

northern exposure giving excellent lighting. This space is chiefly devoted to two large laboratories—the introductory and the advanced, respectively. Each of these laboratories is forty-eight by fifty-three feet in size, and is lighted from three sides by nine very wide windows of plate glass. The heavily paneled ceiling is tinted pure white, and the paneling is supported by a row of beautiful scagliola columns running through the center of the laboratory. The side walls are tinted light buff.

The furniture is all of quartered oak, finished "Early English." Slate is used throughout for the tops of all laboratory tables. The tables assigned to students extend over sixteen feet into the room from the several windows, and their slate tops taper toward a narrow end away from the window, a device which permits each student to obtain unobstructed light for his work. These tables have a new and particularly successful form of electric microscope-lamp for every two students. Outlets for Bunsen burners comprise a part of the fixture at the base of each lamp. An abundance of individual drawer space is provided for each student. Microscope cabinets are ranged conveniently on the wall. And cabinet, drawer, microscope, lock, key—each is stamped with its own number.

The laboratory for introductory courses accommodates fifty-two students at one time; and the number of individual drawers permits the handling of two hundred and eight students in all. The advanced laboratory seats forty-four workers at one time, and the details of the tables here are especially adapted to such courses as require the extensive use of biological reagents. Each of these main laboratories has an adequate quota of general furniture designed for it, including cases for laboratory apparatus, a hood in the corner where reagents may be prepared without tainting the air of the room, and a large aquarium with an abundance of small jets of running water.

SCIENTIFIC NOTES AND NEWS

M. HENRI BECQUEREL has been elected president of the Paris Academy of Sciences, and

is succeeded in the vice-presidency by M. Bouchard.

PROFESSOR W. W. CAMPBELL, director of the Lick Observatory, and his party have returned from Flint Island, having obtained excellent photographs of the recent total eclipse of the sun.

THE Imperial Academy of Sciences of St. Petersburg has elected Professor Sir George Darwin, of Cambridge University, and Professor Charles R. Lanman, of Harvard University, to be corresponding members.

THE German Chemical Society has elected as honorary members M. Becquerel, of Paris; Sir William Crookes, of London; Dr. C. von Linde, of Munich; Professor E. Solvay, of Brussels, and Professor J. Thomson, of Copenhagen.

At the general meeting of the Royal Meteorological Society, on January 15, M. Teisserenc de Bort, the distinguished French meteorologist, was presented with the Symons memorial gold medal of the society, and the president, Dr. H. R. Mill, delivered an address on "Map Studies of Rainfall."

M. BAILLAUD, of the Toulouse Observatory, has been appointed director of the Paris Observatory.

C. E. MOSS, D.Sc. (Victoria University), has been appointed curator of the herbarium of Cambridge University.

DR. WILLIAM F. M. GOSS will be installed as dean of the College of Engineering of the University of Illinois on February 25. In the morning there will be addresses by the president of the university, by representatives of the trustees, of the alumni and of the faculty; followed by the installation address of Dean Goss. In the afternoon there is an inspection of equipment, followed by addresses of visiting engineers. These exercises are to be in connection with the formal opening of the graduate school, which occurs on February 4 and 5.

A DINNER in honor of Dr. Rudolf Leonhard, Kaiser Wilhelm professor at Columbia University this year, and Dr. John W. Burgess, Theodore Roosevelt professor at Berlin last

year, was given at the Hotel Astor on January 28.

THE chiefs of the Six Nations in New York, through the Onondaga tribe, which has been the keeper of the archives throughout the history of the Iroquois Confederacy, have conferred on Director John M. Clarke, of the New York State Museum, the title of Hos-san-na-ga-da, the Keeper of the Name, in recognition of his official custodianship of the Iroquois wampums which were transferred to the state in 1898. The title is to be transmitted in perpetuity with the directorship of the State Museum.

GOVERNOR DENEEN, of Illinois, has appointed the following commission, authorized by the general assembly to investigate the diseases of occupation in the state and report to the next general assembly: Dr. L. Hektoen, of Chicago; Dr. Alice Hamilton, of Hull House, Chicago; Dr. George W. Webster, of Chicago, president of the State Board of Health, and the secretary of the State Board of Health, Dr. James A. Egan.

THE occupation of the Smithsonian seat in the Naples Zoological Station has been approved in behalf of Mr. I. F. Lewis for the month of March of the present year. Mr. Lewis is Bruce fellow in biology at Johns Hopkins University. The seat has further been assigned to Dr. F. M. Andrews, associate professor in botany at the Indiana University, for April and May. Dr. Andrews is now doing research work with Professor Pfeffer at Leipzig, and will devote himself to a problem in plant physiology while at Naples.

MR. ROBERT B. MARSHALL, of the United States Geological Survey, has been appointed to administrative charge of the Topographic Branch of the Survey with the title of chief geographer. Mr. Marshall received his first appointment in the Survey in 1890, and has been connected with it continuously since that date. In 1903 he was given charge of California work, and two years later his district was enlarged to include Oregon. In the reorganization of the Topographic Branch in March, 1907, he was made geographer in charge of the Pacific Division, which com-

prises California, Oregon, Idaho, Nevada, Utah and Arizona. Mr. Thomas G. Gerdine, who has for a number of years had general supervision of the topographic work in Alaska, has been placed in charge of the Pacific division to succeed Mr. Marshall.

PROFESSOR ALBERT NEISSER has returned to his post in Breslau after his long stay at Batavia for research on syphilis in monkeys. He will deliver an address on the present status of the pathology and treatment of syphilis at the approaching German Congress of Internal Medicine at Vienna, opening on April 6.

DURING the week from January 13 to January 18, Dr. Herman von Schrenk, consulting timber engineer for the Atchison, Topeka and Santa Fé Railroad and supervisor of timber preservation for the Chicago, Rock Island and Pacific Railroad, gave, as in former years, a course of seven lectures at the Forest School of Yale University on the decay of timber and a description of American and European methods and plants for seasoning and preserving wood.

WILLIAM S. BIGELOW, A.B. (Harvard '71), M.D. '74, of Boston, has been appointed Ingersoll lecturer for this year at Harvard University. His subject will be "Immortality as conceived and taught in Buddhism." The date of the lecture has not yet been fixed.

PROFESSOR PAUL H. HANUS, of Harvard University, addressed the Civic Federation of New England, in Boston, on January 9, on "Industrial Education under State Auspices in Massachusetts."

PROFESSOR LEO LOEB, of the laboratory of experimental pathology, University of Pennsylvania, read a paper on "Tissue Growth and Tumor Growth" at a meeting of the American Philosophical Society on January 17.

At the meeting of the Academy of Natural Sciences of Philadelphia, held January 21, Dr. Casey A. Wood, of Chicago, gave the results of his ophthalmoscopic examination of the eyes of birds. The communication was illustrated by beautiful colored lantern views

of the arrangement of nerves and blood vessels of the interior of the eyes of birds correlated in a most interesting way with the habits of the several species studied by the speaker in London and elsewhere.

THE Royal Institution celebrated on January 17 the centenary of the discovery of the metals of the alkalis by Sir Humphry Davy. An address on this subject was made by Professor T. E. Thorpe.

A MEETING in commemoration of the life and work of Lord Kelvin was held by the Philosophical Society, of Washington, at the Hubbard Memorial Hall, on January 18. Addresses were made by Professor Arthur G. Webster, Dr. Robert S. Woodward and Professor Simon Newcomb. Ambassador Brice likewise made some remarks. Dr. L. A. Bauer presided.

THE twenty-fifth anniversary of the death of the Russian surgeon Pirogoff has been celebrated by conferring his name on a street and hospital at St. Petersburg and endowing an annual prize for works on surgery. Moscow has also named a street and a hospital in his honor and founded a Pirogoff prize.

MR. MORRIS K. JESUP, president of the American Museum of Natural History and of the Chamber of Commerce of New York City, has died at the age of seventy-seven years.

DR. JOHN ORDRONAU, lecturer on medical jurisprudence at Columbia University from 1861 to 1897 and the author of numerous works on medical jurisprudence, has died at his home at Glenhead, L. I., at the age of seventy-seven years.

DR. THOMAS FILLEBROWN, for many years professor of operative dentistry and oral surgery at the Harvard Dental School, died on January 22, at the age of seventy-one years.

THE death is announced of Lieutenant Colonel R. J. L. Ellery, professor of astronomy and late director of the Melbourne Observatory, at the age of eighty years.

THE Rev. Lorimer Fison, known for his researches among the aborigines of Australia,

died near Melbourne on October 29 at the age of seventy-five years.

DR. ZULKOWSKI, professor of applied chemistry in the German Technical School at Prague, has died at the age of seventy-four years.

SECRETARY ROOT has urged upon congress an appropriation of \$50,000 to enable the government of the United States to be represented in the exposition to be opened at Quito on August 10 next, to celebrate the one hundredth anniversary of the independence of Ecuador.

THE State Charities Aid Association has received \$10,000 from the Russell Sage foundation to organize methods for the prevention of tuberculosis throughout the state of New York.

A JOINT meeting of the Wisconsin Academy of Sciences, Arts and Letters, the Wisconsin Archeological Society, the Wisconsin Mycological Society, the Wisconsin Natural History Society and the Wisconsin section of the American Chemical Society will be held in Milwaukee—probably in the lecture room of the Public Museum—on Thursday and Friday, February 13 and 14. The plans at present formulated include a session on Thursday evening to which the public will be invited, the program for which will be of general interest. A banquet for the members of all the societies will be held on Friday evening.

AN Italian Society for the Study of Tropical Diseases has been founded on the initiative of Professor Angelo Cello, director of the Institute of Hygiene of Rome, Surgeon-Lieutenant-Colonel L. T. Cipollone, of the Italian Navy, and Surgeon-Captain G. Memmo, of the Italian Army.

OWING to the success achieved in the execution of the magnetic survey of the Pacific Ocean, under the auspices of the Department of Terrestrial Magnetism of the Carnegie Institution of Washington, it is proposed upon the return of the present vessel (the *Galilee*), to San Francisco next May, to return her to the owners and to undertake the construction

of a vessel especially designed and adapted for magnetic work. Such a vessel, it is said, will not only greatly facilitate the observational work by getting rid of the troublesome deviation corrections but will likewise materially reduce the office computations. As soon as this vessel is completed similar work to that of the Pacific Ocean is to be undertaken in the other oceans. With the aid of such a specially adapted vessel and the co-operation already secured by the Department of Terrestrial Magnetism from various countries, it seems reasonably sure now that a general magnetic survey of the globe will be completed within a period of ten to fifteen years.

NUMBER 6 of the Augustana Library Publications has just been issued by Augustana College at Rock Island. It is a Linné Memorial number and the principal paper is by Dr. P. A. Rydberg, curator of the New York Botanical Garden, and is on the subject "Scandinavians who have contributed to the knowledge of the Flora of North America." The author says that his national pride helped him in choosing his subject, and well he might, for on the forty-nine pages of his paper he gives biographical and bibliographical notes on no less than 101 Scandinavian scientists who have contributed to the knowledge of systematic botany of North America, including Greenland, Mexico, the West Indies and Central America. The lists of the writings by the various authors contain 280 titles. One of these works, "Peter Kalm's Travels in North America," is in three volumes and is generally known as one of the best accounts of this country in the early days, and has been published in three languages. In all his writings, the author states, Linné described no less than 2,000 American species of plants. Of Scandinavian American botanists, who are now, or who have been residents in this country, the author enumerates no less than twenty-eight, himself being one of the number. Apparently he is easily foremost, as it appears from the long list of his own papers which has been inserted without the author's intention by the editor. Altogether the paper

is a worthy memorial of the two hundredth anniversary of the birth of the illustrious Swede whose life's work gave the first great and world-wide impetus to the study of systematic natural history, and it is particularly fitting that such a memorial paper should be issued by an institution that has been reared by the descendants of the great botanist's countrymen in America.

MR. H. M. TAYLOR, formerly tutor of Trinity College and mayor of Cambridge, is trying to promote the provision of scientific books for the blind. He has made a statement in which he says: "The blind who are interested in subjects of a scientific character are very heavily handicapped. An embossed copy of any book occupies a very much larger space than a printed copy of the same book. Lately the British and Foreign Blind Association has published Mr. Charles Smith's 'Elementary Algebra,' the published price of which is 3s. 6d. The embossed edition consists of five 'large royal quarto' volumes, containing in the whole 800 pages. The published price in cloth is 16s. 6d. Books in embossed type are very much needed, I am told, on such subjects as mechanics, physics, astronomy, chemistry, and geology. I hope that I shall not be disappointed in my belief that there are many persons interested in science who would be willing to contribute to a fund which would enable books on such subjects as I have mentioned to be embossed for the use of the blind, and to be sold at a more moderate price."

THE Exhibition Committee announces that the Grand Exhibition of Japan will be opened in Tokio on April 1, 1912, and will be closed on October 31 of that year. It will be held on a site covering about 292 acres. All foreign governments and peoples are invited to participate in this exhibition. For foreign exhibits belonging to the five different departments of education, science, machinery, electricity, and manufactured goods, space will be allotted in the exhibition buildings erected by the administration office of the Grand Exhibition of Japan. For exhibits other than those above designated, any nation may erect

a separate building at its own expense, which it may also use, if it pleases, for the articles belonging to the five departments mentioned. No charge will be made for space allotted for such building. All articles which shall be imported from foreign countries for the sole purpose of exhibition, and not used for commercial purposes in the country, and all materials for the buildings of foreign governments, or special exhibition buildings and decorations thereof, will be admitted free of duty. It is proposed to make a special arrangement concerning articles which shall be imported from foreign countries for sale at bazaars, or things intended for amusement and shows which are liable to customs duty, and a bill to that effect will be introduced in the next session of the diet. It is also intended to afford special protection to all inventions, designs, models of utility, and trade marks of foreign exhibits, and a bill to that effect will be introduced in the next session of the diet.

UNIVERSITY AND EDUCATIONAL NEWS

ACCORDING to the daily papers the will of the late Mrs. Lydia Bradley disposes of an estate valued at \$3,000,000. Almost the entire property goes to the Bradley Polytechnic of Peoria, Ill., which she established. Mrs. Bradley left only \$5,000 to be divided among the children of her brothers and sisters, who, it is said, will institute suit to annul the will.

THE Rev. Dr. Henry M. Sanders, who, in 1901, retired from the pastorate of the Madison Avenue Baptist Church, New York, has given \$75,000 to Vassar College for the erection of a chemical laboratory. Plans for the building have been accepted, and construction will begin next month. The laboratory is to be of brick with terra cotta facings and in accord with the other buildings of the college. It will be 130 × 60 feet.

MR. ANDREW CARNEGIE has given \$200,000 to Berea College, subject to an equal amount being given by others. It will be remembered that the Kentucky legislature required the

separation of white and colored students, and Berea College has undertaken to establish and maintain two institutions.

MR. CARNEGIE, who recently gave \$50,000 to Illinois College, at Jacksonville, after \$100,000 had been raised as a condition, has now consented to give a further sum of \$75,000 on condition that an equal sum be raised.

ACCORDING to the report of the treasurer of Princeton University, the university received during the last academic year gifts and bequests of the value of nearly a million dollars. This included \$200,000 from an anonymous donor towards the biological laboratory, and \$116,000, received through the committee of fifty for general purposes.

THE trustees of the Western University of Pennsylvania have purchased for \$68,000 twelve acres of the Schenley farms property, near the Carnegie Institute and Carnegie Technical Schools, Pittsburg. Plans will be secured for the new buildings, which, when completed, will cost over \$1,000,000.

THE legislature of Wisconsin has appropriated \$30,000 for the establishment of a mining school at Platteville, which is in the zinc and lead mining district of the state.

FORMER JUDGE GEORGE G. REYNOLDS, of Brooklyn, has established two scholarships at Wesleyan University, Middletown, Conn., from which he was graduated in 1841. Twenty-five hundred dollars are provided for each.

MR. H. O. WILLS has promised £100,000 towards the endowment of the University for Bristol and the West of England provided a charter be granted within two years.

FROM the estate of Richard Brown, Youngstown, Ohio, Mount Union College, Alliance, Ohio, has received \$30,000 for the endowment of a professorship. The board of trustees at their last meeting, in accordance with the provisions of the bequest, installed such professorship, and named it the Richard Brown professorship of mathematics. Professor Benjamin Franklin Yanney, head of the department of mathematics of the institution since 1894, was elected to the professorship.