

marked by a symposium of papers of unusual importance on the electron-tube, presented upon invitation of the president of the society. There will also be the usual program of papers contributed by members in general. The Central Association of Science and Mathematics Teachers holds its annual meeting on the same dates, and arrangements are being made for the usual joint session.

The provisional program of special papers which will probably be given on Saturday morning, is as follows:

"Phenomena in pure-tungsten filament electron tubes," Irving Langmuir, The General Electric Company.

"Phenomena in oxide-coated filament tubes," H. B. Arnold, The Western Electric Company.

"The relations of the constants of an electron tube to its physical dimensions," L. A. Hazeltine, Stevens Institute of Technology.

"Theory of action of electron tubes as amplifiers," John M. Miller, Bureau of Standards.

"Theory of action of electron tubes as generators," John H. Morecroft, Columbia University.

"High power transmission sets," W. C. White, The General Electric Company.

"Telephone sets," O. B. Blackwell, American Telephone and Telegraph Company.

Members wishing to present papers at the Chicago meeting are requested to send abstracts ready for publication, to the secretary, before November 15. The secretary expects to send the program to all members before the meeting, but the delays in the mails are so great at present that members should not depend upon the program to determine their attendance.

The next following meeting of the society will be held in St. Louis in the week of December 29-January 3. Members are requested to submit abstracts of papers for this meeting at the earliest possible date, not waiting for further notice.

DAYTON C. MILLER,
Secretary

CASE SCHOOL OF APPLIED SCIENCE,
CLEVELAND, OHIO

THE HISTORY OF SCIENCE AND THE AMERICAN HISTORICAL ASSOCIATION

THE readers of SCIENCE may be interested to learn that at the coming annual meeting

of the American Historical Association a conference will be devoted to the history of science. This is the first time that such a conference has been held, and it is earnestly hoped that many of those who are interested in this promising field may attend the session, whether they are members of the American Historical Association or not. The program, as thus far arranged, comprises papers on the History of Egyptian Medicine by Thomas Wingate Todd, professor of anatomy, Western Reserve University; on the History of Algebra by Louis C. Karpinski, professor of mathematics, University of Michigan; on Peter of Abano, a Medieval Scientist, by Lynn Thorndike, professor of history, Western Reserve University; and on The Problem of the History of Science in the College Curriculum, by Henry Crew, professor of physics, Northwestern University. The conference will take place in the Hollenden Hotel, Cleveland, Ohio, at 10 A.M., Wednesday morning, December 31.

ELBERT J. BENTON

THE SECTION OF ZOOLOGY OF THE AMERICAN ASSOCIATION

THE Convocation Week meetings of Section F (Zoology) of The American Association for the Advancement of Science will be held in conjunction with those of the American Society of Zoologists at Washington University, St. Louis, Mo., on December 29, 30 and 31, 1919. As the officers of the American Society of Zoologists are responsible for the program under the rules of the American Association all titles and abstracts of papers should be sent to Professor W. C. Allee, Lake Forest, Illinois. They should be in his hands before December 9. The address of the retiring vice-president of Section F, Professor William Patten, will be given at the annual dinner on Wednesday evening, December 31. The subject of the address will be "The message of the biologist." H. V. NEAL,

Secretary of Section F

TUFTS COLLEGE, MASS.

THE DEFLECTION OF LIGHT BY GRAVITATION AND THE THEORY OF RELATIVITY

A JOINT meeting of the Royal Society and the Royal Astronomical Society was held on

November 6, for the discussion of observations made during the total solar eclipse of May 29 last. Sir Frank Dyson, the astronomer royal, opened the discussion, and was followed by Professor Eddington and other members of the eclipse expedition. Cablegrams to the daily papers report that the photographic plates show the deflection of the rays of light from the stars by the sun's gravitation that the Einstein theory of relativity requires. A similar attempt was made by the Crocker Expedition of the Lick Observatory in 1918, and the problem is described by Dr. W. W. Campbell, the director of the observatory, in *SCIENCE* for July 12, 1918. An article on relativity in physics by Professor Reinhard A. Wetzels, of the College of the City of New York, is printed in *SCIENCE* for October 3, 1918, and one by Professor William Marshall, of Purdue University, in *The Popular Science Monthly* for May, 1914. The article on the ether drift by Professor A. A. Michelson and Professor Edward W. Morley, which gave rise to the discussion, was printed in *The American Journal of Science* in 1887. Albert Einstein, then an employee in the patent office at Bern, first published his theory of relativity in the *Annalen der Physik* in 1905. Dr. Einstein later became professor in the Zurich Polytechnic School and was called to Berlin several years ago.

SCIENTIFIC NOTES AND NEWS

THE Nobel prize for physics for 1918 has been awarded to Professor Max Planck, of Berlin, and for 1919 to Professor Stark, of Greifswald. The prize for chemistry for 1918 has been awarded to Professor Fritz Haber, of Berlin.

THE National Academy of Sciences has voted to confer its Public Welfare medal on Mr. Herbert Hoover.

SURGEON-GENERAL WILLIAM C. BRAISTED, of the U. S. Navy Medical Corps, has been elected an honorary fellow of the Royal College of Surgeons of Edinburgh.

DR. M. C. TANQUARY, associate professor of entomology at the Kansas State Agricultural

College, has resigned to accept the position of state entomologist of Texas, and chief of the division of entomology of the Texas Agricultural College. His resignation takes effect on February 1.

G. B. RICHARDSON has been placed in direct charge of the oil and gas section of the U. S. Geological Survey.

DR. G. DALLAS HANNA, who for eight years has been an assistant in the United States Bureau of Fisheries, has been appointed curator of invertebrate paleontology in the California Academy of Sciences. Dr. Hanna has for seven seasons been engaged in scientific work on the Pribilof Islands, Alaska, having taken the census of the fur seal herd for five consecutive years. He brings to the museum of the academy his collection of mollusks which numbers about 100,000 specimens.

SIR HENRY ALEXANDER MIERS, F.R.S., vice-chancellor of the University of Manchester, has been appointed a member of the advisory council to the committee of the privy council for scientific and industrial research.

AT the annual meeting of the Royal College of Physicians of Ireland, held on October 18, Dr. James Craig, professor of practice of medicine in Trinity College, Dublin, was elected president.

V. K. TING, director of the Geological Survey of China, is travelling in the United States.

PROFESSOR LYNDY JONES, of the department of zoology, of Oberlin College, conducted a party of students of ecology on a trip to the Pacific coast during the summer. The entire journey was made in automobiles—four Ford cars, a Franklin sedan, and a trailer. The route followed the Trans-continental, the Union Pacific and Northeastern to Omaha, thence to Yellowstone Park, spending several days in the park, up the Columbia River through eastern Oregon to Portland, then to Moclips, Washington, where camp was made and the party explored the coast and the neighboring islands. Except for occasional hospitality of friends along the way, every night was spent out of doors, and meals were