ELECTRICALS GIVEN X-RAY DEMONSTRATION

Prof. Webster Fascinates Men With His Weird Experiments—Newest Types of Apparatus Explained.

PROF. FRANKLIN COOKS RAREBIT

Over two hundred members of the M. I. T. branch, American Institute of Electrical Engineers, attended the meeting held in Smith Hall, room 10-250, on Thursday evening, November 13. Professor D. L. Webster entertained the men with a remarkably fine X-ray demonstration and Professor W. S. Franklin sprung a surprise in the way of refreshments by cooking a Welsh rarebit himself.

The talk was in the nature of an illustrated sketch of the development of the X-ray. Professor Webster began by explaining how the property of cathode days to produce X-rays when focused on a tungsten target in an exhausted tube were discovered by Rontgen. In this connection he exhibited some of the first tubes which were used in this country. The production of fluorescence in certain minerals by the X-ray formed one of his most striking experiments. The minerals were arranged to glow in the form of a many-colored bunch of flowers in the darkened room. It was during this experiment that Professor Franklin caused a sensation by getting lost in the dark. The weird glow of the tubes was not enough to guide him to the light switch but, being a man of ready resources, he struck a match and thus found his way back.

Professor Webster next emphasized the way in which modern physicists develop apparently insignificant experimental results into great inventions. He said that X-rays are in many ways like rays of light, and showed some remarkable photographs on the screen which were actual pictures of the motion of electrons. The X-ray has been the means of learning many facts hitherto unknown about the size, shape, and spacing of electrons.

At the conclusion of his talk, Prof. Webster answered the many questions put to him by the audience, and a lively discussion was started which lasted until the refreshments were ready. They consisted of coffee and a Welsh rarebit cooked by Professor Franklin. The results were all that could have been desired.

NEW FEATURES ADDED TO HISTORY REFERENCE ROOM

Room 2-179 Proves Mecca for Men in History Courses.

The history reference room, which is to be found in Professor Robinson's office. room 2-179, has acquired many new features. Two new tables, together with the addition of several new books and current literature, are the chief additions.

This reference room was instituted this year, primarily to help freshmen in the preparation of the history essays which the course requires. Books on almost every subject pertaining to history, and to topics of the day which are linked more or less with the study of history, are contained in the collection. Recently the addition of magazine shelves has necessitated the removal of the typewriters which were installed at the first of the term.

Books may be taken out at 4.00 o'clock each day and must be returned by 10.00 o'clock the following day. Books taken out Saturday noon are returned on Monday. No periodicals or magazines, however, can be taken from the room.

The room is open from 9.00 till 5.00 on workdays and until 1.00 o'clock on Saturday.

QUESTION OF NUMERALS FOR WAR CLASS OF '18 RAISED

Differencesn of opinion have arisen concerning the numerals which will appear on the diplomas of service men who have returned to the Institute after missing a year or more of work. A faculty meeting has been called for tomorrow to discuss the matter.

The point has been raised by the men effected. These are men who left the Institute while in good standing to enter the service. Some have expressed the wish that their diplomas bear the numerals of the class of which they were originally members. Others prefer to be known as members of the class in which they are completing their work.

Faculty records show precedents for either course. Diplomas have, in cases of absence because of sickness, been engraved "as of the class of" a certain year, giving the numerals of the original class.

PROF. AYDELOTTE ANNOUNCES RHODES SCHOLARSHIP AWARDS

The first Rhodes scholars to be appointed from the United States for two years were recently announced by Professor Frank Aydelotte of Technology English Department, American secretary to the Rhodes trustees, who was in charge of the selection.

Names of 63 Announced

The names of 63 were announced, the full number but one allotted to the United States this year, instead of the yearly quota of 32. The 64th, whose selection from Michigan was postponed, will be announced later. The same number will be appointed next year, Prof. Aydelotte said, to make up for the two years during which the scholarships were suspended on account of the war.

The men selected this year were those who would have gone to Oxford in 1918 and 1919 rspectively, had it not been for the war. Those selected as of 1918 will enter Oxford next January, and those elected as of 1919 will enter next October. The competition was keener than at any time during the 15 years since the schoalrships began, Prof. Aydelotte said, due in large measure to increased interest in England resulting from the war.

A large proportion of the candidates were men who had been in military service, and many of them had already studied a short term at Oxford under the educational plan arranged by the American expeditionary forces. Interest in the scholarships was also increased by an announcement that the University of Oxford would in the future offer the Ph. D. degree.

Change Method of Selection

After next year the regular yearly quota for the United States will be 32, the distribution among the states being so arranged that each state will send one man two years out of every three. The method of selection has been altered in two ways:

The qualifying examination in Latin, Greek and mathematics, formerly required of all candidates, has now been abandoned; and committees of selection are composed of ex-Rhodes scholars, acting under the chairmanship of one of the leading educational men of the state.

With the Rhodes scholars now appointed and a large number whose term at Oxford was interrupted by the war and who are now returning to complete their course, the University of Oxford will, during the next two or three years have a larger American population than ever before in its history.

The war record of the American Rhodes scholars ip now being compiled by Prof. B. E. Schmitt, Western Reserve University. Between 250 and 300 of the 400 Rhodes scholars who have gone to Oxford since the scholarships began in 1904 were in military or government service during the war, most of them in the American army and a few in the British and French. Twelve American Rhodes scholars lost their lives in service.

FAILURE TO ATTEND MOVIES MEANS TERM DEFICIENCIES

Sophomores Must Attend the Special .. Sessions in Military Science.

Deficiencies for the term will be given to all Sophomores who fail to attend one or the other of the military science moving picture shows which are to be given in the Main Hall of Walker Memorial tonight and next Friday night at 7.30 o'clock. Last year a number of Sophomores doubted the truth of a similar report. They are repeating the course this year.

The moving pictures embrace many subjects of artillery value. The students will be shown views of the candidates for a commission undergoing training during the war, including their infantry drill and parades, artillery drill on guns and mortars, and actual firing with disappearing guns, rapid fire guns, light mountain armament and, heavy mobile howitzers. The use of anti-aircraft guns, the operation of mobile searchlights, and instruction in the use of trucks and tractors will also be illustrated.

Another film points out the use of railroad artillery in France, and also shows such different phases of artillery work as service of a casemated 75mm. gun during a gas attack, the service of a heavy platform mortar, and barrage fire by guns of intermediate caliber.

Other films illustrate the work of seacoast artillery in our harbor defenses, showing the operation of various types of range-finders, the tracking of a moving ship, the planting and firing of submarine mines, the methods of hoisting and hauling ammunition, and target practice with 12-inch guns, mortars and rapjd fire armament.

There will be no lecture on the pictures since they are held to be self-explanatory.

PROFS. SUPERVISE SANITATION

Profsesor GeorgeC handler Whipple '89 has just been appointed Dirctor eof Sanitation of the League of Red Cross Societies or Internationall Red Cross, organized in connection with Article 25 of the League of Nations. The Director-General of the Internationla Red Cross is Sir David Hederson of England, and the Secrteary General is W. E. Rappard, formerly French Exchange Professor at Harvard. Of the Board of Governors Mr. Henry P. Davidson, late head of the American Red Cross, is Chariman, and the General Medical Director in charge of Hygiene and Public Health is Dr. R. P. Strong of the Harvard Medical School and the Harvard-Technology School of Public Health. Professor Whipple, now head of the Department of Sanitary Engineering at Harvard University, and recently connected with the Institute, as well as a member of the firH of mazen Whipple and Fuller, the well-known Sanitary Engineers of N. Y. City, is to be Director of the Division of Sanitation, with Headquarters at Geneva, Switzerland, and with him as Associate Director will be **Col. Francis Fielding Longley '05**, M. I. T., Courses I and XI, 1905. During the war Col. Longley was head of the entire Water Supply Service of the A. E. F., in charge of the Water Supply Regiment, and for his work was awarded a Distinguished Service Medal. After the Armistice he went to England and had. charge of the 2000 American soldiers distributed among the various universities there. Professor Whipple and Col. Longley are expected to leave for Geneva in February, to be gone until the autumn or later.

SERBS RECEIVE SCHOLARSHIPS

Before the war Serbs who desired a professional or technical education were sent as a matter of course to one of the great German universities. But now Serbia desires to break entirely away from German and Austrian influences. The material aid and sympathy extended to their country by America has deeply impressed the Serbs. The American Red Cross has saved literally thousands of lives; the workers have fed and clothed and housed a people who had no othher help to look to, have established hospitals and dispensaries, and have even brought seeds and agricultural implements from America, replacing those destroyed by the invaders, in an effort to permit the peasants to establish themselves again on a self supporting basis. The result of all this disinterested work has been to convince the Serbs of the desirability of American culture and the value of American ideals.

An organization has been formed which has recently appealed to the United States to provide scholarships in American universities for Serbian students. In a communication to the American Red Cross Mission at Belgade, a member of the Serbian government says:

"In times gone by most of our young men went to Germany or Austria for their technical education. Since the outbreak of the war we have had hundreds of students in France, Italy and Switzerland. The American ideals of morality and conduct are so like our own that we are very anxious to send our young men to the United States for schooling. Education in engineering and medicine is important for the future of our country."

Practically all college men and university students in Serbia were mobilized at the outbreak of the war. Many have now been released to continue their studies. Through the faith that the Red Cross has given them they look to America for help and sympathy in their political and educational aspirations, and for the advantages of technical schooling which their own country must lack for some time to come.

PROF. JAGGAR EXPLORES VOLCANO

The scientific party headed by Prof. **Thomas A. Jaggar, Jr.** director of the Kilauea observatory and former head of the department of geoolgy of Technology, with five days' supplies, has gone on a tour of investigation of the eruption of the volcano of Mauna Loa, on the island of Hawaii. The flow apparently was a mile wide and moved rapidly. It reached the ocean 20 miles from the volcano. Two ranch homes and much valuable Koa forest has been destroyed by the lava flow from the latest eruption. The Koa wood is a valuable hardwood similar to mahogany, and is used in finishing.

Professor Jaggar received the degree of Bachelor of Arts from Harvard in 1893, that of Master of Arts in 1894, and that of Doctor of Philosophy in 1897. He was an assistant in petrography there in 1894, an instructor in geology in 1895, and in 1903 was assistant professor. In 1904 he became Professor of Geology at Technolgy, and later was placed in charge of the Department of Geology. He was assistant geologist in the U. S. G. S. from 1893 to 1903, is a fellow of the American Academy, and a member of the Boston Society of Natural History. He is the author of many works on geology.

PUBLISH LIST OF LOST ARTICLES

The following lost articles may be obtained by the owners on applying at the office of the Superintendent of Buildings and Power:

Books—Lessons in Mechanics, Well's New Four-place Logarithmic Tables, Working Drawings of Machinery, Applied Mechanics (2), Lessons in Electricity and Magnetism, Exercises in Physics, Modern Accounting, Physics with Applications, Steam Engine Indicator, Computing Tables and Formulas, Special Directions for use in Electrical Engineering Laboratory, Inorganic Chemistry, Le Monde O'u L'on S'ennuie, Le Gendre de M. Poirier (2), Money and Banking, Monsieur Lecoq, A Motor Car Story of Interior Cuba, The Principles of Composition, Quantitative Analysis, The Evolution of Industry, Descriptive Geometry, Hand Book of Chemistry, Foreign Exchange Explained.

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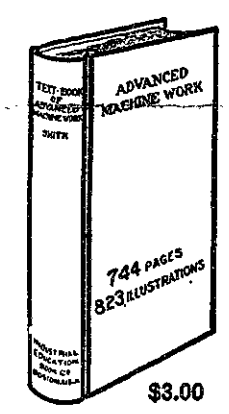

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