

of stations was 54. Their total income was somewhat over \$1,200,000, of which \$720,000 was received under the Hatch Act (in addition to \$35,000 for this office) and \$480,000 from State governments and other local sources. The number of officers had increased to 669.

With the increase in the number of the stations and the enlargement of their resources, there has been a corresponding increase in the number and variety of their publications, and these have been more thoroughly distributed each year. Besides the vast amount of agricultural information which has thus been generally diffused among our farmers, either directly through station publications, or indirectly through the public press, more than fifty books on strictly agricultural subjects have been written by station men during the past ten years, and the results of the work of the stations are being largely incorporated in books whose authors are not connected with the stations. It requires only a superficial retrospect to discover a very remarkable difference in the freshness of material and the thoroughness of treatment of the published information available to our farmers ten years ago and that which is at their command to-day. It is most encouraging to observe that, despite the pessimistic predictions in certain quarters, the output of carefully prepared books for the farmer's use has notably increased within the past few years, and American books for the American farmer are written from an American standpoint, and on the basis of accurate information obtained by American investigators.

#### SCIENTIFIC NOTES AND NEWS.

WE regret to record the death in New York on January 15th of Dr. Thomas Egleston, emeritus professor of mineralogy and metallurgy in Columbia University.

AT the January meeting of the American Academy of Arts and Sciences, Boston, Professor William M. Davis was chosen corresponding secretary in the place of Mr. Samuel H. Scudder, resigned.

M. MÉRAY has been elected a correspondent of the section of geometry of the Paris Academy of Sciences.

PROFESSOR RÖNTGEN, who has accepted the

call to the University of Munich, has been appointed director of the State Institute of physics and metrology.

MR. W. N. SHAW, of Emanuel College, Cambridge, has been chosen to succeed Mr. Scott at the British Meteorological Office.

MM. RADAU AND BIGOURDAN have been presented by the Paris Academy of Sciences to the Minister of Public Instruction, who will select one to fill the vacancy in the Bureau des Longitudes, caused by the death of M. Tisserand.

PROFESSOR G. FREDERICK WRIGHT, of Oberlin College, has been given a leave of absence for a year and three months. He will make geologic studies in the Sandwich Islands, Japan, Russia, Egypt, Italy and other countries.

ON the twenty-fourth of December, 1899, the Physico-Mathematic Society, of Kazan, Russia, celebrated a jubilee in honor of the twenty-fifth year of professorial and scientific service of its President, Professor A. Vasiliev. It is also the fifteenth year of his presidency. Professor Vasiliev has been an important figure in Russian science. His discourse on Lobachevski has been translated into English by Professor Halsted, and a German translation of his book on 'Tchebychev' is to be published this month by Teubner at Leipzig. The first volume of an edition of 'Tchebychev's Collected Works,' in French, has just appeared, edited by the Academicians Markof and Sonine. It contains a fine portrait of the great mathematician and the first thirty-four memoirs of Vasiliev's list.

THE two books, Whitehead's 'Universal Algebra' and Killing's 'Einführung in die Grundlagen der Geometrie,' which were particularly signalized in Professor Halsted's Report on Progress in Non-Euclidean Geometry recently published in this JOURNAL, have been entered in competition for the Lobachevski prize of 1900.

THE American Society of Naval Engineers has awarded its first prize for the best technical essay submitted to Professor W. F. Durand of Cornell University, for his paper on 'Electrical Propulsion for Torpedo Boats.' The prize consists of a substantial compensation, life membership in the Society, and a gold medal. The second prize has been awarded to D. C. Ball, late of the Engineer Corps, and now a consult-

ing engineer in New York, for his paper on 'Interior Diagrams for Multiple Expansion Engines.'

THE University of Lyons has received a legacy of 50,000 francs for the establishment of a prize to be awarded every five years to a resident of the city or neighborhood who shall have contributed to the advancement of hygiene or medicine.

M. BISCHOFFSHEIM has given to the Paris University the observatory established by him at Nice at a cost of 2,500,000 francs, together with an endowment of the same amount.

THE government has appropriated 13,000 Marks for mounting the 12-inch photographic telescope presented to the University of Heidelberg. Two thousand Marks have been given to the Scientific Society of Heidelberg for publication.

ANDREW CARNEGIE has promised the College of Emporia, Kan., \$50,000 for a library building as soon as the present debt is paid.

DR. DOMENIK JOSEPH RITTER VON HAUSCHKA, formerly professor of medicine at Vienna, has died at the age of 84 years.

AT the last meeting of the Council, the Ottawa Field Naturalists' Club, Dr. Ami in the chair, the following gentlemen were nominated a committee of the Club on the Billings Memorial: Mr. J. E. Whiteaves, Sir James Grant, Dr. James Fletcher, Mr. Walter R. Billings, Mr. Byron E. Walker (Toronto), Mr. W. J. Wilson (Secretary of the Club), and Dr. H. M. Ami. A handsome sum of money has already been subscribed, and it is confidently expected that sufficient funds will be raised to pay suitable tribute to the memory of one who has done much to advance researches in paleontology and natural history in North America.

THE report of the Executive Committee of the New York Zoological Society shows that the Society has a total membership of 736, an increase of 136 over last year. The committee during the last year added \$49,760 to the Park's fund, making \$160,779 in all. The City had, however, cut the Society's allowance to \$40,000 from \$60,000. It was stated that the most pressing needs of the Society for new

buildings could be met for \$75,000. The following were elected members of the Board of Managers of the class of 1904: Ex-Gov. Morton, Andrew Carnegie, Morris K. Jesup, John L. Cadwalader, Philip Schuyler, John S. Barnes, Madison Grant, William White Niles, Samuel Thorne, H. A. C. Taylor, William D. Sloane, and Hugh J. Chisholm.

THE report of the Palisades Commission, which has been in communication with a similar commission from New Jersey, was made to Governor Roosevelt at Albany, on January 12th. It presents a bill providing for an appropriation of \$250,000 to the National Government for Palisades Park purposes, in addition to land ceded in Rockland County. "While New York has a vastly greater material interest in the preservation of the natural scenery of the Palisades than has New Jersey," the commission says, "the former has offered to the National Government only an unimportant contribution in its very limited length of water front on the Hudson, while the State of New Jersey has offered to give property valued at upward of \$750,000. It seems equitable that New York should tender in money what she lacks in land. With such an equalization of the burden, it is deemed not unlikely that all three parties may be brought into harmony in the carrying out of the proposition to preserve the Palisades."

THE sixth annual series of University Lectures in Biology, at Columbia University is being given by Professor Thomas H. Morgan, of Bryn Mawr College, on the subject of 'Regeneration and Experimental Embryology.' The dates and subjects are as follows: Jan. 16th, General Phenomena of Regeneration; Jan. 19th, The Conditions that Influence Regeneration; Jan. 23d, Special Problems of Regeneration and Development, Specification of the Tissues; Jan. 26th, Development of the Egg in the Light of Experimental Embryology; Jan. 30th, The Relations of Growth, Development and Regeneration. The lectures are given at 5 p. m. in Schermerhorn Hall. No tickets are required.

POSITIONS of library clerk in the Department Division of Forestry and of associate ethnologic librarian in the Smithsonian Institution will be filled by Civil Service examination during Feb-

ruary. The position of assistant and expert in forestry history, at a salary of \$1000 per annum, will also be filled in February as the result of an examination. Details regarding these, as of all other Civil Service examinations, can be obtained by addressing the U. S. Civil Service Commission, Washington, D. C.

AN examination will be held on February 6th for the position of draughtsman in the Geological Survey. The candidates should have experience in the preparation of drawings of invertebrate fossils.

THE Civil Service Commission of New York State will hold open competitive examinations on or about January 27, 1900, in various cities throughout the State, for the position of chemist, State Board of Health, with a salary of \$125 per month. The examination will consist entirely of practical questions relating to analysis of food products, and questions relating to experience and training of the candidates; candidates having applications on file will be given ample notice of the time and place of examination most convenient to their places of residence.

A STATE department of Trade, Art and Commerce has been established for the Russian Empire.

THE Liverpool School of Tropical Medicine proposes to organize an International Conference on Malaria.

A CONGRESS on Tuberculosis will take place at Naples in the spring of 1900. The Congress, in connection with which there will be a great hygienic exhibition, is under the patronage of the Queen of Italy. Professor Baccelli, Minister of Public Instruction, will preside. A German committee has already been formed to assist in making arrangements for the Congress.

WE learn from the London *Times* that several prominent English medical men have been staying in Rome for some days. They visited the scientific and academic institutions and devoted special attention to the researches of Professors Grassi, Bignami, Celli and Dionisi, in connection with malaria. Arrangements were made for the maintenance of continual intercourse between the Roman School of Hygiene and the London School of Tropical Medicine. The English doctors visited various hospitals

and conferred with the Minister of Public Instruction, who promised to be present at the official inauguration of the tropical school in London.

AT the annual meeting of the New York Neurological Society, held January 2d, the following officers were elected: *President*, Frederick Peterson; *First Vice-President*, Joseph Collins; *Second Vice-President*, L. Stieglitz; *Recording Secretary*, Pearce Bailey; *Corresponding Secretary*, Lewis A. Conner; *Treasurer*, Graeme M. Hammond; *Councillors*, C. L. Dana, M. A. Starr, B. Sachs, E. D. Fisher and J. Arthur Booth.

AT a meeting of the Zoological Society of London, on December 17th, Dr. P. L. Selater, the secretary, read a report on the additions that had been made to the Society's menagerie during the month of November, 1899, and called special attention to two snake-fishes (*Polypterus senegalus*) from the river Gambia, obtained by Mr. J. S. Budgett, F.Z.S., during his recent expedition to the Gambia, and presented by him on November 22d. These were believed to be the first examples of this fish ever brought alive to Europe.

THE German Emperor began an address to the officers of Berlin garrison on January 1st with the words: "The first day of the new century sees our army," etc., and the day has been celebrated in Berlin as the first day of the twentieth century.

#### UNIVERSITY AND EDUCATIONAL NEWS.

By the will of the late Dorman B. Eaton, Columbia University receives \$100,000 to found a professorship of municipal science and administration, and Harvard University \$100,000 to endow a chair in the science of government.

MR. LOUIS H. SEVERANCE, of New York City, has given \$60,000 to Oberlin College for a chemical laboratory. The provision made for the College by Mrs. C. E. Haskell amounts to \$77,000.

DR. ALONZO E. TAYLOR, who, as we recently announced, has been called from the William Pepper Laboratory of the University of Pennsylvania to the professorship of pathology in the University of California, is at present in Berlin arranging for the purchase and construc-