marked contrasts were observed. The Normans were generally prominent in science, and little so in poetry or works of imagination; while this was reversed for the south of France. Dr. Collignon, therefore, comes to the conclusion: "To the difference of race, a purely anatomical fact shown by the shape of the head and the color of the hair, corresponds a difference in the brain, which reveals itself by a special tendency of the thoughts and particular aptitudes."

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

## SCIENTIFIC NOTES AND NEWS.

THE annual stated session of the National Academy of Sciences will be held in Washington, D. C., beginning Tuesday, April 21, 1896, at 11 A. M. The place of meeting will be at the National Museum. In accordance with the new rule adopted October 30, 1895, the business meetings of the Academy will continue until one o'clock P. M. The scientific meetings will begin at half-past one P. M.

A BILL has been passed by the Legislature of Maryland and signed by the Governor, entitled "An Act to establish a State Geological and Economic Survey and to make provision for the preparation and publication of reports and maps to illustrate the natural resources of the State, together with the necessary investigations preparatory thereto." \$10,000 annually is appropriated for carrying out the provisions of the act, and a commission has been established composed of the Governor of the State, the Comptroller, the President of the Johns Hopkins University and the President of the Maryland Agricultural College. At a meeting of the commission, on March 25th, Prof. William Bullock Clark was appointed State Geologist. He will at once begin work in the field.

BRIGADIER-GENERAL THOS. LINCOLN CASEY died suddenly at Washington on March 26th. He was born on May 10, 1831, and had supervised many important engineering works and public buildings. At the time of his death he had charge of the new Congressional Library, one of the most notable buildings of the world. General Casey was appointed Chief of Engineers in 1888 and was retired in May, 1895. He was a member of the National Academy of Sciences, an officer of the Legion of Honor, of France, and author of many important articles and reports.

THE privileges of the laboratories of the International Zoölogical Station at Naples have been extended to *seven* American students for the spring of 1896. At the present moment, however, there are only two American Tables, so that most of these men are accepted at the station through the courtesy of the director, Geheimrath Dohrn. The Smithsonian table has not remained unoccupied a single day since it was established, nearly three years ago, while Prof. Agassiz's table has also been in great demand. This country should have at least three tables at Naples. Who will assume the responsibility of raising the money for the support of a third table?

A MARBLE bust in memory of the philosopher Luigi Ferri was placed, on March 16th, the anniversary of his death, in the hall of the University of Rome, where Ferri taught for twenty-four years. For this memorial about \$200 had been collected by subscription.

FRANK WEIR & Co., New York, announce the publication of an *Index* to the medical press, to be published monthly, beginning the 15th of the present month. It is proposed to give a complete bibliography of papers published in the medical magazines and transactions of the United States and Canada.

Icones Plantarum, which has been edited by Prof. Daniel Oliver since 1891, will hereafter be edited by the director of Kew Gardens.

THE French government has decided to continue to Mme. Pasteur the pension of 25,000 fr. which her husband had received for thirteen years.

PROF. FRANCIS R. FAVA, who held the chair of civil engineering at the Columbian University, Washington, died at that place on March 26th, aged about thirty-six years.

M. BERTHELOT, the eminent French chemist, has resigned from the Ministry of Foreign affairs of France. A RESOLUTION has been adopted by the Senate permitting Prof. Simon Newcomb to accept the decoration of the cross of an officer of the Legion of Honor, and Prof. Asaph Hall that of chevalier, respectively, conferred on them by the French Republic, on the occasion of the centenary establishment of the French Institute, for services to the French Academy of Sciences as corresponding members.

THE Senate Committee on Public Buildings and Grounds has reported favorably the bill providing for the erection of an additional fireproof building for the National Museum.

THE department of geology and geography of Harvard University has placed on exhibition in Cambridge the Gardner collection of photographs, which consists of more than 3,000 mounted photographs and about 1,500 stereopticon views of geological subjects and landscapes, mainly purchased from the income of a fund established in 1892 by George A. Gardner, of Boston.

MR. M. A. LAWSON, government botanist in India and formerly professor at Oxford, died at Madras on February 14th.

MACMILLAN & Co. announce an English translation, by D. E. Jones and G. A. Scholt, of the Miscellaneous Papers of Heinrich Hertz, with an introduction by Prof. Lenard.

*Nature* states that Mr. Edwin Wheeler has presented to the Natural History Museum a valuable series of water-color drawings of fungi, 2449 in number.

It is reported in the daily papers that locusts are doing much damage in South Africa. In Natal a 'chief locust officer' has been appointed and \$35,000 has been spent in the attempts to check the plague.

THE German naturalist John Gundlach has died in Havana. According to the New York Sun, Gundlach was born at Marburg, Hesse-Cassel, in 1810, where his father was a professor in the University. He published in his native country some notable articles on natural history. The wealthy Cuban, Mr. Booth, proposed to him to come to Cuba and write a book on the natural history of the island. Mr. Gundlach accepted, and in 1839 he landed at Havana, and never returned to Europe, except for short visits. In 1844 he began his collection of Cuba's fauna, now preserved at the institute in Havana, and valued at over \$200,000. He completed it in 1856. In 1873 and 1875 he went to Puerto Rico, to gather final materials for his book on the fauna of both the Antilles. Mr. Gundlach was also the author of a work on Cuban ornithology.

DR. A. W. BEKETON, professor of botany in the University of St. Petersburg, has retired, owing to ill health.

Nature for March 12th and 19th contains extended and appreciative articles reviewing the recent work of the U. S. Geological Survey.

AT the anniversary meeting of the London Chemical Society, on March 26th, the President, Mr. A. G. Vernon Harcourt, was expected to give the annual Presidential address before the Society.

MR. BERNARD RICHARDSON GREEN, who succeeds General Casey as Superintendent of the construction of the Congressional Library building, has been his chief assistant in all his great engineering enterprises, and was responsible for many of the brilliant and novel devices employed in the critical task of completing the Washington Monument, and replacing its old foundation by a new one. He is a graduate of Harvard University and is Recording Secretary of the Philosophical Society of Washington.

THE nomination of John J. Brice, of California, for Commissioner of Fish and Fisheries was confirmed by the Senate on March 25th.

A RECENT act of the British Parliament provides for the opening of the Government Museums for a portion of each Sunday. It provides that no employee shall be required to be on duty more than six days in the week and that those who have scruples against Sunday service shall be excused from attendance on that day.

MR. HIRAM S. MAXIM has written a series of articles on the evolution and manufacture of Automatic Firing Guns, the first of which appears in the current issue of *Industries and Iron*.

MR. THOMAS A. EDISON has invented an improved form of the fluoroscope proposed by Prof. Salvioni, and at about the same time by Prof. McGee, of Princeton University. In this instru-

## SCIENCE.

ment paper is covered with the fluorescing substance, and the shadows produced by the X-rays may be directly seen. The instrument has the general form of a stereoscope. Mr. Edison uses tungstate of calcium, with which it is said it is possible to see the shadow through three feet of cork.

M. BECQUEREL has reported to the Paris Academy that he has found that potassium uranyl sulphide when excited to phosphorescence gives rise to rays which last many hours (more than 160) after the phosphorescence ceases, and pass through paper aluminium and copper. They also discharge electrified bodies in a manner similar to the X-rays.

A SERIES of field lessons on 'Birds in the Bush' will be given by Mr. Ralph Hoffmann, of Belmont, Mass., on Saturday mornings of April, May and June, in the neighborhood of Cambridge and Arlington, Mass. The object of the course is to indicate the easiest means of distinguishing the common birds native to this region, and the more interesting of the migrants. The songs of the different species, their favorite haunts, their feeding habits, and the sites chosen for their nests, will be studied. Before each walk, skins of the birds likely to be found will he examined. By beginning about the middle of April students may learn many of our common birds before the rush of migrants in May, and by continuing into June may pursue the study of our native birds after the migrants have passed. 5

A COMMITTEE from the New York Chamber of Commerce has been organized to promote the efficiency of the medical library in the New York Academy of Medicine. An attempt is being made to collect \$100,000 for the library. The library of the New York Academy of Medicine is one of the most complete in the world and is open, without charge, to all wishing to use it.

MM. A. AND L. LUMIÈRE have invented an improvement on Edison's kinetoscope, which they call a cinematograph. With this instrument changing scenes are exhibited in their natural size on a screen. The groups, such as a crowd of people passing along the street or a railway train entering and stopping at a station, are said to be very effective. Some nine hundred instantaneous photographs are taken in the course of a minute, and when these photographs are thrown on a screen by means of the electric light at the same rate and order as they were taken an exact reproduction of the moving people is obtained.

THE University of the State of New York has recently issued Museum bulletin 14 on the Geology of Moriah and Westport Townships, Essex *County.* Besides describing the general geology of these townships, this contribution to our knowledge of the magnetic iron-ore deposits of the United States discusses in detail the ironore bodies of that region, gives the latest information on its important iron-ore deposits and reviews the probable hypotheses as to their origin. It contains a geologic map of the two townships, a map of Mineville iron region, and half-tone views of the mining district and sections of the ore bodies. The bulletin is mailed postpaid to any address by the State Library on receipt of 10 cents. Bulletin 15 on the Mineral Resources of New York, by Dr. F. J. H. Merrill, director of the Museum, is nearly ready and will be mailed postpaid for 40 cents.

## UNIVERSITY AND EDUCATIONAL NEWS.

GRADUATE SCHOLARSHIPS AND FELLOWSHIPS IN THE UNIVERSITY OF PENNSYLVANIA.

A LARGE number of Graduate Scholarships and Fellowships are about to be established in the University of Pennsylvania. Provost Harrison gave to the University last June, as stated at the time in this journal, the sum of \$500,000, to be held as a special fund, and to be known as the 'George L. Harrison Foundation for the Encouragement of Liberal Studies and the Advancement of Knowlcdge.' The purposes of the fund were described in the deed of gift as follows :

1. The establishment of Scholarships and Fellowships intended solely for men of exceptional ability.

2. The increasing of the Library of the University, particularly by the acquisition of works of permanent use and of lasting reference to and by the scholar.

3. The temporary relief from routine work of professors of ability in order that they may de-