meeting to be held in Salt Lake City, April 3, 4 and 6 and drew up a constitution to be submitted at that meeting. At the April meetings eight or ten papers will be given by men engaged in various lines of scientific work in the state. On the evening of the sixth, the new organization will be addressed by President David Starr Jordan, of Stanford University. All those interested in scientific work in the state are invited to attend the meetings.

## THIRD SESSION OF THE GRADUATE SCHOOL OF AGRICULTURE

The third session of the Graduate School of Agriculture, of which Dr. A. C. True is dean, will be held at Ithaca and Geneva, New York, beginning July 6, 1908, and continuing four weeks. Instruction adapted to the needs of graduate students will be given under the general heads of biochemistry, agronomy, horticulture, dairy husbandry and dairying, poultry, veterinary medicine and entomology. The following is an incomplete list of the faculty for this session:

Biochemistry.—Professor Dr. N. Zuntz, professor of animal physiology, Royal Agricultural College, Berlin, Germany; Professor L. B. Mendel, professor of physiological chemistry, Yale University; Dr. H. P. Armsby, director of Institute of Animal Nutrition, Pennsylvania State College; Dr. C. F. Langworthy, expert in nutrition, U. S. Office of Experiment Stations; Professor H. S. Grindley, professor of chemistry, University of Illinois; Professor H. C. Sherman, professor of analytical chemistry, Columbia University.

Agronomy.—A. D. Hall, director of the Rothamsted Experimental Station, England; Professor Milton Whitney, chief, U. S. Bureau of Soils; H. A. Harding, bacteriologist, New York Agricultural Experiment Station; Professor T. L. Lyon, professor of experimental agronomy, Cornell University; Professor W. J. Spillman, agriculturist, U. S. Bureau of Plant Industry; Dr. Samuel Fortier, chief of irrigation investigations, U. S. Office of Experiment Stations; C. G. Elliott, chief of drainage investigations, U. S. Office of Experiment Stations; Professor H. J. Webber,

professor of experimental plant biology, Cornell University; E. G. Montgomery, instructor in agronomy, University of Nebraska.

Horticulture.—Professor J. C. Whitten, professor of horticulture, University of Missouri; Professor F. A. Waugh, professor of horticulture. Massachusetts Agricultural College; Professor S. A. Beach, vice dean, division of agriculture, and professor of horticulture, Iowa State College; Professor U. P. Hedrick, horticulturist, New York Agricultural Experiment Station; Professor John Craig, professor of horticulture, Cornell University; Professor B. M. Duggar, professor of plant physiology in its relations with agriculture, Cornell University; G. H. Powell, pomologist, U. S. Bureau of Plant Industry; W. T. Swingle, physiologist in charge, plant life history investigations, U.S. Bureau of Plant Industry; Dr. L. J. Briggs, physicist in charge, physical laboratory, U. S. Bureau of Plant Industry; Dr. Erwin F. Smith, pathologist in charge, Laboratory of Plant Pathology, U. S. Bureau of Plant Industry.

Dairy Husbandry and Dairying.—Dr. W. H. Jordan, director of the New York Agricultural Experiment Station; Professor T. L. Hæcker, professor of dairy husbandry, University of Minnesota; Dr. H. L. Russell, dean of the College of Agriculture, University of Wisconsin; Dr. E. Davenport, dean of the College of Agriculture, University of Illinois; Professor H. H. Wing, professor of animal husbandry, Cornell University; Professor R. A. Pearson, professor of dairy industry, Cornell University; Dr. L. L. Van Slyke, chemist, New York Agricultural Experiment Station; E. H. Webster, chief, Dairy Division, U. S. Bureau of Animal Industry.

Poultry.—Professor S. H. Gage, professor of microscopy, histology and embryology, Cornell University; Professor G. S. Hopkins, professor of veterinary anatomy and anatomical methods, New York State Veterinary College; Professor P. A. Fish, professor of veterinary physiology, pharmacology and therapeutics, New York State Veterinary College; Professor C. B. Davenport, department of experimental evolution, Carnegie Institution; Professor J. E. Rice, professor

of poultry husbandry, Cornell University. W. R. Graham, manager and lecturer, poultry department, Ontario Agricultural College.

Veterinary Medicine.—Professor James Law, director of the New York State Veterinary College, and professor of principles and practise of veterinary medicine, veterinary sanitary science and parasitism; Professor V. A. Moore, professor of comparative and veterinary pathology and bacteriology, and of meat inspection, New York State Veterinary College. Professor J. W. Connaway, professor of veterinary science, University of Missouri.

Entomology.—Dr. L. O. Howard, chief, U. S. Bureau of Entomology; Professor S. A. Forbes, professor of zoology, University of Illinois; Professor M. V. Slingerland, assistant professor of economic entomology, Cornell University; P. J. Parrott, entomologist, New York Agricultural Experiment Station; Dr. James G. Needham, assistant professor of limnology, Cornell University; Dr. A. D. MacGillivray, assistant professor of entomology, Cornell University; Dr. W. A. Riley, assistant professor of entomology, Cornell University; Professor E. Dwight Sanderson, director and entomologist, New Hampshire Agricultural Experiment Station.

## SCIENTIFIC NOTES AND NEWS

THE annual session of the National Academy of Sciences will be held in Washington, D. C., beginning Tuesday, April 21, at 11 A.M. The place of meeting will be the Smithsonian Institution. Dr. Arthur L. Day, director of the Geophysical Laboratory of the Carnegie Institution of Washington, invites the members interested to inspect the laboratory on April 22, at 4:30 P.M. The members of the academy are invited by the Smithsonian Institution to attend the Hamilton lecture in the Hubbard Memorial Hall on Wednesday evening, April 22, 1908, at 8:30. The lecture will be given by Professor George E. Hale, of the Solar Research Observatory, Mount Wilson, California; his subject being "Some Recent Advances in our Knowledge of the Sun."

THE American Philosophical Society, Philadelphia, will hold a general meeting on April

23. 24 and 25. The opening session will be held on Thursday afternoon, April 23, at 2:30 o'clock, in the hall of the society in Independence Square. The morning sessions are from 10:30 A.M. to 1 P.M., and the afternoon sessions from 2:30 to 5. Luncheon for the members will be served in the rooms of the society on Friday and Saturday. A reception will be held in the hall of the Historical Society of Pennsylvania on Friday evening, April 24, at the conclusion of a lecture by Professor Henry F. Osborn on "Results of the American Museum Exploration in the Fayûm Desert of Northern Egypt." annual dinner of the society will be held at the Bellevue-Stratford, on Saturday evening, at 7:30 o'clock.

Provision will be made by the Canadian government in the estimates for the coming financial year for a grant of \$25,000 by the Dominion parliament towards the expenses of the visit of the British Association to Winnipeg. The city of Winnipeg proposes to make a grant of \$5,000. The week of the meeting will probably be from August 25 to September 1, 1909.

Dr. W. M. Davis, Sturgis-Hooper professor of geology, has been selected by the German government as Harvard visiting professor at the University of Berlin for the academic year 1908-9. Professor Davis's term of service will probably fall in the second semester.

MAJOR GENERAL A. W. GREELY, eminent for his arctic explorations and his services to meteorology, having reached the age of sixty-four years on March 27, was transferred to the retired list in accordance with law.

Professor Alfred Marshall, of Cambridge University, who succeeded the late Professor Henry Fawcett in the year 1884, intends to resign the professorship of political economy, at the beginning of the Easter term.

Dr. Theobald Smith, professor of comparative pathology at Harvard University, has been elected honorary fellow of the Society of Tropical Medicine and Hygiene of London and honorary member of the recently organized Société de Pathologie Exotique, Institut Pasteur, Paris.