Michigan State Agricultural College	11.6 +
Michigan College of Mines	8.8 +
University of Minnesota	26.1 +
Mississippi Agricultural and Mechanical	
College	16.6 +
University of Mississippi 2	12.6 +
University of Missouri	8.4 +
Montana College of Agriculture and	
Mechanic Arts	8.3 +
Montana State School of Mines	6.7 +
University of Montana	6.4 +
University of Nebraska	11.3 +
University of Nevada	8.3 +
New Hampshire College of Agriculture	001
and Mechanic Arts	6.8 +
Rutgers College (N. J.)	9.3 +
New Mexico College of Agriculture and	001
Mechanic Arts	8.2 +
	8.1 +
New Mexico School of Mines	6.5
Cornell University (N. Y.)	6.6 + 8.2 +
North Carolina College of Agriculture and	
Mechanic Arts	
North Dakota Agricultural College	10.4 + 11.5 +
State University and School of Mines	11.0 7
(N. Dak.)	9.2 +
Ohio University	9.2 - 19
Ohio State University	12.8 +
Miami University (Ohio)	10 +
University of Oklahoma	10.9 +
Oklahoma Agricultural and Mechanical	
College	11.8 +
Oregon State Agricultural College	11.9 +
University of Oregon	8.6 +
Pennsylvania State College	9.5 +
Rhode Island State College	6.6 +
South Carolina Military Academy	17.9 +
Clemson Agricultural College (S. C.)	13.5 +
University of South Carolina	10.5 +
South Dakota Agricultural College	8.6 +
South Dakota State School of Mines	3 +
University of South Dakota	9.6 +
University of Tennessee	6.5 +
University of Texas	18 +
Agricultural and Mechanical College of	
Texas	
Agricultural College of Utah	
University of Utah	
University of Vermont and Agricultural	
College	
Virginia Polytechnic Institute	
University of Virginia	10.5 +
² From 1909 report.	

Virginia Military Institute	16.3 +
College of William and Mary (Va.)	12 +
State College of Washington	
University of Washington	18.5 +
West Virginia University	6.5 +
University of Wisconsin	
University of Wyoming	5.6 +
C. H. HANDSCHIN	

SCIENTIFIC NOTES AND NEWS

It is reported from Stockholm, we hope correctly, that the Nobel prize for physics will be awarded this year to Mr. Thomas A. Edison.

Professor R. W. Wood, of the Johns Hopkins University, has been elected a corresponding member of the Göttingen Academy of Sciences.

Professor R. Dec. Ward, of Harvard University, and Mr. C. G. Abbot, of the Smithsonian Institution, have been elected corresponding members of the German Meteorological Society.

Dr. EMIL FISCHER, of Berlin, has been awarded the Berzelius medal of the Swedish Medical Society.

Professor Martin Kirchner, the bacteriologist, has been appointed head of the medical department in the Prussian ministry, a position that has hitherto been held by a jurist.

SIR ALMROTH WRIGHT has been commissioned by the mining groups of the Rand to investigate and report on the question of immunization against pneumonia, a disease which is said to be the cause of the largest mortality among the native laborers on the goldfields.

Dr. William H. Brown, research assistant in plant physiology at the Michigan Experiment Station, and instructor in plant physiology at the college, has been appointed plant physiologist in the Philippine Bureau of Science, Manila.

Dr. Yabe, formerly of Yokohama, is spending several months in the paleontological laboratory of Columbia University studying American Paleozoic faunas and also continuing his research on Scaphites.

Mr. Gano Dunn has returned from abroad, where, as a representative of the United States government and as president of the American Institute of Electrical Engineers, he has been attending the International Electrical Congress at Turin and the meeting of the International Electrotechnical Commission, the body that has been organized to bring about international uniformity of standards and practise in the electrical industry.

WE learn from the Electrical World that Dr. Adolf Franke, director of Siemens & Halske Actien Gesellschaft, Berlin, arrived at New York on October 13, and will represent the Verband Deutscher Electrotechniker at a Helmholtz celebration which will take place under the auspices of the American Institute of Electrical Engineers. Dr. Franke is accompanied by Dr. A. Ebeling, chief of the Pupin department of the Siemens & Halske Company, known for his researches in connection with the Pupin system and the design of telephone lines. Later these gentlemen will be joined by Dr. Paul Rasehorn, chief of the electrical measuring department of the Siemens & Halske Company. These gentlemen will, in company with Dr. K. G. Frank, American representative of their company, visit a number of the more important telephone installations in this country and also make a study of the effect of high-tension transmission lines on neighboring telephone and telegraph lines.

WE learn from the Yale Alumni Weekly that Professor Harry W. Foote, the naturalist on the Yale Peruvian expedition, has returned from South America with a valuable collection of zoological specimens including a large number of insects. He reports that the other members of the expedition, Professors Bingham and Bowman, are in good health and are having a successful field season. The party will be engaged until January studying a section of the seventy-third meridian from the base of the Andes to the Pacific Ocean.

Dr. M. P. RAVENEL, of the University of Wisconsin, has left for New York City, where he will attend the second meeting of the National Commission on Standards of Milk. While in New York Dr. Ravenel will call a meeting of the board of directors of the National Association for the Study and Prevention of Tuberculosis of which he was elected president at the recent annual meeting in Denver.

Dr. GILBERT AMES BLISS, associate professor of mathematics at the University of Chicago, is giving a course in advanced mathematics at Harvard University for the current quarter.

Dr. Paul Lindner, of the Institute for Fermentation Industries at Berlin, gave an illustrated lecture on "New Views on Fermentation and the Fermentation Organisms" at the College of the City of New York on Tuesday, October 24, at 4 p.m., and at Columbia University on Wednesday, October 25, at 8:30 p.m.

Dr. Max Verworn, professor of physiology in the University of Bonn, lectured at Columbia University on October 26, on "Life and Death."

Dr. Thomas L. Watson, professor of geology, has been elected chairman, and Dr. R. M. Bird, collegiate professor of chemistry, secretary, of the scientific section of the Philosophical Society of the University of Virginia. The editorial committee, which will supervise the publications, consist of Dr. William H. Echols (mathematics), Dr. William A. Kepner (biology) and Professor L. G. Hoxton (physics).

Dr. J. Hughlings-Jackson, F.R.S., the eminent English neurologist, died on October 7, aged seventy-six years.

Professor August Michel-Levy, the distinguished French geologist, died on September 25.

THE death is also announced of M. Alfred Binet, director of the psychological laboratory of the University of Paris.

The directors of the Journal of Biological Chemistry announce that the following friends and associates of the late Christian A. Herter have contributed to a Memorial Fund in recognition of his labors in promoting medical science: Mr. and Mrs. George F.

Baker, Mr. George B. Cooksey, Dr. H. D. Dakin, Dr. and Mrs. Edward K. Dunham, Mr. and Mrs. Richard M. Hoe, Mr. Alexander E. Orr. Mr. Cornelius N. Bliss, Miss Bliss, Mr. David Dows, Mr. Tracy Dows, Dr. and Mrs. L. Emmett Holt, Dr. Graham Lusk, Mr. Frederick Strauss. This fund, now amounting to forty thousand dollars, has been confided to the care of the directors of the Journal of Biological Chemistry under the provisions of a declaration of trust executed by them. The chief aim of the trust is to further the interests of the Journal of Biological Chemistry, an instrument for the development of science created by Christian A. Herter and fostered by him up to the time of his death. In the event that conditions arise removing the need for such a use of the income, provisions are made by which the fund shall continue as a memorial of Professor Herter and of service to humanity by the promotion of scientific research.

LECTURES given in the lecture hall of the Museum Building of the New York Botanical Garden on Saturday afternoons are as follows:

September 2-"The Berlin Botanical Garden," Dr. W. A. Murrill.

September 9—"Plants and People of Pinar del Rio, Cuba," Dr. C. Stuart Gager.

September 16—"The Fruit Industry of the Northwest," Mr. George V. Nash.

September 23—"The Vegetation of the Dismal Swamp of Virginia," Dr. Arthur Hollick.

September 30—"The Progress of the Development of the New York Botanical Garden," Dr. N. L. Britton.

October 7-"Some Scenic and Floral Features of Cuba," Dr. Marshall A. Howe.

October 14—"The Movements of Plants," Dr. C. C. Curtis.

October 21—"Some Types of Variegated Plants," Professor R. A. Harper.

October 28—"The Methods of Detecting Adulteration in Food and Drugs," Dr. H. H. Rusby.

The new pathological institute of the Royal Infirmary, Glasgow, has been formally opened by Sir William Osler, as we learn from *The British Medical Journal*. The new building, which forms an important feature of the extensive reconstruction scheme of the Royal Infirmary, is situated in the eastern

corner of the infirmary grounds and abuts on Glenfield Street. It is a fine building which reflects great credit on the architect, Mr. James Millar, who has already had experience of modern laboratory requirements in the new university medical extension. The feature of the institute is a large central hall, well lit by roof windows. Round the hall runs a gallery. The eastern end communicates with a large museum, consisting of a central well with two The museum is beautifully lit both by roof and side windows. Off the central hall open the various laboratories and research rooms. On the ground floor are laboratories for the teaching staff and a large general laboratory for research purposes. From the gallery entrance is gained to the lecture theaters, bacteriological laboratory, histology room, and the chemical laboratory. while a staircase gives access to the photographic room and library. At the western end of the building the post-mortem room, with a small chapel, etc., are situated.

Nature learns from a Sydney correspondent that the New South Wales government has issued instructions for the appointment of a state astronomer, who is also to be professor of astronomy in the Sydney University. At present it is said there is no chair of astronomy in Australia. In making this appointment, the public service board is acting with the university authorities, and they have fixed the salary at £800 per annum, with £100 for quarters; the professorship will carry with it the usual pension allowance. The first duty of the new state astronomer will be to organize the erection and equipment of a new observatory, as the present site is condemned.

MR. CHARLES E. GOODSPEED, of Boston, paid \$2,000 for a copy of the elephant folio edition of Audubon's "Birds" at a recent auction sale of rare books by C. F. Libbie & Co. The copy of Audubon's "Birds" was in fine condition, with the large plates of the turkey full-size, and many other plates in practically uncut condition. This original edition contained 435 beautiful plates, colored by hand. The work was published by the author in London in 1827–38.

During the last two weeks of August some students of the summer session and graduate department of Columbia University made an extended excursion with Professor A. W. Grabau through New York State for the purpose of studying the various type sections of the Paleozoic series. The party numbered fourteen in all and included Professor C. E. Gordon, of Amherst; Dr. Yabe, recently appointed to the professorship of paleontology in the new university at Sendai, Japan, and Dr. Hahn, of Munich. Among the localities visited were Schoharie, Little Falls, Trenton Falls, Holland-Patent, the ravine of Swift Creek near Chadwick, a type section of the Clinton, the typical outcrops of the Oneida conglomerate, the Syracuse region, Tully and vicinity, the Genesee Gorge at Rochester and at Portage, Olean and the Rock City, Eighteen Mile Creek, and the Lake Erie shore, North Buffalo, Niagara, etc.

UNIVERSITY AND EDUCATIONAL NEWS

THE Massachusetts Institute of Technology has broken ground for the Summer Engineering Camp at Gardner Lake, Me., near East The wooden permanent buildings Machias. will be erected as soon as possible in the spring and the whole camp will be ready for the summer course of the civil engineers early in August. The camp grounds, which have been presented to the institute by an anonymous friend, include more than a square mile of land at Crosby's Point, with outlook on the water on both sides and more than three miles of shore line. Mr. Charles W. Eaton ('84), of Haverhill, gave to the institute \$10,000 for the purpose of erecting permanent buildings on this land.

On October 3 members of the faculty and students at the University of Chicago observed the nineteenth anniversary of the opening of the institution with commemorative chapel services in Mandel Hall. The services were opened with prayer by Professor C. R. Henderson. President Judson spoke on the work of the university and compared the institution when founded with that of to-day.

In a comparison of present conditions with those obtaining nineteen years ago, it was recalled that when the doors were opened for instruction on October 1, 1892, the number of students registered was 594, as against 6,466 during the year 1910–11. The faculty at the start consisted of 135 men; now it numbers over 400. At its inception, the university owned four city squares of ground, and its total assets in pledges, endowment, buildings and books were \$4,341,708. To-day its endowment and property holdings and pledges total \$37,-270,792.

Announcement has been made of the consolidation of Barnes Medical College, St. Louis, and the St. Louis College of Physicians and Surgeons. It is hoped that the combination may bring the institution up to the standard required by the State Board of Health.

At Goucher College, Baltimore, Dr. Samuel N. Taylor, formerly professor of engineering at the University of Cincinnati, has been appointed professor of physics, and Dr. William H. Longley, professor of biology.

Professor H. E. Jordan has been promoted to a professorship of histology and embryology at the University of Virginia.

J. CHESTER BRADLEY, Ph.D. (Cornell '10), has been promoted to be assistant professor of systematic entomology in Cornell University, to succeed Dr. A. D. MacGillivray, Ph.D. (Cornell '04), who has accepted a similar position in the University of Illinois.

A. J. GOLDFARB, Ph.D. (Columbia '10), has been made an instructor in natural history at the College of the City of New York.

Mr. H. A. Wadsworth has been appointed assistant professor in the School of Forestry at the University of Idaho.

Dr. Dudley B. Reed, formerly director of physical education at the University of Rochester, has assumed his duties as medical examiner at the University of Chicago, succeeding Dr. J. E. Raycroft, who has gone to Princeton University as head of a new department of hygiene and physical education.