Waller, Professor A. D.—Anesthetics				
Sherrington, Professor C. SMental and				
Muscular Fatigue	25			
Starling, Professor E. HDissociation of				
Oxyhemoglobin	25			

Botany

Scott, Dr. D. H.—Structure of Fossil Plants	15			
Darwin, Dr. F Experimental Study of				
Heredity	45			
Johnson, Professor TSurvey of Clare Island				
Oliver, Professor F. WRegistration of Bot-				
anical Photographs	10			

Education

Findlay,	$\mathbf{Professor}$	J.	JMental	and	Phys-	
ical F	actors	•••	•••••	••••	••••	10

Corresponding Societies Committee

Whitaker, W.-For Preparation of Report .. 20

SCIENTIFIC NOTES AND NEWS

SIR WILLIAM RAMSAY has been elected president of the British Association for the meeting to be held next year at Portsmouth. The meeting of 1912 will be at Dundee. The meeting of 1914 will be held in Australia in the cities of Adelaide, Melbourne, Sidney and Brisbane. The commonwealth government has voted £10,000 toward the expenses of the meeting, and the several states will make additional contributions.

THE Accademia dei Lincei of Rome has elected foreign members as follows: E. G. van de Sande Bakhuyzen in astronomy; John Henry Poynting for physics; Armand Gautier in chemistry; Wilhelm Waldeyer and Richard Hertwig for zoology and morphology, and Max Verworn and Ludimar Hermann for physiology.

DR. WILLY WIEN, professor of physics in the University of Würzburg; Dr. Felix Marchand, professor of pathology at the University of Leipzig; Dr. Friedrich Merkel, professor of anatomy at the University of Göttingen; Dr. Gustav Schwalbe, professor of anatomy at the University of Strasburg, and Dr. Oswald Schmiedeberg, professor of pharmacology at the University of Strasburg, have been elected corresponding members of the Berlin Academy of Sciences. PROFESSOR CZERNY will preside over the second International Conference for the Study of Cancer to be held in Paris from October 1 to 5.

AT the thirty-eighth annual meeting of the American Public Health Association, held in Milwaukee, September 6 to 9, Dr. Robert M. Simpson, of Winnipeg, Man., was elected president.

DR. HERMAN A. SPOEHR, assistant in chemistry in the University of Chicago, has been appointed a member of the staff of the department of botanical research of the Carnegie Institution of Washington. Dr. Spoehr is investigating certain problems in plant physiology which lend themselves to the application of chemical methods.

MR. D. P. ROBERTS, electrical engineer at London, Ont., Canada, has been appointed electrical expert and inspector for the British Columbia government.

SEVERAL collections of bees from the British Museum and from the Berlin Museum were classified by Professor Theodore D. A. Cockerell at the request of those institutions this summer. During the latter part of the summer he has been working on a collection of fossils sent to him for classification by the American Museum of Natural History of New York.

DEAN MILO S. KETCHUM returns to the University of Colorado after a year's leave of absence. As a member of the firm, Crocker and Ketchum, consulting engineers, Denver, he has been designing and constructing bridges, viaducts, dams and reinforced concrete structures. He is now consulting engineer for the Albion dam which the city of Boulder is to build.

PROFESSOR JOSEPHINE TILDEN, of the department of botany of the University of Minnesota, who spent the year in New Zealand studying the algæ of the southern Pacific, has returned to the university.

It is proposed to name the new hospital for contagious diseases at Buffalo after the late Dr. Ernest Wende, as a memorial of his services as a sanitarian and health officer.

SCIENCE

PROFESSOR W. Kolle has been appointed head of the newly erected laboratory of hygiene and bacteriology at Berne.

THE centenary of the death of the Italian naturalist Filippo Cavolini will be commemorated by a series of meetings to be held in Naples beginning on September 12.

DR. JAMES NEVINS HYDE, of Chicago, for thirty-one years professor of dermatology in the Rush Medical College, died on September 6.

PROFESSOR EDOUARD HEINRICH HENOCH, one of the founders of modern pediatrics, died at Dresden on August 22, in his ninety-first year.

PROFESSOR VON RECKLINGHAUSEN, since 1872 professor of pathology at Strasburg, died on August 26 at the age of seventy-six years.

THE death is announced of Professor Pedroso, president of the Geographical Society of Lisbon.

THE ninth International Conference on Tuberculosis will take place at Brussels on October 5-8. Nature states that among the subjects likely to be brought under consideration are: Hereditary tuberculosis contagion; the pre-disposition to the disease; the protection of children against tuberculosis; tuberculosis and the school; the part of women in the campaign against tuberculosis. Reports on the progress of the war against tuberculosis in different countries, milk supply, solar radiation, international statistics and international marks indicating the condition of the lungs will be presented, and a paper will be read by Dr. Nathan Raw on the general measures recommended by the International Conference to the public authorities for the prevention of the spread of tuberculosis in different countries.

THE first mid-summer meeting of Illinois farmers was held in August at the University of Illinois. The purpose of holding this institute in the middle of the summer was to give an opportunity to farmers and others interested in agriculture to see the agricultural experiment plots, the oldest in the United States, at a time when they were bearing crops. The institute was attended by about 2,500 farmers, bankers, teachers and various other professional men who were interested in agriculture. One of the leading addresses delivered at this meeting was by N. Kaumans, German commissioner for agriculture. The main idea in the address was the necessity of the conservation of the soil. Commissioner Kaumans was merely emphasizing, however, what Professor Cyril G. Hopkins, the head of the department of agronomy at the university, and others have been saying for a number of years.

THE following arrangements are given in *Nature* for the opening of the winter session of the London medical schools: St. George's Hospital, King's College Hospital and London Hospital will open on October 1. At the first-named Dr. S. Squire Sprigge will deliver an oration "On Prizes." St. Bartholomew's Hospital, Charing Cross Hospital (at which Dr. F. W. Mott, F.R.S., will deliver the eighth Huxley lecture, on "The Hereditary Aspect of Nervous and Mental Diseases"), Guy's Hospital. London (Royal Free Hospital). School of Medicine for Women (at which an address on "Women's Sphere in Medicine" will be given by Dr. E. W. Roughton), Middlesex Hospital, St. Mary's Hospital, University College Hospital and Westminster Hospital will reopen on October 3. The opening day for St. Thomas's Hospital is October 4, and that of the London School of Tropical Medicine is October 14, when Dr. H. A. Miers, F.R.S., will give an address. At the opening of the medical school of the Victoria University of Manchester, on October 3, Professor W. Thorburn will speak on "The Evolution of Surgery."

THE availability of even low-grade phosphate rock for use as a fertilizer gives importance to the enormous phosphate deposits in Idaho, Wyoming and Utah, many of which are on government land. The total area of public phosphate lands now withheld from entry is more than two and a half million acres. Portions of the lands thus withdrawn were examined in 1909 by geologists of the United States Geological Survey, whose reports have just been published as an advance chapter of the survey's Bulletin 430. This chapter includes two reports, one on deposits in southeastern Idaho and adjacent parts of Wyoming and Utah, by H. S. Gale and R. W. Richards, the other on deposits near Ogden. Utah, by Eliot Blackwelder. The reports discuss the geologic age and relations of the deposits, their origin and the chemical composition of the rock and are illustrated by maps The deposits are deand geologic sections. scribed and mapped in detail and estimates are given of the available phosphate in the several areas considered. The phosphate rock is chiefly of oolitic structure-that is, it consists of masses of round grains closely cemented together with other material, generally calcite. These grains differ greatly in size in each mass of rock, ranging from microscopic pellets to pebble-like bodies half an inch in Chips of shells and small fragdiameter. ments of plants are in places included in the The rock at different places differs in rock. color, ranging from gray to jet black, the darker shades being probably due to the presence of bituminous matter. The areas examined contain more than 267 million tons of high-grade phosphate rock, very little of which has yet been mined, and it is probable that the deposits extend far beyond the areas examined, forming, perhaps, the largest phosphate field in the world.

UNIVERSITY AND EDUCATIONAL NEWS

THE amount of the bequest made by Professor Goldwin Smith to Cornell University is \$832,000. The testator states that he makes the bequest "to show my affection for the university, at the foundation of which I had the honor of taking part, to pay respect to the memory of Ezra Cornell and to show my attachment as an Englishman to the union of the two branches of our race on this continent with each other and with their common mother." Professor Goldwin Smith bequeathed his library valued at nearly \$10,000 to the University of Toronto.

THE contract for an addition to the Ryerson Physical Laboratory at the University of Chicago has just been let, as the result of a gift by Mr. Martin A. Ryerson, president of the board of trustees and the donor of the original building. The addition will be located back of the present laboratory, with which it will be connected by a Gothic corridor. The new building will be fitted with the newest and most improved equipment, and Professor Albert A. Michelson, head of the department of physics, and his staff, will then be in possession of greatly increased facilities for research. To this end research laboratories will be made a special feature of the new building.

THE basement of the geology wing of the science and museum building of the University of Colorado is completed. This wing is to be sixty by eighty feet in plan and three stories in height. It is being built of gray brick.

STATISTICS recently compiled at the University of Illinois show that there were 5,096 students in attendance at the university for the year 1909–10. These were distributed as follows:

Graduate School	283
Undergraduate colleges (not including pro-	
fessional)	491
College of Law	193
College of Medicine	526
College of Dentistry	108
School of Pharmacy	174
Academy	334

After deducting 13, those counted twice, we have the total stated above, 5,096. For the same year, 1909–10, the number on the instructional, scientific and administrative forces was 673. Of these 498 were in the schools and colleges in Urbana; the remaining 175 were in the professional schools of Chicago.

Dr. WOODROW WILSON, having been nominated by the democratic state convention for governor of New Jersey, will offer his resignation as president of Princeton University at the next meeting of the board of trustees.

New appointments at the Oregon Agricultural College include Dr. E. G. Peterson, of Cornell, professor of bacteriology; Dr. J. F. Morel, in charge of the new work in veterinary science; G. R. Samson, U. S. Department of Agriculture, instructor in animal hus-