In the February number of *Rhodora* the same author describes thirteen new species of *Crataegus* from the Champlain Valley, principally in the neighborhood of Middlebury, Vermont. The species described are the following: *C. champlainensis* and *C. pringlei*, both of the section 'Molles'; *C. lobulata* (of the section 'Flabellatae'); *C. acutiloba*, *C. matura*, *C. pastorum C. pentandra* (all of the section 'Tenuifoliae'); *C. praecox*, *C. brainerdi* (of the section 'Coccineae'); *C. modesta* (of the section 'Intricatae'); *C. scabrida*, *C. egglestoni*, *C.asperifolia* (all of the section 'Anomalae').

## SELBY'S HANDBOOK OF PLANT DISEASES.

PROFESSOR A. D. SELBY, of the Ohio Agricultural Experiment Station, has just issued as a bulletin (No. 121) a very valuable pamphlet of seventy pages entitled 'A Condensed Handbook of the Diseases of Cultivated Plants in Ohio.' It discusses in non-technical language the nature of disease, the structure and habits of parasitic fungi, and then takes up alphabetically the cultivated plants of the farm and garden, describing under each the diseases and their effects. Woodcuts are freely used to help the descriptions. A couple of pages are given to formulæ and directions for making different fungicides, and the pamphlet closes with a very suggestive 'spray calendar.' This bulletin must prove to be very useful to the farmers and gardeners of Ohio, and it will be found most helpful, also, to all who are studying the diseases of plants,

CHARLES E. BESSEY.

UNIVERSITY OF NEBRASKA.

## SCIENTIFIC NOTES AND NEWS.

GOVERNOR STONE, of Pennsylvania, has appointed Dr. J. T. Rothrock forestry commissioner under the new act, which places the forestry interests of Pennsylvania under the charge of a separate department of the State Government.

GOVERNOR ODELL, of New York, has appointed Dr. Daniel Lewis, of New York City, State Health Commissioner. Dr. Lewis was president of the State Board of Health which has been abolished.

DR. W. W. KEEN, professor of surgery in the Jefferson Medical College, Philadelphia, expects to spend next year in a trip around the world.

PROFESSOR JOHN GRIER HIBBEN, of Princeton University, has returned from his trip abroad and has resumed his work in the University.

THE Institution of Naval Architects has awarded a gold medal to Professor G. H. Bryan, F.R.S., for his paper on 'Bilge Keels.'

It is stated in *Nature* that the Brussels Academy of Sciences has awarded a gold meda, of the value of six hundred francs, to M. F. Swarts, for a memoir on the subject of carbonates of an element the compounds of which are little known. A similar award has been made to Professor J. Massart, for a memoir on the nucleus of Scizophytes, and the Edouard Mailey prize of one thousand francs, for assistance in the extension of the knowledge of astronomy in Belgium, has been awarded to M. F. Jacobs, the founder of the Société Belge d'Astronomie.

WE also learn from *Nature* that Mr. Vaughan Cornish, whose name is closely associated with the wave-like forms assumed by drifted materials, is now engaged on the Canadian prairies photographing and studying the forms assumed by drifting snow. Thanks to the liberality of the Canadian Pacific Railway Company and the interest evinced in the investigation by Sir William van Horne, Mr. Cornish writes that his work proceeds satisfactorily, and enough has already been done to justify the expedition.

PROFESSOR ERNST HAECKEL is expected to return from Java to the University of Jena at the beginning of the summer semester, when he will resume his regular lectures.

MR. SAMUEL HENSHAW, who has been head gardener of the New York Botanical Garden since its establishment, has resigned on account of advancing years, but is to act as adviser when his services are needed.

DR. F. BIDSCHOF, of the Observatory in Vienna, has been appointed assistant in the Observatory at Trieste. SCIENCE.

THE Royal Swedish Academy of Sciences will celebrate the tercentenary of the death of Tycho Brahe by a special session on October 24th. The Academy has also undertaken to issue a facsimile reproduction of the astronomer's great work, 'Astronomiæ Instauratæ Progymnasmata,' which was printed under the author's direction and of which but five copies are known to exist.

THE death is announced of Dr. Robert Pöhlmann, the geologist, curator in the Natural History Museum at Santiago, Chili.

DR. OSCAR SCHLÖMILCH, formerly professor of mathematics at the Technical School at Dresden, died on February 7th, at the age of seventy-eight years.

MR. MAURICE THOMPSON, the eminent poet, critic and novelist, who died recently, did good work as a naturalist. He was originally a civil engineer and was at one time State geologist of Indiana.

ADVICES have been received from Para, Brazil, regarding the death of Dr. Walter Myers, of the expedition from the Liverpool School of Tropical Medicine. The attack of yellow fever followed a prolonged autopsy and Dr. Herbert Durham also contracted the disease. As cable advices to the contrary have not, however, been received, it may be assumed that he recovered.

A CIVIL SERVICE examination will be held on March 26th to fill the position of nautical expert in the hydrographic office, Navy Department, at a salary of \$1,000 per annum. The examination will be in pure mathematics, physical geography and navigation.

THE Department of State has received a note from the legation of Sweden and Norway, dated Washington, February 2, 1901, stating that the managers of the Nobel fund have been authorized to correspond directly with interested parties abroad without using the channel of the Ministry of Foreign Affairs at Stockholm.

THE London correspondent of the New York Evening Post cables that an extensive collection of Central American land fresh-water shells has been presented to the Natural History Museum by Mr. Frederick Godman, F.R.S. There are nearly 5,000 specimens, including types of 70 new species. Mr. Godman also presented a large and important collection of butterflies of Central America, containing 2,500 specimens.

THE Paris Academy of Sciences has decided to award annually in memory of Lavoisier a gold medal for distinguished services to chemistry.

THE fifteenth free lecture course of the Field Columbian Museum of Chicago will be given on Saturday afternoons at three o'clock, as follows:

March 2—'The Kiowa Indians—A Typical Buffalo Tribe,' by James Mooney, Bureau of Ethnology, Washington, D. C.

March 9—'The Hills and Valleys of Wisconsin and their Life History,' by Dr. E. R. Buckley, Wisconsin Geological and Natural History Survey.

March 16—'The Diamonds of the Kettle Moraine and their ancestral Home,' by Professor William H. Hobbs, University of Wisconsin.

March 23—'The Evolution of Means of Transportation in America,' by Professor Edwin Erle Sparks, University of Chicago.

March 30—'Some Interesting Insects,' by Mr. Edward Benjamin Chope, Assistant in Department of Zoology, Field Columbian Museum.

April 6—' Deep Sea Fishing and Fishes,' by Dr. S. E. Meek, Assistant Curator, Department of Zoology, Field Columbian Museum.

April 13—'The Ancient Pueblos of Arizona,' by Dr. J. Walter Fewkes, Bureau of Ethnology, Washington, D. C.

April 20—'Tour of the Plant World—West Indies,' by Dr. Charles F. Millspaugh, Curator, Department of Botany, Field Columbian Museum.

April 27—' Jamaica—The Princess of the Antilles,' by Dr. Charles F. Millspaugh, Curator, Department of Botany, Field Columbian Museum.

THE second annual banquet of the Sigma Xi Society of the University of Nebraska was held in connection with charter day and mid-winter commencement on February 14th. Afterwards an address was made before the Society by Professor C. C. Nutting, of the University of Iowa, his subject being 'The Conditions of Life at the Bottom of the Sea.'

DR. C. HART MERRIAN, chief of the Biological Survey, lectured before the Linnean Society of New York on February 28th, his subject being 'The Naturalist on the Coast of Alaska.'

MR. N. C. MACNAMARA delivered the Hunterian Oration before the Royal College of Surgeons of England on February 14th, taking as his subject the form of the human skull in relation to the origin of pre-historic man in western Europe.

It is reported that there is a serious outbreak of the bubonic plague in the Khirgiz steppes of western Siberia. Many thousands are said to have already died. The spread of the plague at Cape Town gives apprehension lest the army may be affected, and rumors to this effect are already current.

THE last biennial report of the Illinois State Laboratory of Natural History indicates that some valuable investigations have been made in regard to the abundance, distribution and migration of Illinois fishes, their times and places of breeding, their feeding habits and their food preferences. Five stations have been established in the Illinois river for investigation, one in the Spoon river and three in the bottomland lakes connected with the larger streams. Eighty species of fish were found near Havana, on the Illinois river, the families most characteristic of the region being catfish, suckers and sunfish. There are also a few very abundant species of other families, as the gar, dog-fish, gizzard-chad, yellow bass, sheepshead and carp. A considerable number of collections have been made by high school principals and science teachers and sent to the laboratory in aid of this survey. The laboratory collections of fishes for the last thirty years have been examined and catalogued and rearranged. The collections assorted to the present time are contained in 63 large copper tanks and in 2,827 jars and bottles. A beginning was made last summer in the preparation of colored plates for the report on the fishes of the State. Sixteen plates were finished during the summer, and the color drawings are accurate in detail, true to life in color, form and attitude. It is the purpose of Dean S. A. Forbes to have illustrated by such plates every species of fish found, and the result will be a more finished series of plates of

American fresh-water fishes than has ever yet been published.

## UNIVERSITY AND EDUCATIONAL NEWS.

THE Chicago Institute of Pedagogy, endowed by Mrs. Emmons Blaine with, it is said, nearly \$2,000,000, has been united with the University of Chicago.

THROUGH Mr. Jonathan Bulkley, of New York, Yale University has received \$10,000 for the establishment of a fellowship in American history.

PRESIDENT MORLEY, of Fargo College, North Dakota, is making progress towards collecting the \$150,000 necessary to secure the pledge of Dr. Pearson, of Chicago, for \$50,000 before the end of the present year.

MR. ANDREW CARNEGIE has presented \$32,-500 to the Iron and Steel Institute, London, for the foundation of a research scholarship.

THE troubles in the Russian universities appear to be serious, having spread from Kieff to St. Petersburg and Moscow. About 200 Kieff students have been compelled to serve in the army as a punishment for their objecting to one of the professors. It is reported that six of them have been shot for refusing to renew their oath of allegiance to the Czar, but this may be incorrect.

HOMER CHARLES PRICE, M.S., has been elected to the chair of horticulture and forestry at the Iowa State College of Agriculture and Mechanic Arts. At Wellesley College, Miss Margaret C. Ferguson, B.S., has been appointed instructor in botany and Roxanna H. Vivian, B.A., instructor in mathematics.

PROFESSOR FRANK THILLY, of the University of Missouri, asks us to state that there is no truth in the report that he had been called to the chair of ethics in Leland Stanford Junior University.

DR. F. PASCHEN, of the Technical Institute at Hanover, has been appointed full professor of physics in the University of Tübingen.

DR. FRANZ NISSL, known for his work on the histology of the nervous system, has been promoted to an associate professorship of psychiatry at the University of Heidelberg.