SCIENTIFIC NOTES AND NEWS.

An oil portrait of Professor Henry A. Rowland, of Johns Hopkins University, painted by Mr. Harper Pennington, has been presented to the University and hung in the large lecture room in the physical laboratory.

DR. OSCAR LOEW, for some time expert physiologist in the Division of Vegetable Physiology and Pathology of the United States Department of Agriculture, has resigned in order to accept a position in the Agricultural College of the Imperial University of Tokyo, Japan, as lecturer on physiological chemistry. By his resignation the Department loses one of its best investigators in the special field which he occupied. He sailed from Vancouver on October 8th.

Dr. Oustalet has been appointed professor of zoology in the Natural History Museum at Paris, as successor to the late Professor Milne-Edwards.

Professor Bashford Dean, of Columbia University, is spending his Sabbatical year in zoological work in Japan. He has begun his work at the Marine Biological Station of the Government on the east coast.

THE expedition to Labrador under Professor Delabarre of Brown University and Dr. Daly of Harvard University has returned, having made numerous observations and collections in Labrador.

THE Gold Medal of the Paris Exposition was awarded to Professor A. S. Bickmore, of the American Musem of Natural History, and his assistants especially for the photographic slides illustrating the lectures: 'Across the American Continent' and 'The Hawaiian Islands.' The 'wide system of free education' carried on by this department in cooperation with the State Board of Education was especially mentioned in the award. Professor Bickmore was moreover invited to give two public lectures in the Trocadero illustrating his method of visual instruction.

Dr. B. M. Duggar, of Cornell University, has been elected a member of the German Botanical Society.

PROFESSOR H. V. HILPRECHT, who has been carrying on explorations in Babylonia, is ex-

pected to return to the University of Pennsylvania at the end of the present month.

MR. FRANK M. CHAPMAN, assistant curator of the Department of Vertebrate Zoology, of the American Museum of Natural History, will give a special course of six lectures on birds, at the Museum on Saturday afternoons at three o'clock, beginning November 10th.

Dr. Robert Koch, who is employed by the German Government to investigate tropical diseases, arrived at Marseilles on October 19th from German New Guinea by way of Hong Kong. He is on his way to Berlin, where he will present to the Academy of Medicine the result of fifteen months' study of malaria in New Guinea, Java and adjacent German territories.

It appears that Elias Howe, the inventor of the sewing machine, is not to be included among the 30 eminent Americans of the Hall of Fame of New York University. A mistake was made in counting up the votes, Howe receiving 47 instead of 53 as originally announced. This leaves 21 panels to be filled two years hence.

The house in which Samuel F. B. Morse lived from 1864 until 1872, at No. 5 West 22d street, New York City, has been torn down and an office building erected in its place. The original house contained a bronze commemorative tablet which was last week moved to the new building. The tablet bears the inscription: "In this house S. F. B. Morse lived for many years and died." Under it has been added: "This tablet was removed from building formerly on this site and replaced A. D. 1900."

SIR HENRY WENTWORTH DYKE ACKLAND, for many years regius professor of medicine at Oxford, and Radcliffe Librarian, died on October 16th at the age of 85 years. Sir Henry was appointed reader in anatomy at Oxford in 1845 and regius professor of medicine in 1858, resigning the chair in 1894.

A DISPATCH from Daker, Senegal, states that M. Paul Blanchet, the well-known French explorer, has died of yellow fever. He was about to embark on his return to France.

The positions of assistant in zoology and in mineralogy in the State Museum at Albany

will be filled by civil service examination on or about November 10th. The salaries of these positions are \$1,200 and \$900, respectively. In the examinations, experience and education count three, and the answers to questions on the science seven points. In zoology the examination will have special reference to vertebrate and systematic zoology. The positions are open only to men over twenty-one years of age who must be citizens of New York State.

THE government of the Canton of Zurich has voted to increase its annual subsidy to the Concilium Bibliographicum. In the preamble it is stated that this is done in recognition of the high value of the work of the Concilium Bibliographicum, in the hope that others may aid in securing for the undertaking a firm financial basis, with the purpose of offering the full support permitted by the funds at our disposal, be it enacted, etc. This vote which was taken August 15th has led to a similar decision on the part of the town of Zurich, and now a bill has been introduced by the Department of Interior providing for quintupling the federal subsidy and for placing the Concilium under the more immediate control of the Swiss Government. The ultimate result of these votes will doubtless be the expansion of the field of activity of the Concilium, so as to include botany, anthropology, etc., but for the time being all will be done to render the bibliographies now in existence more complete and to issue them more promptly.

THE Duke of Abruzzi has given the Stellar Polare, the vessel in which he made his recent exploring trip to the North, to the Italian Navy. She is to be kept in the naval arsenal at Spezia as a souvenir.

Mr. Andrew Carnegie has presented £10,-000 to the town of Hawick, Roxburgh County, Scotland, for a public library.

THE late Edwin H. Bugbee of Danielson, Connecticut, bequeathed \$15,000 and his private library to the public library of that town.

THE fine new lecture hall of the American Museum of Natural History will be opened with appropriate exercises on Tuesday, October 30th. The president of the institution, Mr. Morris K. Jesup, will receive invited guests from 3

until 6 o'clock. At 4 o'clock some views of the Paris Exposition will be exhibited in the lecture hall by Professor Bickmore. Admission to the new halls in the west wing and an inspection of their archeological and ethnological collections will also be permitted.

THE Library Building of the Historical Society of the State of Wisconsin was dedicated on October 19th. The building, which is practically part of the University of Wisconsin, has been erected at a cost of \$575,000.

WE learn from the Botanical Gazette that the Division of Vegetable Physiology and Pathology of the Department of Agriculture has secured a table at the Marine Biological Laboratory at Woods Holl for the use of its staff during the summer months.

THE British Museum (Natural History) has started a collection of 'sports' and 'monstrosities' among insects and will be glad to receive contributions from entomologists.

THE new dynamometer car which the Illinois Central Railroad has been building for the Mechanical Department of the University of Illinois, is now ready for use. It is fully equipped and is fitted up with every convenience. The car will be put into active service immediately on a series of tests begun some time ago by the Illinois Central.

The collection of rare African antelope skinsreceived in exchange from the Field Columbian Museum are now all mounted and placed on exhibition in the American Museum of Natural History.

As the daily papers have very fully reported, Count von Zeppelin's air-ship made two ascents. On October 17th it stayed in the air about an hour and was apparently able to make some headway against a light breeze. It could not, however, return to its starting point.

THE German Anthropological Society held its thirty-first annual meeting at Halle from September 23d to 27th.

THE new laboratories at King's College, which have been in course of construction during the past year, are finished and ready for occupation, and the opening ceremony has been fixed for Tuesday, October 30th. Lord

Lister, P.R.S., will deliver an address after which the laboratories will be open for inspec-We learn from the British Medical Journal that although a considerable sum has already been subscribed toward defraving the cost of the building, much has still to be raised, and it is hoped that those interested in higher education may see their way to assist the Council to defray the debt. It is also hoped that funds may be available from the reconstituted University of London for the same purpose. The movement for the extension of the College primarily arose from the difficulties experienced by the professors of bacteriology and physiology in dealing with the great increase in their classes which has occurred during recent years, and at the same time to afford space to those who wish to prosecute original research. already spacious bacteriological laboratory has been nearly doubled in size and a complete bacteriological library added to it. The physiological laboratory is entirely new, the rooms are handsome, well lighted and fitted in a most complete way. The old physiological laboratory has been absorbed by the extension into it of the anatomical department which was previously much cramped for room. The museum has been completely rearranged; the old museum now becomes the architectural department. Geology and botany are provided with new laboratories and other departments which have benefited by the change are physics, materia medica and State medicine.

The London Standard states that Dr. Sven Hedin, according to the latest reports, reached Abdal, on the Tarim River, in eastern Turkestan, on June 27th. He states that the Tarim is the largest river in the interior of Asia. He surveyed the river from Arghan to Abdal in a ferryboat. From Jeggeli-ku, where the river becomes a multitude of small lakes, he continued his journey in a craft made up of three canoes lashed together, with a deck surmounted by a felt tent. In the beginning of March he made an excursion from the Yangikol, where he had his winter camp, to the southern slope of the Karruk-tagh Mountains, where he surveyed the Kumdarya bed of the Tarim which is now dry. In the neighborhood he found the marks of a large dried-up lake, probably the old Lob-Nor, which lies east of the present Lob-Nor, or rather the four lakes discovered by him in 1896. The dry soil was covered with a thick layer of salt and millions of mussel shells, while the banks held many withered reeds, dead trees, consisting exclusively of poplars and ruins of houses, fortifications, temples, etc., which were often adorned with artistic wood carvings. Dr. Hedin intended to return to this region in the autumn. In the middle of the desert he found and investigated a larger lake of salt water and then returned to his winter camp. During his stay at Abdal he wrote down several songs sung for many generations by the Lob-Nor men when fishing. When he left this district the thermometer registered forty-two degrees above zero, Celsius; whereas it falls to thirty-two degrees below zero during the winter.

WE learn from the American Museum Journal that the photographs collected by members of the Jesup North Pacific Expedition will be reproduced by the heliotype process in large quarto form, and published under the title 'Ethnographical Album of the North Pacific Coasts of America and Asia.' It is intended to issue the album to subscribers only, in parts of at least 24 plates annually, the whole series to embrace 120 plates. Part I., consisting of 28 plates, illustrating Indian types from the interior of British Columbia, has already appeared.

The British Office of Woods and Forests has purchased from the Duke of Beaufort the Tintern Abbey estate which comprises the famous abbey and 5,334 acres of land. This area includes nearly 3,000 acres of woodland, the most picturesque portions of which are the wooded hills and slopes with a frontage of eight miles on the River Wye. The estate is near the extensive woods of the Crown in the Forest of Dean. At the same time the Crown has also purchased the whole of the Duke's farms surrounding Raglan Castle, 3,169 acres in extent.

DURING the past summer the division of soils of the department of agronomy at the University of Illinois has undertaken a study of the soils of Illinois. With this end in view, over five hundred samples have been collected from various parts of the State. These samples, which are being prepared for permanent specimens and for purposes of study, represent a large proportion of the many different types of soil which are to be found within the State. It is proposed to study these soils mechanically, chemically and biologically, to determine the individual properties peculiar to each different type, and the proper methods of handling and cropping best adapted to each. The work which has been done indicates that there are numerous problems of a fundamental character and of vital importance which are demanding the attention of the farmers of the State. Not the least among these is the question of soil exhaustion which is beginning to force itself upon the attention of the people of some parts of the State in such a way that its importance and influence are being seriously felt.

DURING the last few years, several thousand samples of drinking water from various ordinary house wells throughout the State have been sent to the State University of Illinois, for analysis and report as to quality. By far the greater proportion of these water samples have proved, upon analysis, to be contaminated with drainage from refuse animal matters and consequently have been regarded with grave suspicion, or have been pronounced unwholesome for use as drink. The present prevalence of typhoid fever in a number of places in the State makes it desirable that the public should remember that the State has made provision for the examination of all suspected waters. It is not practicable to isolate actually the typhoid fever germs or to prove directly their absence from waters submitted for analysis; this for the reason that the work entails more labor and time than is made available by the means which the State provides. However, the chemical examination is sufficient ordinarily to show whether the water is contaminated with house drainage or drainage from refuse animal matters or whether it is free from such contami-Any citizen of the State may have nation. examinations made of the drinking water in which he is interested, free of charge, by applying to the Department of Chemistry of the State University.

The Journal of the Board of Trade, as quoted by the London Times, states that deposits of sulphur have been discovered in Russia only in recent years, and that small works for treating the ore have been established at various times, the largest being in Daghestan, in the northern Caucasus. The chief output of these was in 1888, when it reached 1,500 tons, but since then the works have been closed. The deposits in Daghestan are known to be extensive, while the ore contains 20 per cent. of sulphur, and the geological formation is very similar to that in which the Sicilian deposits occur. But the situation is unfavorable, being a mountainous district 4,500 feet above the level of the Caspian, from which it is separated by numerous steep ridges which are difficult to traverse, even for mules. In Russia now only two sulphur works are in operation, and they produce only 1,000 tons a year, while the consumption of sulphur in the country, owing to the growth of the petroleum industry, is about 20,000 tons. The vast bed lately discovered in Trans-Caspia is one of the richest in the world, and will undoubtedly prove of great importance. It comprises several distinct mounds in an area of 23 square miles, and is situated 100 miles from Khiva, near the Amu Daria river and about 170 miles from Askabad on the Trans-Caspian railway. None of the minerals discovered in the province are being worked, and sulphur is doubtless the most important of these. mounds above mentioned are dome shaped, about 300 feet high, the sulphur being practically exposed, while the ore is generally sandstone and contains on an average 60 per cent. of sulphur. It is estimated that the mounds contain over 9,000,000 tons of sulphur, and the local circumstances are said to be favorable to work on a large scale. Labor is plentiful and cheap. and transportation could be effected by means of a narrow-gauge line to Askabad, and this could be extended beyond the deposits to Khiva, where wool and other commodities may be had in quantities sufficient to make the line profitable. Nor, it is said, are there any engineering difficulties in the construction of such a line.

WE have already called attention to the comparatively few awards made at Paris for American machinery. The Electrical World holds that the country has been unfairly treated. It says: "In electricity, Austria, with 25 entries, had 5 grand prizes and 17 gold medals. The United States, with 283 entries, had 6 grand prizes and 23 gold medals. In machinery, Switzerland, with 14 entries, got 9 grand prizes and 15 gold medals. The United States, with 282 entries, got a paltry 10 grand prizes and 26 gold medals. The relative proportions are preposterous. We refuse to believe that American machinery, now sweeping Europe, is inferior to the Swiss or Austrian in any such degree as this implies."

UNIVERSITY AND EDUCATIONAL NEWS.

MRS. JANE K. SATHER, of San Francisco, has given \$1000,000 to the University of California.

It is reported that three alumni of Yale University have offered to subscribe each \$100,000 for the memorial building in case the further sum of \$300,000 is secured.

THE United States Supreme Court has finally rendered a decision sustaining the trust left by Mrs. Katherine M. Garcelon of Oakland, California. After long and expensive litigation, the wishes of Mrs. Garcelon will be carried into effect and three-fifths of the sum will be used to establish a hospital in Oakland and two-fifths will revert to Bowdoin College which will receive about \$500,000.

THE Bartram memorial library of botanical books has been presented to the library of the University of Pennsylvania.

Mr. R. F. Balk, of Cincinnati, has given to the University of Cincinnati his collection of specimens of natural history said to be of considerable value.

A NEW bacteriological laboratory has been built for the University of Melbourne at a cost of \$20,000.

THE Department of Geology of the University of Chicago had three parties of students in the field during the past summer. Two of these parties were in Wisconsin, one during July and one during August, while the third party was in the West, along the line of the

Great Northern Railway. The principal stops made by the third party were at Midvale and Lake McDonald, Montana, and at Lake Chelan in Washington. A trip was also made into the Kootenai region of British Columbia. Each party was in the field four weeks, and the total number of students participating was between thirty and forty.

THE registration at Yale University is 2,474, a decrease of 43 as compared with last year. The Sheffield Scientific School has, however, an increase of 36 students.

SIR MICHAEL FOSTER has been reelected member of the British Parliament, representing the University of London, without opposition; Sir John Batty Tuke has been returned under the Universities of Edinburgh and St. Andrews also without opposition,

THE daily papers report that eight of the former professors of the reorganized University of Havana are to receive pensions of \$1,200 a year each during the term of the military occupation.

THE Rev. Dr. Robert Sheppard, professor of history and political economy at Northwestern University, has been appointed president of the University.

EDWARD M. PAXSON, ex-Chief Justice of the Supreme Court of Pennsylvania, has been elected president of the Medico-Chirurgical College in Philadelphia.

WILLIAM T. HORNE and Albert T. Bell, fellows in botany in the University of Nebraska, have resigned, the former to accept a position in Kadiak, Alaska and the latter an instructorship in the High School of Lincoln, Nebr. Mr. Horne expects to make collections of the flora of Kadiak Island for study on his return a year or two hence. Miss Daisy F. Bonnell, of the class of 1899, has been appointed fellow in botany.

Professor J. W. Freley has been appointed acting president of Wells College.

Dr. Spencer W. Richardson, lecturer on mathematical physics at University College, Nottingham, has been elected principal of Hartley College and professor of physics.