by Edwin Grant Conklin, professor of zoology, Princeton University. Subject: "Methods and Causes of Organic Evolution" (open to the public), U. S. National Museum.

9.00 P.M. Reception, main hall, Smithsonian Institution.

Tuesday, April 17

9.30 P.M. Business session, U. S. National Museum.

10.30 A.M. Scientific session (open to the public), U. S. National Museum.

2.30 P.M. Scientific session (open to the public), U. S. National Museum.

8.00 p.m. Annual dinner, Raleigh Hotel. Presentation of medals.

Wednesday, April 18

9.30 A.M. Business session, U. S. National Museum. Election of officers and members.

1.30 P.M. Luncheon, Raleigh Hotel.

3.00 p.m. Scientific session (open to the public), U. S. National Museum.

4.00 P.M. Second William Ellery Hale Lecture, by Edwin Grant Conklin, professor of zoology, Princeton University. Subject: "Methods and Causes of Organic Evolution" (open to the public), U. S. National Museum.

SCIENTIFIC NOTES AND NEWS

THE portrait by Henry Ulke of Joseph Henry, first secretary of the Smithsonian Institution, has been transferred by a senate resolution, from the capitol to the Smithsonian Institution, where it has been hung in the National Gallery of Art, in the new building of the National Museum.

DR. WILLIAM H. WELCH was the guest of honor at the tenth annual banquet of the Æsculapian Club, Philadelphia, on February 6.

Professor Austin F. Hawes, head of the forestry department of the University of Vermont and state forester, has resigned. Two positions were created lately in the United States Government's States Relations Service, foresters in charge of the Agricultural Extension work, one for the Cotton Belt States and one for the states of the north and west, the last of which Professor Hawes will fill.

Dr. Fabian Franklin, associate editor of the New York *Evening Post* since October, 1909, has resigned. Dr. Franklin was professor of mathematics in the Johns Hopkins University from 1879 to 1895.

Dr. Morton G. Lloyd, formerly technical editor of *The Electrical Review* and *Western Electrician*, has accepted a temporary appointment as associate engineer in the Bureau of Standards, Washington, D. C.

K. F. Kellerman has been promoted from the position of assistant chief to that of associate chief of the Bureau of Plant Industry, U. S. Department of Agriculture.

Dr. Watson L. Wasson, professor of mental diseases in the college of medicine of the University of Vermont, has accepted the position of superintendent of the Vermont State Hospital for the Insane at Waterbury to succeed Dr. Don D. Grout, who has resigned. Dr. E. A. Stanley has been appointed to succeed Dr. Wasson at the University of Vermont. He has been a member of the hospital staff for some time.

AFTER seven months' absence in Japan, Korea, southern Manchuria and China, Assistant Professor Wellington Downing Jones, of the department of geography at the University of Chicago, has returned to the university for his regular work. The purpose of his trip to the Orient was to get a general view of the regions visited so as to be able to study intelligently what has been written about them, and also to plan effectively future detailed field investigations.

It is stated in *Nature* that Captain Amundsen, the Norwegian explorer, who proposes to endeavor to reach the North Pole by aeroplane, is on his way to Norway from America to complete his plans. The ship in which he will make the first part of the journey is to be launched at Christiania next March, and Captain Amundsen expects to start his scientific expedition about the summer of next year. He hopes eventually to come in touch with Robert A. Bartlett, another explorer, who is going via Bering Strait.

At the annual meeting of the Royal Microscopical Society, held on January 17, the following officers were elected for the year 1917: President, E. Heron-Allen; Vice-presidents, J.

E. Barnard, A. Earland, R. G. Hebb, F. Shillington Scales; *Treasurer*, C. F. Hill; *Secretaries*, J. W. H. Eyre, D. J. Scourfield; *Librarian*, P. E. Radley; *Curator of Instruments*, C. Singer; *Curator of Slides*, E. J. Sheppard; *Editor of Journal*, R. G. Hebb.

Professor Frederic S. Lee, of Columbia University, lectured before the Science Club of the University of Wisconsin on February 12, on "Air and Efficiency."

On February 8 Professor Murlin, of Cornell University, addressed a meeting of the Biological Society of the College of the City of New York on "The Relation of Acidosis to Carbohydrate Metabolism." Professor Abraham J. Goldfarb and Dr. Dayton J. Edwards participated in the discussion following the lecture.

PROFESSOR WILLIAM K. GREGORY, of Columbia University and the American Museum of Natural History, delivered an illustrated lecture before the Biological Society of the College of the City of New York on "The Evolution of the Human Race," on March 1.

Nearly \$400,000 was bequeathed in 1910 to the city of Munich by Dr. G. Krauss to found, as a memorial to his father, an institution for mechanical and other forms of orthopedics, especially those practised by the elder Krauss. The building is now completed. It stands on the grounds of the university orthopedic clinic with which it is closely affiliated, Professor F. Lange being in charge.

EDWARD DYER PETERS, Gordon McKay professor of metallurgy, Harvard University, died on February 17, in the sixty-eighth year of his age.

C. OWEN WATERHOUSE, formerly assistant keeper of the British Museum of Natural History, died on February 4, at the age of seventy-three years.

The death is announced of J. M. Alvarez, professor of hygiene at the University of Cordoba, Argentina, senator of the realm and governor of the Province of Cordoba, aged fifty-seven years.

THE death at the age of fifty-four years is announced of Dr. H. Schulthess, of Zurich, known for his work on heart diseases, the sphygmometer and photography of the pulse.

M. Honnorat, deputy of the department of the Lower Alps, is said by the *Journal of the American Medical Association* to have ready for publication the demographic statistics of France for 1915. The data at hand are as follows:

Years		Births	Deaths
1913 (77 depar	tments)	. 604,454	588,809
1914 (77 depar	tments)	. 594,222	647,549
1915 (76 depar		•	644.301

Therefore, in the departments which can be accounted for, registry shows: in 1913, an excess of 15,645 births; in 1914, an excess of 53,-327 deaths, and in 1915, an excess of 261,835 deaths. The figures do not represent correctly the births and deaths in the invaded departments in the war zone, where almost all the deaths of combatants are registered.

The Imperial Russian Society of Mineralogy celebrated its centenary in January. Owing to existing circumstances, a special session was not held, but there was a general meeting and an exhibit showing the history of the society.

At the two hundred and twenty-eighth meeting of the Elisha Mitchell Scientific Society at the University of North Carolina on February 20, Mr. Collier Cobb spoke on "Recent Changes in Currituck Sound," and Mr. Horace Williams on "The Philosophy of Science."

The second annual Drainage Conference of the University of Illinois is to be held March 13-15, 1917. Engineers, drainage officials, contractors, public officials, land-owners and business men from all parts of the state will be in attendance to consider such subjects as the reclamation of swamp and overflowed lands. flood control and the conservation of the soil. The subject of land reclamation in Illinois is one of greater importance than is generally supposed. Although some three million acres of uplands have been drained, there remain great overflow areas of rich lowlands along the rivers, the aggregate extent of which is greater than that of Holland and the reclamation of which would add \$150,000,000 to the land values of the state. The conference to be held at Urbana will have for its purpose the stimulation of greater interest in this problem. The speakers will be engineers and public officials of prominence and information regarding the practical phases of drainage will be made available to those in attendance. The organization and financing of drainage districts, the surveying of drainage areas, the design of systems and improved methods of construction are among the subjects to be considered. The meeting will be in charge of the department of civil engineering, college of engineering, Urbana, Illinois.

"ASPECTS of Modern Science" is the general subject of a series of lectures being given by members of the faculties of the University of Chicago, at the North Side Center of the University Lecture Association of Chicago. The series was opened on February 19 by Professor Robert A. Millikan, of the department of physics, who spoke on "Modern Views of Electricity." On the evening of February 26, Associate Professor William Draper Harkins, of the department of chemistry, discussed the subject of "Radium, the Breaking Up of Atoms, and the Evolution of the Elements." On March 5, Professor John Merle Coulter, head of the department of botany, will lecture on "The Revolution in Agriculture," showing how the investigations of heredity and of the soil have revolutionized agricultural practise and bid fair to solve the pressing problem of food production. On March 12, Associate Professor Walter Sheldon Tower, of the department of geography, will discuss "The Meaning of Modern Geography," and, on March 19, Director Edwin Brant Frost, of the Yerkes Observatory, will present some of the "Revelations of the Spectroscope." The closing lecture, "The New Geology," on March 26, will be given by Dean Rollin D. Salisbury, of the Ogden Graduate School of Science, who will present some of the newer theories concerning the earth's history, especially its origin and its age.

UNIVERSITY AND EDUCATIONAL NEWS

PRESIDENT WILSON signed, on February 23, the Smith-Hughes Vocational Education Bill,

which provides large funds for federal aid to the states for the teaching of agriculture, trade, industries and home economics.

Mr. AND Mrs. Max Epstein, of Chicago, have contributed to the medical school enterprise of the University of Chicago \$100,000 to erect and furnish the equipment for a university dispensary. This will provide a structure in which will be reception rooms, rooms for diagnosis and treatment, rooms for hospital and dispensary social service work and workers both professional and volunteer.

Mr. Frank G. Logan, of Chicago, has given to the University of Chicago a fund providing an income of \$3,000 a year for three research fellowships, one in pathology and bacteriology, one in medicine and one in surgery.

At a recent meeting of the faculty of the Long Island College Hospital it was voted to admit women students on the same terms as men.

It is stated in *Nature* that Mr. E. J. C. Rennie, son of Professor Rennie, of the University of Adelaide, has been appointed acting lecturer in electrical engineering in the University of Melbourne. He will take the place of Mr. E. B. Brown, who is about to engage in munition work in England.

Dr. C. E. Moss, of the University of Cambridge, has been appointed professor of botany in the South African School of Mines and Technology, Johannesburg.

DISCUSSION AND CORRESPONDENCE PHOSPHATE EXPERIMENTS

In Science, January 5, 1917, pages 18 and 19, Professor C. A. Mooers writes as follows concerning the results of Tennessee experiments with different phosphates:

Neither now nor in the past have these results allowed us to advocate, as intimated by Dr. Hopkins, the use of unacidulated bone meal. From the standpoint of economy, the data obtained here have been decidedly in favor of acid phosphate. In Dr. Hopkins's article omission was made of the fact that in the table referred to—Bulletin 90, p. 89, Tennessee Agricultural Experiment Station—every \$1.00 invested in acid phosphate gave on the average a calculated profit of \$4.28 where the