

SCIENTIFIC NOTES AND NEWS.

THE ROYAL SOCIETY.

THE ROYAL SOCIETY held its anniversary meeting at the Burlington House on the afternoon of November 30th and its anniversary dinner on the evening of the same day. The medals were presented in accordance with the announcement already made, and the officers were re-elected, with the exception of some members of the Council. The officers elected are as follows: President, Lord Lister; Treasurer, Sir John Evans; Secretaries, Professor Michael Foster, Professor Arthur William Rücker; Foreign Secretary, Sir Edward Frankland; other members of the Council, Professor William Grylls Adams, Professor Thomas Clifford Allbutt, Sir Robert Stawell Ball, Rev. Thomas George Bonney, Professor John Cleland, Professor Robert Bellamy Clifton, Professor James Alfred Ewing, Alfred Bray Kempe, John Newport Langley, Joseph Larmor, Professor Nevil Story Maskelyne, Professor Raphael Meldola, Professor Edward Bagnall Poulton, William James Russell, Dukinfield Henry Scott, Professor Walter Frank Raphael Weldon.

Lord Lister delivered the anniversary address, beginning by enumerating the fellows and foreign members who had died during the year, and paying a tribute to those whose scientific services had been the most noteworthy, including Sylvester, Sir Augustus Wollaston Franks, the Rev. Dr. Houghton, Edward Ballard, James Heywood, Weierstrass, DesCloizeaux, Julius von Sachs and du Bois-Reymond.

Lord Lister then proceeded to report on the activities of the Royal Society during the year, including the address of congratulation presented to the Queen, the deputation of the Society to urge upon the government the establishment of a National Physical Laboratory, and its relations with the India office in regard to the treatment of the plague. Lord Lister further referred to Dr. Copeland's researches on variola and vaccinia and to the contributions collected by the Society for the National Pasteur Memorial. At the anniversary dinner toasts were proposed or responded to by the President, Sir John Evans, the Duke of Devonshire, the American Ambassador, Professor Forsyth, Lord Kelvin and Professor Campbell.

THE NEW YORK STATE SCIENCE TEACHERS' ASSOCIATION.

THIS Association will, as we have already announced, hold its second annual meeting at Ithaca on December 30th and 31st, following the sessions of the American Society of Naturalists and the affiliated societies. The objects of such an Association should commend themselves to all men of science, and it is hoped that as many as possible attending the other meetings will remain at Ithaca over Thursday and Friday, and that all resident in New York State will join the Association. The program arranged for the meeting is as follows:

Thursday afternoon at 3 p. m., address of welcome by President J. G. Schurman; paper by Miss Mary E. Dann, of the Girls' High School, Brooklyn, on 'Physical Laboratory Work in Secondary Schools.' Discussion opened by Professor John F. Woodhull, Teachers' College, New York; followed by Professor D. L. Bardwell, Cortland Normal School, and Professor Irving P. Bishop, of Buffalo Normal School.

At the evening session, in the Physical Lecture Room, an address will be given by the President of the Association, Professor Nichols, on 'The Use of the Lantern in Science Teaching' (illustrated by numerous experiments). After the evening session there will be an informal reception at the house of the President.

On Friday morning the report of the committee of nine will be presented on the three following subjects: (1) The recognition of science as a requirement for entrance to Colleges. (2) Science courses for secondary schools. (3) Nature study in elementary schools. A paper by Professor L. M. Underwood, of Columbia University, on 'The Teaching of Botany in Secondary Schools,' will be followed by a discussion by Miss Sarah V. Chollar, of Potsdam Normal School, and Professor W. H. Lennon, of Brockport Normal School.

In the afternoon there will be round tables for the discussion of science teaching, as follows: I. 'Union Schools and Academies,' led by Principal Thomas B. Lovell, of Niagara Falls High School. II. 'Normal Schools,' led by Professor Howard Lyon, of Oneonta Normal School. III. 'Colleges,' led by Professor B.

G. Wilder, of Cornell University. The final paper will be on 'Out-door Science Work in Secondary Schools,' by Principal Frederick A. Vogt, of Buffalo Central High School. Discussion opened by Professor A. D. Morrill, of Hamilton College, Clinton; followed by Professor Chas. B. Scott, of Oswego Normal School, and Professor R. A. Surface, of Cornell University.

A NATIONAL DEPARTMENT OF HEALTH.

THE New York Board of Trade and Transportation has addressed a circular letter on public health and quarantine to the Governors of States, to the Mayors of all important cities, seaboard and interior, and to all State and municipal health authorities, physicians, and known experts on the subject, asking for opinions as to the desirability of creating a national department of health, and requesting suggestions as to the best method of protecting the public health, especially as the same affects interstate commerce, on the following lines:

(1) Quarantine status and administration in foreign countries as furnishing precedents for the United States. A, border; B, internal.

(2) The present status of quarantine in the United States. A, border defence; B, interstate; C, state and local.

(3) The existing system of quarantine administration in the United States. A, cost; B, injury to and restrictions imposed on commerce and travel; C, security afforded.

(4) Legislation needed for lessening injury to and restrictions on commerce and travel, and to afford greater security to the country. A, increase power of Marine Hospital Service and how; or, B, create a national department of health; or, C, create a national department of commerce, with a bureau of health; or, D, other suggestions.

(5) The power of Congress under the Constitution to regulate matters affecting the health of the people. A, national; B, interstate; C, State and local.

THE PROTECTION OF THE SEA OTTER.

THE Treasury Department has recently issued an important and interesting 'Report on the Sea Otter,' by Capt. C. L. Hooper, of the revenue marine, giving an account of its range, habits, method of capture and decrease under American rule almost to the point of extermination. From 1873 to 1883 the annual catch

increased from 2,265 to 4,152, and then, as the inevitable result of overhunting, rapidly declined, the catch for 1896 being only 724. So sharp has been the pursuit of this valuable animal that it has changed its habits, no longer coming on shore to feed, rest, or bring forth its young. As about 1,200 natives of the Aleutian Islands are almost wholly dependent on the sea otter for the necessities of life, it is highly important to make some effort to preserve it, and to do so promptly. With this end in view, a set of regulations for 1898 are appended, intended to preserve the remaining sea otters for the use of the Aleut hunters and their families, in accordance with the spirit of article 1,956, Revised Statutes. The Report is accompanied by a map showing the sea otter grounds, which lie mainly to the southwest of Kadiak and in waters considered to be within the jurisdiction of the United States. If so, the proposed regulations, properly enforced, will furnish ample protection; if not, an international agreement would be necessary and a limit of fifteen miles from shore. The remaining otter would then be protected, and hunting from schooners being prohibited, the natives would be compelled to hunt from the shore, and the otter would have some chance of increasing.

GENERAL.

WE record with regret the death of the Hon. Gardiner Greene Hubbard, at his residence near Washington, on December 11th, in his 76th year. He was President of the National Geographic Society, whose great success was almost entirely due to his efforts, and was prominent in all movements for the advancement of science at Washington. The first series of this JOURNAL was greatly indebted to him for his counsel and financial support, it having been established by him and Professor A. Graham Bell.

A BUST of Pasteur was unveiled on November 28th at Melun as a memorial of his anti-anthrax vaccine. On the same day a memorial to him was also unveiled at Boulogne, an address being made by M. Gaston, Paris.

At the anniversary meeting of the Royal Society Lord Lister announced that Sir William Mackinnon, late Director-General of the Med-

ical Department of the Army, had, by will and codicils dated 1896 and 1897, after making certain specific legacies, including one of £2,000 to the University of Glasgow, bequeathed the whole residue of his property to the Royal Society, subject to certain life annuities. The proceeds of the fund were to be applied by the Royal Society for the foundation of such prizes and scholarships for the special purpose of furthering natural and physical science, including geology and astronomy, and for furthering original research and investigation in pathology, as the Society might think best and most conducive to the promotion of those sciences and of original discoveries therein; such prizes and scholarships to be called after the name of the testator.

THE Berlin Academy of Sciences has made a further appropriation of 3,000 M. for the History of the Academy now being prepared by Professor A. Harnack.

E. CZABAN, a Warsaw merchant, has bequeathed 50,000 roubles (some \$35,000) to the Warsaw Academy of Sciences and also 30,000 roubles to both the University of Cracow and the University of Lemberg.

THE Indiana Academy of Science will hold its annual meeting at Indianapolis on December 28th, 29th and 30th, under the presidency of Professor Thomas Grey, Terre Haute, Ind.

THE Lick Observatory eclipse expedition, from San Francisco, has arrived at Bombay and will proceed inland to select an observing station.

It is reported that an endeavor will be made to found an astronomical observatory at Glasgow.

THE Marine Biological Station of the University of Tokyo, at Mazaki, will be removed during the present year to a new site about two miles north of the present location. A proposed railway will bring the station within two or three hours of Tokyo.

A MARBLE bust in memory of the geologist A. Stelzner has been unveiled in the School of Mines at Freiburg.

It is proposed to commemorate the late Mr. J. Greig Smith, M.A., M.B., C.M., Aberdeen,

professor of surgery at University College, Bristol, by erecting within the precincts of the University of Aberdeen a memorial tablet.

DR. CAMPBELL MORFIT, the chemist, died on December 8th in London. He was born in Herculaneum, Mo., November 19, 1820. He was formerly professor of applied chemistry in the University of Maryland. In 1858 he removed to New York, where he followed his profession until 1861, when he went to London.

THE death is announced of Mr. Ernest Giles, the Australian explorer, who between 1874 and 1875 twice traversed the West Australian desert from Adelaide to Perth. The Royal Geographical Society awarded him its founder's medal for his journey.

BILLS have been introduced in both branches of Congress prohibiting pelagic sealing by citizens of the United States.

SECRETARY LONG has issued an order transferring the Naval Hydrographic Office from the control of the Navigation Bureau to the Bureau of Equipment. The latter bureau now has charge of the Naval Observatory and similar branches of the service.

ONE hundred employees of the Gypsy Moth Commission have been discharged, the appropriation made by the Legislature being nearly exhausted.

LIEUTENANT R. E. PEARY, having again complained in London of Captain Sverdrup's unfairness in going to Smith Sound next summer, Captain Sverdrup explains that he wrote to Mr. Peary some time ago saying that he did not aim to reach the pole, but only intended to explore Greenland and to make a study of the ice.

THE Zurich correspondent of the *London Times* writes that at Windisch the old Roman colony of Vindonissa, in the Canton of Argovie, excavations recently carried out under the auspices of the Swiss Archæological Society have yielded important results. Large Roman villas and an amphitheatre have been disinterred and, besides a large quantity of coins, pottery, bronze and ironware, some large silver vessels have been discovered, which are said only to have their equals in the famous treasure-trove

of Hildesheim, in Germany, brought to light in 1868.

THE daily papers report that uranium has been discovered near Black Hawk, Col. The mineral is worth \$1,500 per ton, and the agents of a French syndicate have announced that they will buy all that can be produced, as it is much desired by the French government for hardening and solidifying gun metal and armor plate.

THE American Forestry Association held its 16th annual meeting at Washington on December 8th. General Francis H. Appleton, of Boston, presided and made an address. The chairman of the Executive Committee, Dr. E. B. Fernow, presented a detailed report, reviewing especially the legislation of the past session of Congress. The Association proposes to establish a monthly journal, *The Forester*, devoted to the interests which the Association is doing so much to forward. The summer meeting of the Association will probably be held at Boston; in conjunction with the American Association for the Advancement of Science.

THE British Institution of Electrical Engineers, which now numbers 3,000 members, held its annual dinner on November 24th. Addresses were made by Lord Kelvin and others.

It is expected that the life of Pasteur by his son-in-law, M. Vallery Radot, will soon be ready for publication.

M. ALCAN announces, in the next volume of the French edition of the 'International Scientific Series,' a work on the physiology of hearing by Dr. Gelle.

THE *Open Court* continues in the December number the series of portraits of mathematicians, with the reproduction of an old steel engraving of Lagrange, of whom Dr. T. J. McCormack gives a biographical sketch.

AT the anniversary dinner of the Royal Society on November 30th Lord Kelvin referred to the presence of representatives of many foreign powers and of the Ambassador of the United States, who, he said, 'could not be regarded as a representative of a foreign nation.' In his address at the dinner Lord Lister remarked: "That among the great number of emi-

nent Americans who attended the Canadian meetings of the British Association and the Medical Congress there was never a jarring note; there was never anything but cordiality and kindly feeling towards the old country."

MAJOR M. P. HANDY, special commissioner to gather information regarding the Paris Exposition of 1890, recommended the appropriation of \$915,000 towards the expenses of preparing a proper representation for the United States. The sum includes \$1,500 per year for three years for each of nine scientific experts. In his report Major Handy says: "The industrial progress of the United States, and the evolution of its material resources during the hundred years which the Exposition is to crown, has been unequalled by that of any other nation. It is not too much to say that the United States now stands the greatest nation of the world in all the great lines of industry. According to the figures given by the eminent statistician Mulhall in his 'Industries and Wealth of Nations,' the United States leads in agriculture, with products greater than Russia and the United Kingdom combined; in the manufactures with a product of greater value than the aggregate output of the factories of the United Kingdom, France, Austria-Hungary and Belgium combined; in machinery with a greater steam power than the United Kingdom, Austria-Hungary and Italy combined; in mining with a product greater than the United Kingdom and France combined, or nearly one-third of that of the entire world; in railway transportation with a mileage 40 per cent. greater than that of all Europe; in forestry with products greater than that of all Europe, and nearly one-half of the total products of the world; in fisheries with a greater product than the United Kingdom, Russia and Germany combined."

THE English papers report that the Guilford Natural History Society have been considering the question of the preservation of Wolmer Forest, which is only fifteen miles from that town, and have decided to present a petition to the Commissioners of Woods and Forests, praying that Wolmer Forest may be reserved as a sanctuary for wild birds, in which they, their nests and eggs may remain unmolested

throughout the year; that it may not be let at any time for game preserving, or for any purpose inimical to bird life; and that it may remain in perpetuity as a national memorial to the greatest outdoor naturalist England has produced—Gilbert White, of Selborne. Such a recognition, the Society urge, would show that the admiration of Gilbert White in the nineteenth century was so practical as to be of value to the naturalist and the English-speaking race for all succeeding time. The Society have no wish to attempt to interfere with the use of the Forest by the War Office for the purposes of military manœuvres.

UNIVERSITY AND EDUCATIONAL NEWS.

BILLS have been again introduced into both Houses of Congress to establish the University of the United States. Such a bill was introduced by Senator Edmunds in 1890 and referred to a select committee, which reported unanimously in its favor. The standing committee since appointed has also reported unanimously in its favor and it is said that the bill will probably be passed during the present session.

NEGOTIATIONS are said to be under way looking towards the affiliation of the University of Chicago and the Rush Medical College.

EVELYN COLLEGE, Princeton, has been closed, owing to the fact, as stated by the principal, that Princeton University refuses to recognize any work for the education of women.

MR. FRANZ KEMPE, of Stockholm, has given the University of Upsala the sum of about \$45,000 for the establishment of an associate professorship of physiological botany under the condition that Dr. Lundström be the first incumbent.

BY the will of the late F. Ulrich the German University of Prague receives 100,000Fl. for the distribution of scholarships.

A PROPOSITION has been introduced into the French Chamber and referred to the Education Commission creating a chair of colonial science in the University of Paris.

PROFESSOR WALDEMAR LINDGREN, of the U. S. Geological Survey, has been appointed to the chair of metallurgy and mining engineering in Stanford University.

MR. EDGAR R. CUMINGS, of Cornell University, who graduated from Union College last June with honors in geology, has been appointed instructor in geology in the University of Indiana.

DR. W. OPHÜLS, assistant in the University of Göttingen, has been called to the chair of pathological anatomy in the University of Missouri.

DR. S. FUCHS has been promoted to an associate professorship of physiology at the University at Jena.

THE regents of the University of the State of New York have just published as bulletin 38 a compilation of all the laws, ordinances and by-laws pertaining to higher education in this State. It includes not only the University law, but also the educational articles from the Constitution and the various statutes governing professional education and license to practice, and other allied matters. Its practical utility is greatly increased by many annotations and cross references and by a very full index, so that every lawyer or school officer will find it indispensable when considering any of the large class of questions covered. It is being sent to every institution in the University free, but lawyers or others interested may obtain copies from the regent's office, post-free, at the nominal price of 15 cents for the 108 pages.

THE report of the Sites Syndicate of Cambridge University was approved on November 25th. By it provision was made for sites for the erection of a law school, for new buildings for the department of botany, for a museum of general and local archæology and of ethnology, to be erected on ground purchased from Downing College. The mathematical professors are to be provided for by buildings to be erected on the site purchased from Messrs. Murtlock & Co., while the rooms now occupied by them are to be assigned, together with the bird room, when vacated, to the department of morphology. The rooms between the bird room and the department of physiology are to be assigned to the departments of physiology and morphology. The present Geological Museum in Cockerell's buildings and the rooms in Scott's buildings occupied by the University for business pur-