

United States there will be \$50,000, the same as for the present year, but an increase as compared with former years.

The appropriation for gauging streams and determining the water supply of the United States, including the investigation of underground currents in arid and semi-arid sections is likewise the same as this year—\$100,000.

With a view to meeting as far as possible a very strong demand from the people for an extension of the hydrographic work of the Survey, there was practical unanimity in Congress in favor of a large increase in the allowance for this work. The increase was provided for in the form of an amendment to the River and Harbor Bill, and hence, like many other items covering meritorious objects, it went down to defeat in the last hour of the session with that now famous measure.

Other items under the appropriation are for engraving and printing, preparation of illustrations, rent of quarters, etc. There is \$12,000 for furniture for a new addition to the Survey building in Washington.

Congress also granted upwards of \$15,000 to cover deficiencies for the current year.

SCIENTIFIC NOTES AND NEWS.

DR. CHARLES F. CHANDLER, professor of chemistry in Columbia University, has been appointed by the President a member of the Board of Visitors of the U. S. Naval Observatory, in the place of Mr. Clair McKelway, of Brooklyn, who did not accept the position.

THREE expert geologists from the U. S. Geological Survey have been detailed to make a geologic and mineral reconnaissance of the Island of Cuba. They are Dr. C. Willard Hayes, Mr. T. Wayland Vaughan and Mr. A. C. Spencer. Mr. Spencer has not yet started from Washington, but Messrs. Hayes and Vaughan have already reached the island and taken up their work, after conference with the military governor. It is expected that these geologists will accomplish results of distinct economic value to the island. The assignment of these United States geologists to work in Cuba is made at the request of Major-General Wood, the military governor, and of Secretary

of War Root, and is with the approval of Secretary of the Interior Hitchcock. The expenses will be met by the Cuban Government.

PROFESSOR S. M. BABCOCK of the University of Wisconsin, inventor of the Babcock milk test, was, on March 27th, presented with a medal, voted him by the State for giving his inventions free to the world. Exercises were held in the Assembly Chamber of the Capitol in the presence of both Houses of the Legislature, the university faculty, Supreme Court, university regents and many prominent citizens of the State. Governor Lafollete presided and addresses were made by him, by ex-Governor W. D. Hoard and others.

AN influential committee has been formed in Italy to celebrate the fortieth anniversary of Professor Paul Mantegazza's entrance on his career as a teacher. This event will be celebrated at Florence on April 30th, and at the same time the thirtieth anniversary of the Italian Society of Anthropology. It is proposed to collect a sum of money to be used for the endowment of the new laboratory of anthropometry which Professor Mantegazza has established at Florence.

THE University of Aberdeen is about to confer the honorary degree of LL.D. on Professor Virchow, of Berlin, and on Major Alfred W. Alcock, superintendent of the Indian Museum, Calcutta, and professor of zoology in the Medical College of that city.

PROFESSOR C. LLOYD MORGAN gave the Croonian Lecture before the Royal Society on March 21st, the subject being 'Studies in Visual Sensation.'

DR. RICHARD R. WETTSTEIN VON WETTSCHEIM, professor of botany at the University of Vienna, has been elected president of the Zoological and Botanical Society of Vienna.

M. HUMBERT has been elected a member of the section of geometry of the Paris Academy of Sciences to fill the vacancy caused by the death of M. Hermite, and M. Normand has been elected a correspondent in the section of geography and navigation in the room of the late General de Tillo.

THE Medical Club of Philadelphia gave a re-

ception on March 29th, at the Bellevue Hotel, in honor of Dr. Charles L. Dana.

THE freedom of the Leathersellers' Company was conferred, on March 15th, on Sir William MacCormac, in recognition of his distinguished services to medical science.

WILLIAM HARPER, who for some years has been the chief of the statistical bureau of the Philadelphia Commercial Museums, has resigned to undertake similar work in London.

WE regret to learn that Dr. Horatio C. Wood, professor of therapeutics in the University of Pennsylvania, and eminent for his contributions to therapeutical and botanical subjects, has been compelled by ill health to give up temporarily his lectures and other work.

THE decoration of the *Mérite Agricole* has been conferred by the French Government upon the following officers of the Department of Agriculture for services in connection with the Paris Exposition: Dr. H. W. Wiley, chief chemist; Major H. E. Alvord, chief of the dairy division; Col. G. B. Brackett, pomologist; W. A. Taylor, assistant pomologist; M. A. Carleton, cerealist; and John I. Schulte, one of the associate editors of the *Experiment Station Record*. The decoration also has been conferred upon James L. Farmer, assistant director of agriculture for the Paris Exposition.

THE Smith's prizes of Cambridge University have been adjudged to Godfrey Harold Hardy, B.A., 4th Wrangler, 1898, scholar of Trinity College, for his essay on 'Definite Integrals of Discontinuous Functions,' and to James Hopwood Jeans, B.A., scholar of Trinity College, bracketed 2d Wrangler, 1898, for his essay on 'The Distribution of Molecular Energy.'

A MARBLE tablet in memory of the eminent French chemist, J. B. Dumas, who died in 1884, has been placed in the house in the rue St. Dominique, Paris, where he formerly lived.

A MEMORIAL marble bust of Robert Brown, the eminent botanist, formerly a student at University of Aberdeen, presented to the University by Miss Hope Paton, has been unveiled in the picture gallery of Marischal College.

THE death is announced of M. Montard, an eminent French mathematician and engineer;

of Baron Keiské Ito, professor of botany at the University of Tokyo, who died on January 21st, at the age of ninety-nine years, and of Dr. Peter M. Pokrowski, professor of mathematics at Kiew, on March 3d, at the age of forty-four years.

THE second Latin-American Scientific Congress opened its two weeks session at Montevideo on March 20th, with over 200 delegates in attendance. Dr. Robert Wernicke, professor of pathology in the University of Buenos Aires, Argentine Republic, was elected president of the Congress.

WE learn from the *British Medical Journal* that Professor Robert Koch is staying at Rovigno, on the Adriatic, where he is inspecting the Marine Zoological German Institute, to which he hopes to affiliate a malaria institute for the Istrian district. Koch's late stay in New Guinea has been fruitful in good results, the fight against malaria having been continued energetically on the lines laid down by him. Unfortunately the disease is very prevalent in the German colonies of East Africa. A medical officer with assistants and the necessary scientific apparatus is to be sent out there by the German Government, for which purpose 30,000 Marks have been voted by the Reichstag.

THE Coast and Geodetic Survey steamships *Pathfinder* and *McArthur*, at San Francisco, and the *Patterson* and *Gedney*, at Seattle, are now fitting up under orders to proceed to Alaska to survey important passages among the islands along the Alaskan coast. The existing charts are based on old Russian ones, corrected from time to time by reconnaissance surveys.

THE Convocation of Oxford University has rejected by a vote of 126 to 125 a resolution to build a house in the Parks adjacent to the observatory as a residence for the professor of astronomy.

SECRETARY WILSON has arranged to carry into effect, on July 1st, the reorganization of certain of the divisions of the Department of Agriculture, as provided by the last Congress. It will be remembered that, in addition to the Weather Bureau and the Bureau of Animal Industry, four new bureaus were created—of Plant Industry, of Forestry, of Chemistry and of Soils.

News has been received from the eclipse expedition sent out by the Massachusetts Institute of Technology to observe the total eclipse of the sun at Sumatra. Professor Burton and his assistants took the Dutch steamship *Konigin Regentes* at Genoa on March 12, and found on this steamer an official expedition sent out by the Netherlands Government. All the instruments were safely placed on board the steamer, which goes directly to Padang.

The ground occupied by the building of the U. S. Fish Commission, at Washington, has been granted to the Baltimore and Potomac Railroad, and the building will be removed to another part of the Mall, west of its present position. The railway company must pay \$40,000 towards the cost of rebuilding.

It has been announced that Mr. J. P. Morgan was the donor not only of the Tiffany collection of gems and pearls, but also of the Bement collection of minerals and meteorites to the American Museum of Natural History.

The Department of Zoology and Entomology of the Ohio State University has secured a very interesting and valuable collection of Ohio birds through the generosity of Mr. W. L. Hayden, of Columbus. It includes representatives of a large number of native birds and is noteworthy from the fact that the different species are shown with their natural surroundings, nests, eggs and often young, as well as old, birds of both sexes. Some particularly striking effects are produced with the nests of owls and woodpeckers included in sections of the trees in which they were constructed. The collection is arranged in forty-two handsome cases, finished in oak, and is stated to have cost over one thousand dollars in its preparation, not counting the time, ingenuity and skill which Mr. Hayden has lavished upon it.

The father and uncle of Dr. Walter Myers, whose life was sacrificed in the study of yellow fever, have given £1,500 to the Liverpool School of Tropical Medicine for the prosecution of its investigations.

PROFESSOR WILLIAM OSLER of Johns Hopkins University, has been invited by the management of the Congress of Tuberculosis, to be held in London at the end of July, to arrange for

American representation. Among those who have already signified their intention to be present are Professor Truudeau, of Massachusetts, Professor Solly, of Colorado, Dr. Herman Biggs, of New York, Dr. J. G. Adami, of Montreal, and Professor McEachran, of Quebec.

THE American Academy of Political and Social Science will hold its fifth annual meeting at Philadelphia on April 12th and 13th. Professor Samuel McCune Lindsay has been elected president of the Association by the directors in succession to Professor E. J. James, of the University of Chicago, who was the founder of the Academy and its first president, from the date of organization in 1889, until January 1, 1901.

A CIVIL service examination for the position of aid in the U. S. Coast and Geodetic Survey, with a salary of \$725, will be held on April 23d. The subjects are mathematics, astronomy, physics, surveying, geography and modern languages.

MR. MARCONI has won the suit brought against him for \$100,000 damages and to restrain him from further use of wireless telegraphy by the assignee of Professor A. E. Dolbear.

SENATOR SLATER has introduced a bill, at Albany, appropriating \$400,000 for the use of the Palisade Commission in purchasing the Palisades. The first section of the bill is as follows:

The sum of \$400,000, or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, for the use of the Commissioners of the Palisades Inter-State Park, to be expended in acquiring land lying between the top of the steep edge of the Palisades of the Hudson River and the high-water line of said river, and lands lying under water and riparian right adjacent thereto between Fort Lee and Piermont Creek, in such name or names and under such conditions as the commission may deem necessary or wise, and for such other purposes as the commission may deem necessary and proper in carrying out the purposes and intent of Chapter 170 of the Laws of 1900.

THE Ways and Means Committee of the Assembly of New York State has reported the bill of Assemblyman Snyder, appropriating \$250,000 for the purchase of forest lands for the State preserves. Of the sum appropriated \$200,000 is to be expended in the purchase of

land for the Adirondack preserve and \$50,000 for the Catskill Mountains preserve.

THE Legislature of New Hampshire has rejected two bills for the preservation of the State forests. One bill provided for the restriction of lumber cutting to trees of a prescribed size. The other bill authorized a loan of \$1,000,000 for the purchase of forest lands and the establishment of a forest reserve in the State.

At the last monthly meeting of the Zoological Society of London, it was stated that there had been 118 additions to the Society's menagerie during the month of February, amongst which special attention was directed to an August amazon (*Chrysotis augusta*) from Dominica. Upon one previous occasion only had a specimen of this fine bird been received at the Society's gardens—namely, on May 12, 1865. The additions also included a Guinea fowl (*Numida meleagris*?) from Rabat, Morocco, presented to the Society by Mr. G. E. Neroutsos, British Vice-Consul at that port. The Council announced to the meeting that the King had been pleased to become patron of the Society in succession to the late Queen Victoria.

In order to further laboratory instruction of large classes of students in physiology, Professor W. T. Porter, director of the physiological department in the Harvard Medical School, will undertake to provide reliable physiological apparatus constructed under his personal supervision. It is expected that the improvements suggested by the daily experience of the Harvard Laboratory will thus be made directly available to others; and it is hoped that by this arrangement the quality of physiological apparatus for general use will be improved and the price sensibly diminished. All communications should be addressed to Professor W. T. Porter, 688 Boylston Street, Boston, Mass.

THE following details are given in *The Forester* regarding the Act passed by the Pennsylvania Legislature which raises the Division of Forestry of the State's Department of Agriculture to the position of a Department of Forestry. In addition to the new importance which is thus given to the forest service of the State, the efficiency and strength of its organ-

ization is much increased by the Act. The department is to consist of a Commissioner of Forestry, and four others. These shall also constitute the State Forestry Reservation Commission. The commissioner is to hold office for four years and so are his fellow members of the Reservation Commission; they are not all to be appointed at the same time, however, and their terms of office so overlap that the Board will always have two members of two years' experience. The Reservation Commission is empowered to buy lands for the forest reserve, to manage them, to sell timber and to make contracts for the mining of any valuable minerals which may be found in them. The Act further specifies that the Commissioner of Forestry shall be the president and executive officer of the Forestry Reservation Commission, and also superintendent of the State Forestry Reservation, and shall have immediate control, under the direction of the Commission, of all forest lands belonging to the Commonwealth. He is empowered to execute all rules adopted by the Commission for the enforcement of laws designed to protect the forest from fire and depredation, and is also empowered to employ detective service and to make arrests. It is also provided in this Act that the kindling of fire on a forest reservation, except in accordance with the rules and regulations of the Commission, shall be a misdemeanor, for which the penalty is a fine of not less than one hundred dollars, or more than five hundred. Governor Stone has appointed, as we have already noted, Dr. J. T. Rothrock as Commissioner.

At the annual general meeting of the Institution of Mechanical Engineers, London, Mr. W. H. Man was elected president, Mr. A. Keen, Mr. T. Hurry Riches and Mr. Bryan Donkin, vice-presidents and Sir J. Wolfe-Barry, Mr. W. Dean, Mr. H. G. Harris, Mr. A. Tannett-Walker and Sir W. T. Lewis, new members of the council. The annual report, as we learn from the *Times*, stated that at the end of 1900 the number in all classes on the roll of the institution was 3,165, a net gain of 243 members as compared with the number on the roll at the end of the previous year. The total revenue for 1900 was £9,005

8s. 1d., while the expenditure was £8,595 11s. 1d., leaving a balance of revenue over expenditure of £409 17s. The total investments and other assets at the end of the year amounted to £70,117 1s. 5d., and, deducting therefrom the £25,000 of debentures and the total remaining liabilities, £4,211 15s. 6d., the capital of the institution amounted to £40,905 5s. 11d. Of this sum £5,000 was set aside in 1897 and 1898 for the redemption of the debentures. The sum of £6,850 4s. 8d. still remained invested in railway debenture stocks and Consols, registered in the name of the institution. A total of £60,270 2s. 10d. had now been expended upon the institution-house. The award of the Willans Premium had been for the first time in the gift of the council, and, from the papers read before the institution since the foundation of the fund in January, 1895, they had selected that read in April, 1895, by Captain H. Riall Sankey, on 'Governing of Steam-engines by Throttling and by Variable Expansion,' as the most suitable for the award. With a view to the formation of a historical museum, relating to mechanical engineering progress, several gifts of value had been promised. The numerous letters which had been received from the United States evinced a thorough appreciation of the reception accorded to the members of the American Society of Mechanical Engineers by the institution at its summer meeting. The work of the graduates has been carried on with considerable success, and a number of visits were made by the graduates to works in the neighborhood of London. The council had awarded prizes to Mr. W. B. Cleverly and Mr. Brees van Homan for their papers on 'Works Management, Methods of Quick Production of Repetition Work' and 'Steel Skeleton Construction, as applied to Buildings on the American System' respectively. In consequence of a desire expressed by several members of the institution, the council communicated with the War Office in February, asking if it would be of any advantage to the Government to have the assistance in South Africa of the engineering experience of members of the institution; the reply indicated the high appreciation of the Secretary of State for War, and stated that, although arrangements had already been made,

the offer would certainly be borne in mind in case circumstances should alter. The council, after consultation with officers of other institutions, had consented to take charge of the mechanical section of the Glasgow International Engineering Congress, the meetings of which would be held during the first week of September of this year. These arrangements would not interfere with the ordinary summer meeting of the institution, which would be held during the last week of July at Barrow-in-Furness.

THE home department of the Government of India has made a report of deaths from wild animals and snakes which are summarized in the *London Times*. During 1899 the number of deaths among human beings attributed to wild animals was 2,966. Fortunately, however, the number is below the average of the last four years and much lower than the number (4,283) reported in 1897. In 1899 tigers caused the death of 899, wolves of 338, and leopards of 327 human beings, while bears, elephants, hyenas, jackals and crocodiles were accountable for a large proportion of the remainder. The tiger is most destructive in Bengal, about half of the whole number of the victims of this animal being reported from that province. Man-eaters have especially troubled certain districts, and liberal rewards have been offered for their destruction. In the Bhamo district of Upper Burma a single man-eating tiger killed about 20 people. A special reward of 100 rupees was paid for its destruction. More than half of the deaths from leopards occurred in Bengal, while more than three-fourths of those from wolves occurred in the Northwestern Provinces and Oudh. Special measures were taken to hunt down a particularly destructive pack near Cawnpur. High rewards were offered, and hunting parties organized, but without much success. The loss of human life from snakes reached the high total of 24,621 a greater mortality than in any of the four preceding years. Nearly half the deaths occurred in Bengal, while the Northwestern Provinces and Oudh came next with nearly one-fourth of the total. In Bengal the relatively high mortality is attributed to floods, which drove the snakes to the highlands on which village homesteads are built. As will be observed, snakes are more

destructive of human life than are wild animals, but the reverse is true of the destruction of cattle. In 1899 no fewer than 89,238 cattle were destroyed by wild animals, and 9,449 by snakes. Of the former 37,986 fell victims to leopards, and 34,321 to tigers. The leopard is even more destructive to cattle than the tiger in Bengal. This province is the greatest sufferer from the ravages of wild animals and snakes, its loss being 30,539 cattle. Assam lost 17,010, Madras 15,592, Burma 11,016, and the Central Provinces 11,689. The number of wild animals destroyed was 18,887 and the amount paid for their destruction was 107,476 rupees. The number of snakes killed was 94,548, and the rewards paid for service amounted to 4,151 rupees.

UNIVERSITY AND EDUCATIONAL NEWS.

THE Washington State Legislature has adjourned after having made liberal appropriations for the support of education. The State University gets \$270,000, the State Agricultural College \$94,800, the three normal schools \$93,800, \$45,000 and \$40,000, respectively.

THE Indiana Legislature has appropriated \$100,000 for a science building for Indiana University.

THE Ontario Government, in addition to the aid contained in the Toronto University Bill now before the Legislature, which involves the payment of about \$20,000 a year for the science department, salaries and maintenance, has decided to erect a new building for the science department on the site of the old Wycliffe College, at a cost of about \$200,000.

By the will of the late George T. Bliss, of New York City, who died on March 24th, Yale University receives \$50,000.

MR. JOHN D. ROCKEFELER has offered to give Richmond College, a Baptist institution of Virginia, \$75,000, on the condition that the College shall collect \$25,000.

THE sum of \$12,000 per annum has been subscribed for the conduct of the experimental school of Teachers College, Columbia University. It will be remembered that a building is about to be erected for this school with a gift of \$100,000.

THE Lord Mayor of London presided at a meeting on March 21st, when the Earl of Roseberry delivered an address on commercial education. The object of the meeting was to call attention to the importance of higher commercial education in relation to the present position and prospects of British trade, and to take the preliminary steps to raise a fund for the establishment of additional higher commercial teaching in connection with the new London University. Toward this fund, Messrs. N. M. Rothschild & Sons have contributed £5,000.

AN influential committee has issued an appeal with the object of raising £150,000 in celebration of the jubilee of Owens College, Manchester. Fifty thousand pounds are needed to discharge debts that have been contracted and £100,000 for additional endowment. Among the objects the promoters have in view are the extinction of the debt of £22,000 on the building of the medical school; special endowments for existing chairs, including French, chemistry, education, anatomy and philosophy; the establishment of new chairs of English literature, Hebrew and architecture; the establishment of an institution for bacteriological investigation and for the study of hygiene, and of research fellowships; and the creation of a pension fund for members of the teaching staff.

FOLLOWING the action recently taken by the University of Michigan, the Faculty of the College of Science, Literature and the Arts in the University of Minnesota has voted to recommend to the Board of Regents that only one degree, that of bachelor of arts, be given hereafter. Under the present arrangement three courses are offered in the college, leading to the degrees of bachelor of arts, bachelor of literature and bachelor of science.

FOR the remainder of the college year, Mr. S. M. Coulter takes the position of instructor in botany in Washington University, vacated by the appointment of H. F. Roberts as professor of botany in the Kansas Agricultural College.

DR. V. L. LEIGHTON, instructor in organic chemistry at Tufts College, has been called to an associate professorship of chemistry at the College of Agricultural and Mechanic Arts, at Kingston, R. I.