

days following, the attendance has exceeded one thousand. The museum will be open to the public from 10 A.M. to 4 P.M. on week days and from 10 A.M. to 5 P.M. on holidays, including Sundays.

BARTON WARREN EVERMANN

SCIENTIFIC NOTES AND NEWS

THE National Academy of Sciences will hold its autumn meeting in Boston and Cambridge on November 13, 14 and 15. The William Ellery Hale lectures will be given on Monday evening and Tuesday afternoon, by Professor Edwin Grant Conklin, of Princeton University.

THE first lecture of the Harvey Society for the present season was given on October 14, at the New York Academy of Medicine, by Dr. J. S. Haldane, F.R.S., of Oxford on "The New Physiology." This lecture will be printed in SCIENCE.

THE degree of doctor of laws was conferred upon Thomas A. Edison over the telephone by Dr. John H. Finley, president of the University of the State of New York, at the closing session of the institution's fifty-second convocation on October 20. Mr. Edison was in his laboratory at Orange, N. J., while Dr. Finley was in the auditorium of the New York Education Building.

DR. GEORGE W. FIELD, of Sharon, Mass., chairman of the Massachusetts Commission on Fisheries and Game, was elected president of the American Fisheries Society at the concluding session of its forty-ninth annual convention, held in New Orleans on October 18.

DR. PERCIVAL LOWELL, of Boston, director of the Lowell Observatory at Flagstaff, Arizona, has been elected an honorary fellow of the Royal Astronomical Society of Canada.

MR. LOUIS R. SULLIVAN and Mr. Leslie Spier have been added to the scientific staff of the department of anthropology of the American Museum of Natural History. Mr. Sullivan will care for the skeletal and other somatological material in the department and will develop exhibitions showing racial differences and man's relations to the primates. Mr. Spier for the present will care for the archeological

and ethnological collections exhibited from the eastern states.

WITH the cooperation of Harvard University and the Massachusetts Institute of Technology, the Barber Asphalt Paving Company has established at these institutions a fellowship for research in asphaltic materials and their uses. The fellowship is to be known as "The Clifford Richardson Fellowship." Mr. Richardson is an alumnus of Harvard, known for his contributions to asphaltic highway construction and the chemistry of bitumens.

PRACTICAL forestry management has developed to such proportions in Massachusetts, under the administration of State Forester Rane, that it has been decided to establish a state forestry office in the western part of the state for the convenience of land owners in that section. C. R. Atwood, who is a graduate of the University of Maine, and for some time has been an assistant to Paul D. Kneeland in the Boston office of the state forester, has been selected for the position. He will have headquarters in Springfield.

S. B. Fox, Ph.D. (Cornell), has been appointed assistant in farm management on the experiment station staff of the Montana State College.

THE American Museum of Natural History had three expeditions for fossil vertebrates in the western United States during the past summer. All report a fair degree of success, especially in the discovery of new and interesting fossil faunas. Mr. Barnum Brown, in charge of the expedition for Cretaceous dinosaurs in Montana, reports the discovery of Cretaceous dinosaurs distinct from those of the localities hitherto explored by the museum, and perhaps representing an older stage in their evolution. Mr. Walter Granger reports the discovery in a new locality in New Mexico of numerous remains of small mammals of an age intermediate between the Torrejon and Wasatch horizons. Mr. Albert Thomson has continued work in the Agate quarry, securing additional material needed for the group planned to represent this quarry fauna and has also secured interesting material from the Pliocene beds

farther south. Dr. W. D. Matthew was with Mr. Thomson's party during the early part of the season, engaged chiefly in an extensive reconnaissance of the later Tertiary fossil beds in western Nebraska. Professor H. F. Osborn joined the party for a short time, visiting on his way some of the more important localities in Nebraska.

THE University of Chicago paleontological expedition to northern Texas the past season, which was in charge of Mr. Paul Miller, of the department of geology and paleontology, secured some valuable material, which is now being prepared for exhibition in Walker Museum. Mr. Miller was accompanied by Messrs. Jillson and Bridge, fellows in geology. The most important of the specimens are several nearly complete skeletons of *Labidosaurus*. In northern New Mexico Professor S. W. Williston and his son spent several weeks exploring the Permian deposits along the Puerco River. He brought back the skull and a large part of the skeleton of a large carnivorous reptile, *Sphenacodon*. Dr. Williston also secured most of the skeleton of a smaller reptile, perhaps five feet in length, which is new to science.

THE expedition from the American Museum of Natural History to Nicaragua, under Messrs. Clarence R. Halter and L. Alfred Mannhardt, will remain in the field until January. Scientific collections of reptiles and fishes have been made from the eastern coastal belt—and shipments north of living specimens of *Basiliscus* and *Caiman* are being prepared for use in the reptile group work of the museum. The expedition will now carry the survey into the mountains of the interior, to Lake Nicaragua, and the western coast.

"ASPECTS of Modern Science" is the general subject of a series of lectures being given under the auspices of the University Lecture Association in cooperation with the University of Chicago. In the Oak Park center of the association, on October 16, Professor Edwin Oakes Jordan, chairman of the department of hygiene and bacteriology, gave the fourth lecture in the series, on the subject of "Bacteria and the Prevention of Disease." On October 25 Associate Professor William

D. Harkins, of the department of chemistry, spoke on "Radium, the Breaking-up of Atoms, and the Evolution of the Elements." The final lecture in the course will be that by Professor Rollin D. Salisbury, dean of the Ogden Graduate School of Science, on the subject of "The New Geology." The series was introduced by Professor Robert A. Millikan, of the department of physics, who discussed "Modern Views of Electricity."

AT University College, London, a series of six public lectures is being delivered by Professor J. A. Fleming on "Long-distance Telegraphy and Telephony."

PROFESSOR A. J. CARLSON, of the University of Chicago, lectured in Toronto before the Academy of Medicine, on October 3, on "Some Recent Studies of the Physiology and Pathology of the Stomach."

A STATUE of Robert Koch was recently unveiled at Berlin, six years after his death.

VIRGIL GAY BOGUE, of New York City, widely known as a civil engineer, died on October 14, at the age of seventy years.

THE thirty-fourth stated meeting of the American Ornithologists' Union will be held at the Academy of Natural Sciences, in Philadelphia, November 14-16, with a business meeting of fellows and members on the 13th.

IN anticipation of a possible epidemic of poliomyelitis next summer, the Illinois State Board of Health has arranged for a number of conferences on the subject at different points in the state during the winter months.

FUNDS have been contributed which make possible the opening of the psychopathic laboratory at the New York City police headquarters. This laboratory was opened last December in order to cull from the prisoners each day those who were mentally defective and to send them to suitable institutions. The list of those subscribing to the support of this laboratory include Andrew Carnegie, F. W. Vanderbilt, Daniel Guggenheim, Mortimer L. Schiff, William Rockefeller and Mrs. George B. Alexander.

DIRECTOR W. T. HORNADAY, of the New York Zoological Park, announces that the fund to

erect a building to house the Zoological Society's national collection of heads and horns had been raised. The building will be built in 1917 and opened to the public in the spring of 1918. The fund is made up of ten subscriptions of \$10,000 each, the donors being Mrs. Frederick Ferris Thompson, Mrs. Russell Sage, John D. Archbold, Jacob H. Schiff, George F. Baker, Mrs. Louise W. Carnegie, Andrew Carnegie, Edmund C. Converse, Samuel Thorne, and two others who signed themselves, respectively, "In Memoriam" and "A Friend."

THE *Journal* of the American Medical Association notes that the *Therapeutische Monatshefte* for September arrived on October 8, the first German medical journal to reach its office since early last May. Before the war twenty-six German journals were indexed regularly. The German medical journals are being published regularly, as abstracts from them appear in the Scandinavian and Netherlands exchanges.

THE celebration on June 13 in connection with the centenary of the Botanic Gardens, Sydney, are noted in *Nature*. Speeches were delivered on the occasion by the governor of New South Wales, the premier, and the minister for agriculture, and a brief historical address was given by Mr. J. H. Maiden, F.R.S., the director of the gardens. Three vistas were named, respectively, after Capt. Cook, Sir Joseph Banks and Governor Phillip, and a rosery is to be known in future as the "Centenary Rosery." The following memorial trees were planted simultaneously by representatives of the Empire and the Allies: Great Britain and Ireland, the British Oak (*Quercus pedunculata*); Australia, the Bunya Bunya (*Araucaria Bidwilli*) and the Flame Tree (*Brachychiton acerifolia*); Sydney, the Port Jackson Fig (*Ficus rubiginosa*); New Zealand, the Kauri (*Agathis australis*); South Africa, the Cape Chestnut (*Calodendron capensis*); Canada, the Sweet Gum (*Liquidambar styraciflua*); India, Indian Date Palm (*Phoenix sylvestris*); Belgium, Black Belgian Poplar (*Populus monilifera*); France, Nettle Tree, or Perpignan Wood (*Celtis aus-*

tralis); Russia, the Aspen (*Populus tremula*); Italy, Lombardy Poplar (*Populus nigra*, var. *pyramidalis*); Serbia, the Carob (*Ceratonia siliqua*); Montenegro, the Olive (*Olea europæa*); Portugal, Portugal Laurel (*Prunus lusitanicus*); Japan, Japanese Maple (*Acer japonica*). A memorial stone of a proposed museum of botany and horticulture was laid.

THE National Forest Reservation Commission has approved the purchase by the government of 59 tracts of land with a total of 66,880 acres in the Appalachian and White Mountains. Of this, 36,000 acres is in the so-called "Kilkenny Purchase Area" in New Hampshire. It is the policy of the commission to build up government holdings, as nearly solid as may be, through buying only in certain specified places, which are designated purchase areas. The Kilkenny Purchase Area adjoins the so-called "White Mountain Purchase Area" on the north, and is on the watershed of the Connecticut River. The land now approved for purchase is the first to be acquired in the Kilkenny Area. About 17,000 acres of land on the White Mountain area was approved. This land lies for the most part on the west slope of the Carter Range and practically completes the government purchases in the northern portion of the White Mountain region. With this land a total of 698,086 acres in the White Mountains has been acquired. Smaller tracts were purchased in the southern Appalachian Mountains, the largest total on any area being that of 7,678 acres in Transylvania County, North Carolina, on the Pisgah Forest. Other tracts in Avery, Caldwell, Macon and McDowell Counties, North Carolina, on the Boone, Nantahala and Mt. Mitchell areas, aggregate 1,870 acres. Approximately 2,000 acres of the approved lands are on the Potomac, Shenandoah and Natural Bridge areas in Virginia; 956 acres are in Rabun and Union Counties, Georgia, and the remaining 586 acres are in Monroe and Sullivan Counties, Tennessee. Congress recently reappropriated the \$3,000,000 of the original fund which was not spent in the beginning of the work and which consequently reverted to the treasury. This money, accord-

ing to the officials in charge, will be used mostly to round out the lands already acquired, so that they may be easily and economically administered. In making future purchases it is stated that the policy will be to select those tracts which block in with lands already purchased and which are offered at the most reasonable prices. The acquisition of lands was begun in 1911 under the so-called "Weeks Law," which permitted the government to purchase, for national forest purposes, lands on the headwaters of navigable streams in the White Mountain and Appalachian regions. To date 1,396,367 acres have been approved for purchase.

THERE has recently been organized, with headquarters at Minneapolis, The American Association for the Promotion of Technical Education in India. The purpose of the society is to promote the development of the American type of education in agriculture and the mechanic arts in India, by assisting Hindoo students who are in attendance at American universities and colleges in selecting their own educational training while here and in planning for service in industrial education upon their return to India. Local sections of the society have been organized at Pullman, Washington, and at Minneapolis, Minnesota; and others are in process of organization at other state institutions. R. W. Thatcher, assistant director of the Minnesota Agricultural Experiment Station, is acting-president of the association, and V. R. Kokatnur, a graduate assistant in the school of chemistry of the University of Minnesota, is general secretary. It is hoped that through the work of this association, the efficiency-ideal of American technical education may be introduced into India, and may serve to assist the Indian people in developing and utilizing their industrial resources, and so tend to prevent the frequent recurrence of the terrible famines of the past.

THE *Journal* of the American Medical Association states that the Henry S. Wellcome prizes, offered through the Association of Military Surgeons, viz., first prize, a gold

medal and \$300, and second prize, a silver medal and \$200, are open for competition to all present and former medical officers of the army, navy, Public Health Service, Organized Militia, U. S. Volunteers, Medical Reserve Corps of the army, navy and of the officers reserve corps of the U. S. Army. These prizes will not be awarded until after December 15, 1916, the council of the association having voted to extend the time of entry of competing essays to that date, because so large a number of the members are now with the troops on the border. Several essays have already been received and a large additional number are expected to be entered for such honorable and valuable prizes. The subject for the first prize is "The Most Practicable Plan for the Organization, Training and Utilization of the Medical Officers of the Medical Reserve Corps, U. S. Army and Navy and of the Medical Officers of the Officers' Reserve Corps, U. S. Army, in Peace and War." The subject of the second prize is "The Influence of the European War on the Transmission of the Infections of Diseases, with special reference to its Effect on Disease Conditions of the United States." Essays (five copies signed by *nom de plume*) not to exceed 20,000 words, exclusive of tables, must be addressed to the secretary of the Association of Military Surgeons, U. S. Army Medical Museum, Washington, D. C.

THE Oberlin Geologic Survey spent the period from June 15 to August 3 in Southern Vermont, near the village of Wilmington. Two groups of students were organized, one for physiography and geographic work, the other for geologic work. The field chosen had been mapped by the topographers of the United States Geologic Survey, but no geologic or topographic map had been made. The rocks were found to be almost entirely metamorphic systems indurated here and there with dikes of basalt quartz and granite. No mineral deposits were found worth working-up, and great quantities of magnetite and tourmaline, and garnet in disseminated crystals were found. The rocks were mostly originally

estuarian sands, clays and calcareous beds. Dr. Hubbard devoted the remainder of the summer to working for the Ohio Geologic Survey, part of the time in the field and part of the time writing. The preparation of the *Bulletin* for the State Survey, in the physiography of the state of Ohio, is well advanced. It is hoped that the manuscript may be ready for the printer by next year.

Nature states that before the war Russian men of science, and especially biologists, had to send a very considerable proportion of their writings abroad for publication, and the German journals thus became the common medium for much of the best Russian work. Soon after the outbreak of war efforts were made to remedy this state of affairs; of the new journals, Professors Shimkewitch and Dogiel are editing the *Russian Journal of Zoology*, Professors Sewertzoff and Elpatiewsky the *Revue Zoologique Russe*, and Professor Dogiel the *Archives Russes d'Anatomie, d'Histologie et d'Embryologie*. The first number of the latter has just appeared. In spite of the enormous drain on Russian finances, the minister of public instruction made the publication of this journal possible by a government subsidy.

UNIVERSITY AND EDUCATIONAL NEWS

A GIFT of \$60,000 for an observatory and 36-inch telescope has been given to the University of Arizona by a donor whose name is withheld.

THE University of Pennsylvania has received \$25,000 from the estate of Anna Yarnall, the income of which is to be used for the maintenance of the Botanic Gardens of the university.

ROBERT W. KELLY, of New York, of the class of '74, has given \$125,000 to the Yale Alumni Fund.

THE new ceramic engineering building of the University of Illinois is to be formally dedicated on November 20 and 21. It is expected that the exercises will be attended by many representatives of the architectural, structural, mining, geological, chemical and

manufacturing interests. In connection with the dedication exercises an industrial conference will be held, in which a number of topics of current interest to the ceramic engineer, the clay-worker and the manufacturer will be discussed by well-known experts. The ceramics building is a fireproof structure three stories high and with basement.

THE salaries of all full professors at Brown University has been increased by \$400. The minimum salary is now \$3,000 and the maximum salary, except for administrative officers, is \$3,650.

DR. ARTHUR R. EDWARDS has resigned as dean of Northwestern University Medical School. Arthur I. Kendall, professor of bacteriology, has been made acting dean.

DR. OTTO DUNKEL, of the University of Missouri, has been appointed assistant professor of mathematics at Washington University, St. Louis.

PROFESSOR WILLIAM H. KAVANAUGH, who has been a member of the engineering staff of the University of Minnesota for fifteen years, has resigned his position as professor of experimental engineering to accept a professorship in the Towne Scientific School of the University of Pennsylvania.

RALPH PATTERSON ROYCE, formerly livestock editor of the *Missouri Farmer*, has been appointed instructor in animal husbandry at the University of California Farm.

THE following appointments have been made in the laboratories of the University of Nebraska, College of Medicine, Omaha: H. E. Eggers, B.Sc., M.A. (Wisconsin), M.D. (Rush), professor of pathology and bacteriology; John T. Myers, A.B. (Washburn), M.S. (Kansas), instructor in bacteriology; Amos W. Peters, A.M., Ph.D. (Harvard), assistant professor of bio-chemistry.

DR. ARDREY W. DOWNS, formerly professor of physiology at the Medico-Chirurgical College, Philadelphia, has accepted the chair of physiology at McGill University, Montreal.

PROFESSOR H. HAHN, of Czernowitz, has been appointed professor of mathematics at Bonn.