represented to take steps for the formation of committees to study the various questions relating to the Catalogue, and for the United States the following committee has been named: Dr. J. S. Billings, Professor Simon Newcomb, Dr. Theodore N. Gill, Professor H. P. Bowditch, Dr. Robert Fletcher, Mr. Clement W. Andrews and Dr. Cyrus Adler. Different universities and scien-

tific societies have been invited to form committees to report upon the questions involved.

THE appointment of Mr. Herbert Putnam as Librarian of the National Library will be welcomed by all friends of science and learning. It is well known that Mr. Putnam has excellently administered the Public Library of Minneapolis and the Boston Public Library, and will undoubtedly make the National Library what he has himself said it should be, "the foremost library in the United States, a national library, the largest in the United States, a model and example of assisting the work of scholarship in the United States." Men of science are directly interested in this appointment, as the great collection of scientific books of the Smithsonian Institution is deposited in the Library.

DR. THOMAS J. SEE, recently appointed professor of mathematics in the Naval Observatory, has been designated as Chief of the Nautical Almanac.

PROFESSOR PATRICK GEDDES, of Edinburgh, is at present visiting the United States with a view to sociological and other studies. Professor Geddes is well known for his accomplishments and versatility in biological science and for his efforts to improve sociological conditions in Edinburgh.

MR. G. F. STOUT, recently appointed Wilde lecturer on mental philosophy at Oxford, and Mr. Charles Stewart, Curator of the Museum of the Royal College of Surgeons, London, have been given the degree of LL.D. by the University of Aberdeen.

THE Stockholm Society for Geology and Geography has awarded its Vega medal to Professor Georg Schweinfurth, of Berlin.

THE Leopoldinisch-Carolinische Deutsche Akademie der Naturforscher, of Halle, has awarded the Cothenius gold medal to Dr. F. Zirkel, professor of mineralogy in the University of Leipzig.

PROFESSOR A. H. SAYCE, of Oxford University, has been appointed Gifford lecturer in Aberdeen University for 1900-1902.

PROFESSOR BURDON SAUNDERSON gave the Croonian lecture before the Royal Society on

March 16th, on 'The Electric Concomitants of Motion in Animals and Plants.'

PROFESSOR JEBB, of Cambridge, will deliver the Romanes lecture at Oxford, June 7th, his subject being 'Humanism and Education.'

THE following Friday evening discourses are being given before the Royal Institution, London: March 10th, 'Measuring Extreme Temperatures,' by Professor H. L. Callendar, F.R.S.; March 17th, 'The Electric Fish of the Nile,' by Professor Francis Gotch, F.R.S.; and on March 24th, 'Transparency and Opacity,' by Lord Rayleigh, F.R.S.

PROFESSOR C. C. GEORGESEN, of the Department of Agriculture, has left Washington for Sitka to superintend investigations in experimental agriculture. A building will be erected at Sitka this year which will contain offices for the experiment station and for meteorological observations.

THE Lord Mayor of Liverpool entertained, on March 4th, Professor Oliver J. Lodge, in recognition of his having received the Rumford medal, which is awarded biennially by the Royal Society for the most important discoveries in heat or light. Speeches were made by the Lord Mayor; Professor Fitzgerald, of Dublin; Sir John Brunner; Professor Myers, of Cambridge; Professor Rücker and Sir W. Crookes. It was announced at the dinner that Sir John Brunner had offered £5,000 towards a new building for the physical laboratory for University College, Liverpool, which is under Professor Lodge's direction.

A STATUE in bronze of the late Dr. William Pepper, of Philadelphia, will be erected in the plaza before the City Hall.

PROFESSOR JOHN COLLETT, for many years State Geologist of Indiana, died at Indianapolis, on March 15th, aged 71 years.

DR. W. HANKEL, professor of physics in the University of Leipzig, died on February 18th, at the age of 84 years.

DR. FRANCIS M. MACNAMARA died on March 5th, at the age of 57. He was formerly professor of chemistry at the Calcutta Medical College and chemical examiner to the Governor of India, where he made important investigations

on the spread of cholera by water and on the distribution of disease.

CONGRESS, in its closing hours, passed a bill containing the stipulation, "That before January 1, 1903, the fence around the Botanical Garden shall be removed, provided that at the first session of the Fifty-sixth Congress the Joint Committee on Library is directed to report a bill embodying a plan for removing the Botanical Garden to another location." The Botanical Garden in Washington has done little for science, being administered by a Joint Committee on the Library of Congress. It is proposed to remove the Garden to a place where a larger area can be secured, and establish there a National Botanical Garden, which will probably be placed under the charge of the Department of Agriculture.

THE New York City Board of Estimate and Apportionment authorized, on March 17th, an issue of bonds to the amount of \$500,000, the proceeds to be used in defraying the cost of removing the Forty-second street reservoir and in laying the foundations for the building for the New York Public Library, Astor, Lenox and Tilden foundations. Mayor Van Wyck is reported to have said: "The original request was for \$150,000. We looked the matter over carefully and concluded that such a sum would suffice only for the demolition of the reservoir. It was suggested that the first requisition for bonds under the act authorizing the construction of the library be large enough to cover the cost of the foundations for the structure. The trustees of the library agreed to this, and the plans were accordingly amended. With \$500,000 it will be possible within nine or ten months to raze the reservoir and lay the foundations. Then we shall be ready to order another issue of bonds and to prosecute the work to an early completion." The New York City Board of Estimate and Apportionment has also set aside \$63,000 for work on the Zoological Garden in Bronx Park.

MAYOR VAN WYCK has given a public hearing on the bill passed by the Legislature authorizing the Board of Estimate and Apportionment to increase the annual appropriation for the American Museum of Natural History from

\$90,000 to \$130,000. Professor Albert S. Bickmore, representing the Museum, and Senator Plunkitt, the introducer of the bill, declared that, on account of recent additions to the building, more money was required for its maintenance, the present allowance being inadequate. The Mayor did not publicly declare his intentions towards the bill, but it is believed that he will sign it.

THE Joint Committee of the Royal Society and the Royal Geographical Society, appointed to promote a National Antarctic Expedition, made application some time ago to the Council of the Royal Society and the Council of the British Association for grants of money in aid of the proposed expedition. The Treasurer of the Royal Society has applied, on behalf of the Council, to the Government Grant Committee for a grant of £1,000, and the Council of the British Association will recommend to the next meeting of the General Committee that a like sum be contributed by the Association. The scientific societies in Australia are moving in the matter with a view to influencing the Premiers of the different colonies.

THE Navy Department expects to make a hydrographic survey of the Philippines. The *Vixen*, now on its way to Manila, will begin the work as soon as it can be spared, and it is expected that the *Yosemite*, after making surveys about Guam, will proceed to the Philippines for this purpose.

DR. W. H. FURNESS and Dr. H. M. Miller have returned from an expedition to Florida, where they have been collecting fossils for the Wistar Institute of Anatomy, University of Pennsylvania. They have made collections from the limestone quarries and phosphate mines, where Dr. Leidy secured many valuable specimens.

THE will of the late Herbert Stewart gives \$2,000 to the American Society of Engineers for a library fund and \$500 to the Engineers' Club of New York City towards its building fund. The residue of the estate, subject to life annuities, is left to the Sheffield Scientific School of Yale University for Scholarships. The amount is estimated at \$40,000.

A CIVIL SERVICE COMMISSION examination

will be held on April 11 and 12, 1899, for the position of Soil Chemist, Division of Soils, Department of Agriculture, at a salary of \$1,400 per annum. The subjects and weights are as follows:

Physical chemistry.....	20
Inorganic chemistry.....	20
Organic chemistry.....	20
Analytical methods.....	20
Literature of soils.....	10
French and German.....	10
Total.....	100

ON the same days an examination will be held for the position of Special Crop Culturist (Department of Agriculture). The subjects will be weighted as follows:

Basis examination (first grade).....	10
English composition and general training and experience... ..	10
Agriculture and horticulture (general principles and practice of agriculture and horticulture, including crop rotation, selection and breeding of variety, agricultural Chemistry, fertilizers, treatment of plant diseases and insect pests).....	20
French (translation into English of a selection relating to the cultivation of field crops).....	10
Field crops (treatment of miscellaneous and little known field crops, including import statistics).....	30
Proof reading.....	10
Typewriting (tabulating, copying and spacing, and writing from dictation).....	10
Total.....	100

WE have already called attention to the Volta commemoration to be held at Como during May of the present year. Como has appropriated \$100,000 for the preliminary expenses. An electrical exhibition will be opened on May 14th. A congress of electricians will also be held.

THE eleventh annual meeting of the Botanical Society of the University of Pennsylvania was held this week, and the following officers were elected: President, *ex-officio*, Provost C. C. Harrison; acting President, Dr. Adolph Miller; First Vice-President, Mrs. L. R. Fox; Secretary, Professor J. MacFarland; Treasurer, R. C. Beane.

WE learn from the *British Medical Journal* that the French Medical Press Association held

its forty-third meeting on February 3d, under the presidency of Dr. Gézilly. It was decided to organize an International Congress of the Medical Press, to be held in Paris in 1900, at the same time as the other congresses which are to take place there in that year.

THE beginning of an arboretum will be made made at the University of Michigan this year, under the direction of the pharmacy department. The plan is to have specimens of as many different kind of trees growing on the University campus as will thrive in the latitude. Special attention, however, will be given to the securing of trees of medicinal or economic importance. A few trees will be set out each year, being selected and planted by the members of the graduating classes of the pharmacy department.

THE report of the committee appointed by the Council of the Society of Arts to inquire into the requisite conditions of safety in acetylene gas generators, and to report on the various apparatus shown at the exhibition held at the Imperial Institute, says the *London Times*, has just been issued. The object of the exhibition, which was undertaken with the approval of Sir Vivian Majendie of the Home Office, and of the London County Council, was to familiarize the public with the means of generating acetylene gas, and with the simple precautions with which its use at low pressures is as safe as that of coal gas. The committee, feeling that in the interests of the public it was advisable carefully to test the various forms of generators exhibited, appointed Professor Vivian B. Lewes and Mr. Boverton Redwood as a sub-committee to make a series of tests. As a result of these tests the committee have advised the granting of certificates to those generators which have complied with the requirements of the various tests to which they have been submitted, and which have worked safely and satisfactorily during a month's every-day use. The committee classified the generators into three groups: (1) those in which the gas is generated by water being allowed to drip or flow on to the carbide; (2) those in which the water is allowed to rise in contact with the carbide, the rise being regulated by the increase of pressure in the generating chamber;

(3) those in which the carbide drops into the water. These are again subdivided into automatic generators whose storage capacity is less than the total volume which the charge of carbide is capable of generating, and which, therefore, require automatic regulation; and non-automatic, whose holders can receive all the gas produced by the charge of carbide. The committee consider that the tests have clearly demonstrated that many types of acetylene gas apparatus can be so constructed as with ordinary precautions to be absolutely safe, and that lighting by acetylene need be no more fraught with danger than any other form of artificial lighting in general use. The committee, however, feel it their duty to state that, safe as they consider acetylene gas to be, when generated in a properly-constructed apparatus outside the building to be lighted, and in accordance with the rules and suggestions contained in the report, they consider the generation of gas within the house, and the use of hand lamps, cycle lamps, etc., to be not unattended by danger, except in skilled hands. As to the storage of the carbide, the Home Office regulations allow 5lb. to be kept without a license in 1lb. packages. The committee recommend that the quantity, however small, should always be kept in a dry place, and under lock and key. These precautions, they think, may not be necessary when its properties are fully understood, as it is no more dangerous than many other substances in daily use.

THE Reale Istituto Lombardo announces in its *Rendiconti* the award of its prizes which are quoted in *Nature* as follows: The Cagnola prize of 2,500 lire and a gold medal of 500 lire has been awarded to Signor Angelo Battelli and Signor Annibale Stefanini for their joint paper containing a critical exposition of electric dissociation considered principally in regard to the experimental proofs of its deductions. For the Kramer prize, on an essay relating to the use of condensers in the transmission of electric energy by alternating currents and their construction for industrial purposes, two competitors entered, and prizes of 2,500 lire and 1,500 lire respectively have been awarded to Professor Luigi Lombardi, of Turin, and Signor Giovanni Battista Folco,

director of the electric tramways of Leghorn. For the Fossati prize, on some physiological point connected with the human encephalus, two competitors entered, and awards of 400 lire have been made to both—namely, Dr. Domenico Mirto, of Palermo, and Dr. Carlo Martinotti, of Turin. For the Brambilla prize, given for the invention or introduction of some new machine or industrial process of real practical value, seven competitors entered. A gold medal and 500 lire has been awarded to Fratelli Boltri, of Milan, for their grain desiccators; a similar award to Premoli and Zanoncelli, of Lodi, for their preparation of Gaertnerised milk. Gold medals and 200 lire have also been given to Rossi, Enrico and Co., of Milan, for their manufacture of varnishes, etc.; to Piola Alfredo, of Milan, for artists' colors; and to Pizonni Pietro, of Milan, for the manufacture of baskets. The prizes offered for future competition include prizes of the Institution for 1899 for a list of unusual meteorological events that have been recorded from the earliest times, and for 1900 for an essay on collective property in Italy; two triennial medals for improvements in agricultural or industrial processes in Lombardy; a Cagnola prize and gold medal on the subjects chosen by the Institution, viz., in 1899, for an essay on Hertz's phenomenon, or the effect of active radiation or of products of combustion on the sparking distance in air, and in 1900 for a critical study of toxin and anti-toxin; a Cagnola prize and gold medal for 1899 on one of the following subjects chosen by the founder, viz: the cure of 'pellagra,' the nature of miasma and contagion, the direction of flying balloons, and the methods of preventing forgery of writings; a Brambilla prize for industrial improvements in Lombardy; Fossati prizes for 1899 on the macro- or micro-scopical anatomy of the nervous system, for 1900 on the regeneration of peripheral nervous fibres in vertebrates, and for 1901 on the anatomy of the encephalus of the higher animals; a Kramer prize for an essay on the transmission of heat between the steam and walls of the cylinders of steam engines; a Secco Comneno prize for 1902 for a description of Italian natural deposits of phosphates; a Pizzamiglio prize for an essay on the influence of socialistic doctrines on private rights; Ciani prizes

for popular Italian books, a Tommasoni prize for a history of the life and works of Leonardi da Vinci; and a triennial Zanetti prize for some improvements or discovery in pharmaceutical chemistry.

#### UNIVERSITY AND EDUCATIONAL NEWS.

AT a meeting of the Board of Overseers of Harvard University on March 15th it was voted to concur with the President and Fellows in the election of William Morris Davis, M.E., now holding the chair of physical geography, to be Sturgis Hooper professor of geology; Robert Tracy Jackson, S.D., was elected assistant professor of paleontology, and Jay Backus Woodworth, S.B., instructor in geology.

DR. SIMON FLEXNER, of the Johns Hopkins University, has accepted the chair of pathology in the University of Pennsylvania, to succeed Dr. John Guiteras. Dr. Guiteras will spend a year abroad and expects then to devote his services to the University of Havana.

MR. H. E. BROWN and Mr. W. A. Nivelung, assistant instructors in chemistry in the University of Michigan, have resigned their positions to engage in technical work.

AT Yale University Dr. Jervase Greene has been promoted to an instructorship in philosophy and Dr. I. K. Phelps to an instructorship in chemistry. Dr. Milton B. Porter has been appointed instructor in mathematics.

COLONEL HEINRICH HARTL has been appointed professor of geodesy in the University of Vienna, and Dr. G. Bodländer, of Göttingen, professor of physical chemistry in the Institute of Technology at Braunschweig. Dr. Gutzmer, of Halle, has been called to the new assistant professorship of mathematics in the University of Jena; Dr. Aladar Richter to be assistant professor of botany in the University at Klausenburg, and Dr. Bengst Jöhnsson to be professor of botany in the Academy at Lund. Dr. Tobler and Dr. Streckeisen have qualified as docents in mineralogy and geography in the University at Basle. Dr. Ad. Fick, professor of physiology at the University of Würzburg, will retire at the end of the present semester.