

7,200 square miles, has just been issued in a volume of some 700 pages.

The survey of the lead and zinc region of Southwestern Wisconsin, which is under the direction of Mr. Hotchkiss, has been extended by the work of a party of geologists and topographers, under the immediate charge of Mr. Edward Steidtmann. Nearly 100 square miles have been surveyed and maps are being prepared on the scale of four inches to the mile, with ten-foot contours. Much detailed information has been secured from drill holes, regarding the contours of the surface of the base of the Galena limestone, which forms the bottom of the zinc-bearing horizons.

The survey has continued its work on lakes on a more extensive scale through cooperative aid furnished by the U. S. Bureau of Fisheries and the Wisconsin Commissioners of Fisheries. The season was spent in the study of the lake region of Northeastern Wisconsin. Messrs. George Wagner and C. T. Vorhies were engaged throughout the summer in collecting fish from these lakes, especially whitefish and lake trout. During August Mr. Chancey Juday, biologist, with Messrs. R. D. Hall and George Kemmerer, as chemist, and Mr. E. V. Hills, as assistant, investigated the lakes as to temperature, oxygen, carbon dioxide, plankton, etc. Materials for study were obtained from nearly 70 lakes. This work was under the immediate charge of the director, Mr. E. A. Birge.

In addition to Dr. Weidman's report, the survey has just issued a bulletin by Dr. J. W. Goldthwait, on the abandoned beaches of Lake Michigan. Reports on the water powers of the state, by L. S. Smith, and on underground waters, by A. R. Schultz, are now in press.

#### SCIENTIFIC NOTES AND NEWS

DR. KEYSSELITZ and Dr. Martin Meyer, members of the Institute for Ship and Tropical Diseases at Hamburg, have been sent to the Agricultural and Biological Station at Amani in German East Africa to study the disease-causing protozoa.

DURING the past summer, Professor J. W. Toumey, of the Yale Forest School, made an extensive tour of inspection for the United

States Forest Service through many of the national forests, investigating the condition of the forest tree plantations and nurseries which the national government is maintaining.

DR. HEINRICH RUBENS, professor of physics at Berlin, has been elected a member of the Berlin Academy of Sciences.

DR. FRANZ RICHARZ, professor of physics at Marburg, has been elected to membership in the Academy of Sciences at Halle.

PROFESSOR BÄTZ, of Stuttgart and formerly of Tokyo, has been elected president of the German Society of Tropical Medicine, recently founded in Berlin.

MR. R. I. SMITH, formerly state entomologist of Georgia, has accepted the position of entomologist to the North Carolina College of Agriculture and Mechanic Arts and the Agricultural Experiment Station at West Rayleigh.

OF the Western Reserve medical staff, Dr. William T. Howard has returned from one year's leave of absence, during which time he has done research work at the University of Munich. Dr. Howard D. Haskins, absent upon leave, has returned from research work at the University of Strassburg. Dr. Norman W. Ingalls, absent upon leave, returns after a year's research work at Freiburg and Leipzig.

MR. W. L. ABBOTT, chief engineer for the Chicago Edison Company, has been elected president of the board of trustees of the University of Illinois.

MR. E. S. GOODRICH, M.A., F.R.S., has been elected to an official Fellowship at Merton College, Oxford, on condition of his carrying on scientific researches in zoology and continuing educational work in the university.

DR. HUGO HERTZER, professor of graphics, in the technical high school at Berlin, has retired from active service.

THE first lecture in the present year's Harvey Society course will be delivered by Professor E. O. Jordan, University of Chicago, at the New York Academy of Medicine on Saturday evening, October 26, at 8:30 P.M. Subject: "The Problems of Sanitation." All interested are invited to be present.

PROFESSOR JOSIAH ROYCE is this year giving courses on ethics and metaphysics at Yale

University on the Harvard lectureship foundation. Professor Royce also gives a course of six Lowell lectures on the "Philosophy of Loyalty," beginning on November 18.

DURING the first half of the present academic year Professor Frederick J. E. Woodbridge, of Columbia University, will continue to lecture on philosophy at Amherst College on Saturdays.

PROFESSOR TH. W. RICHARDS, of Harvard University, will give a course of eight Lowell lectures on "The Early History and Recent Development of the Atomic Theory," beginning on Monday, February 17.

THE first Thomas Young oration before the London Optical Society was given on October 17, by Professor H. E. Tscherning, of the Sorbonne, Paris.

THE International Congress of Hygiene, meeting in Berlin, on September 27, sent on that day, which was the anniversary of Pasteur's death, a telegram to his widow gratefully recalling the memory of the immortal genius and unforgettable benefactor of humanity.

M. MAURICE LOEWY, director of the Paris Observatory, born in Vienna in 1833, died on October 15, while attending a meeting of the national board of French observatories of the Ministry of Public Instruction.

DR. EDMUND VON MOJSISOVICS, formerly vice-director of the German Geological Survey, has died at the age of sixty-nine years.

THE observatory of the University of Michigan is being enlarged under the direction of Professor Hussey. The old instruments are being reconstructed and a new reflecting telescope added, having an aperture of about  $37\frac{1}{2}$  inches. The optical work for this is being done by the John A. Brashear Company, of Allegheny.

THE Sixth International Conference on Tuberculosis, held in Vienna from September 19 to 21, adopted a resolution calling for general compulsory reporting, in a specified manner, of all deaths from tuberculosis of the lungs or throat.

THE Association of Collegiate Alumnae will hold its quarter-centennial meeting at Boston on November 5 to 9. Addresses at the public meeting on November 6 are to be given by Professor Ellen H. Richards, of the Massachusetts Institute of Technology, on "Professional Education," by President Charles R. Van Hise, of the University of Wisconsin, on "University Education," and by President M. Carey Thomas, of Bryn Mawr College, on "Women's College and University Education." Among those who will address the association are President Eliot, of Harvard University; Professor Briggs, president of Radcliffe College; President Hazard, of Wellesley College, and Professor William James, of Harvard University.

THE forty-fifth university convocation of the state of New York was held in the senate chamber at Albany on Thursday evening, Friday, and Saturday, October 17, 18, and 19. Among the speakers announced were St. Clair McKelway; John H. Finley, president of the College of the City of New York; Sir C. Purdon Clarke, director of the Metropolitan Museum of Art; Frank Damrosch, director of the Institute of Musical Art; Hollis E. Dann, professor of music at Cornell University; Brander Matthews, professor of dramatic literature, Columbia University; Rush Rhees, president of Rochester University, and Paul H. Hanus, professor of the history and art of teaching, Harvard University.

A REUTER representative on board the *Ragnvald Jarl* has received the following details of the Arctic expedition undertaken by the Duc d'Orléans, who, together with Dr. Recamier, the surgeon and naturalist of the expedition, has arrived in England by that steamer from Bergen. The expedition, which was on board the duke's polar yacht *Belgica*, under the command of Captain de Gerlache, included four men of science, Dr. Recamier, Lieutenant Bergendal, Lieutenant Rachlew and Dr. Stappers. The ship left Vardö on July 9, and passed through the Matotchkin Shar on July 14. Soon after, the *Belgica* was beset with heavy ice, from which

she was not liberated until August 21. During this period a continuance of northeast winds eventually drifted the ship through the Kara Sea into Barent's Sea. Afterwards the expedition explored the west coast of Novaya Zemlya. The ship unfortunately grounded on an unknown shoal, and it was found necessary to lighten her by throwing out coal, a course which seriously impaired her steaming powers. In spite of this the voyage was continued up the northern part of Novaya Zemlya to 78° north. The expedition returned to Hammerfest on September 15, all the explorers being in excellent health, notwithstanding the anxious time they had had. The scientific work accomplished will, it is said, prove of the greatest interest, since during the whole period of imprisonment in the ice a continual systematic series of observations was made. The *Belgica* with the rest of the expedition is now returning home *via* the Norwegian fjords.

ACCORDING to a bulletin of the U. S. Geological Survey, the total value of the stone product of the country in 1906 was \$66,378,794, an increase of \$2,570,046 over that of 1905, and an increase of \$42,413,565 over that of 1896. The value of the granite, trap rock, marble, bluestone and limestone increased, while the value of the sandstone decreased. The figures are:

Limestone .....	\$27,320,243
Granite .....	18,569,705
Marble .....	7,582,938
Sandstone .....	7,147,439
Trap rock .....	3,736,571
Bluestone .....	2,021,898

Almost all the producers, especially the small quarrymen, state that the cost of production was greater in 1906 because of the increase in the cost of supplies and in the rates of wages, especially for common laborers. The increased use of cement and concrete has also had an important effect on the stone industry. Pennsylvania, producing chiefly limestone and sandstone, but also granite and marble, reported the greatest value of stone output for the entire United States, which was 13.27 per cent. of the total; Vermont, produ-

cing granite, marble, and a small quantity of limestone, was second, with 11.34 per cent. of the total; New York, producing sandstone, limestone, granite and marble, ranked third; Ohio, producing limestone and sandstone, was fourth; Massachusetts, producing granite, marble, sandstone and limestone, was fifth; Indiana was sixth, followed by Illinois, Maine, California and Missouri, each producing stone valued at over \$2,000,000.

MR. JAMES W. RAGSDALE, consul-general at Tientsin, reports that in view of the enormous forestry enterprise in the three eastern provinces of Manchuria, Viceroy Hsu Shih-chang is going to establish a school of forestry for teaching the modern methods, so as to protect China's interest in future. The proposed school will be opened in Mukden shortly. He also states that, according to a Tientsin paper, Viceroy Tuan Fang has notified the board of education and the Chinese foreign office that the German consul-general at Shanghai has intimated the desire of the College of Eastern Languages in Berlin to engage the services of four educated Chinese to teach Mandarin. The instructors would only be required to teach for six hours a week each, and the salary offered is 1,500 Marks a month each. The students would also be afforded every opportunity for continuing their own studies in accordance with the best modern standard. Tuan Fang has accordingly nominated Messrs. Wang, Chang, Chiang, and Liu for these posts, and proposes to grant them from the Nankin treasury 2,340 Marks each per month to cover incidental expenses.

#### UNIVERSITY AND EDUCATIONAL NEWS

HARVARD University has received a gift of 2,000 acres of timber land for the Division of Forestry. The tract, which is said to be the best body of timber on an equal area in Massachusetts, was formerly the property of Mr. James W. Brooks, who offered it to Harvard at a price below its true value. Mr. John S. Ames, of Boston, has given the university the purchase money and \$5,000 additional for the repair and equipment of the building.