

CIVIL ENGINEERS HOLD SMOKER IN CAFETERIA

Mr. Schurig of Research Department Speaks on Tractive Resistances—H. L. Rogers '17 Talks on the Exhibit at Plattsburg

NEXT TRIP TODAY

The C. E. Society held its regular meeting last Wednesday night in the "Caf." In the business session several new men were taken into the society and G. E. Crosby '17 was elected a member of the Executive Committee in the place of Richard Whitney '17, who resigned. The advisability of changing the regular meeting night to Friday also was discussed.

The first speaker of the evening was H. L. Rogers '17, who gave a description of the Engineering Exhibit at Plattsburg. A U. S. Army officer conducted the visitors through the exhibit and explained to them the many duties of the engineer during times of war. One of these is to map out the roads for the troops. This is rather hard work as it requires traveling all day and then drawing up the blueprints during the night. In addition to mapping out the roads, they are also required to build all necessary bridges. These bridges are mostly of the truss type and are built out of trees or any rough timber. There are no nails or bolts used in the construction, everything being held together by lashing. In case that the span is too great for the truss, bridge, pontoons, which are carried with the regular equipment of the army, are used. Another duty of the engineer is to lay out the trenches, which are always of the zig-zag type, as they are in many ways superior to a straight line trench.

Alarms Used to Prevent Surprise Attacks

For guarding against scouts at night there are three kinds of alarms, all of which are set off by someone stepping on a wire stretched close along the ground. In one type this wire pulls the trigger of a gun. In another type it pulls a stone off of a high post, lets it roll down a chute of tin or galvanized iron, thereby making quite a loud noise. In the third type the wire sets off a large amount of powder, the light from which shows the whereabouts of the prowler.

Mr. Rogers also explained the make-up of a hand-grenade, and the trench mortar, both of which, contrary to public opinion, are constructed in a very crude way. The hand-grenade consists of some kind of tin can, such as a tomato can, filled with a high explosive and bits of iron and steel. The trench mortar is nothing more than a three-inch iron pipe mounted on two-by-fours. It is loaded much in the same way as an old-time musket.

E. E. Research Department Tests Roads

Mr. Montgomery Rollins, who had been announced to talk on "Personal Reminiscences in the Field of Accountant," was unable to do so on account of a bad cold. In his place Mr. O. R. Schurig, of the E. E. Research Department, spoke on "The Tractive Resistances to a Motor Delivery on Different Roads and at Different Speeds." These resistances were determined by tests made by Mr. Schurig and Prof. Kennelly, the report of which was read before the American Institute of Engineers at their annual convention in June, 1916. The vehicle used was an electric truck with solid U-shaped tires. In making a test the truck was run over a certain length of road at a constant speed and the volt-meter and ammeter readings recorded. In order to offset the error caused by wind-resistance, the truck was run over each stretch of road in both directions and the average power output taken for each of the several different kinds of roads and at various speeds. The truck

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VIRGINIA TANNER, DANCING DIRECTRESS TECH SHOW 1916

E. E. SOCIETY TRIP

Electrical Engineers Visit Ford Assembling Plant

On Wednesday and Thursday forty-five members of the Electrical Society visited the Ford factory and were shown in detail the processes which are so successful in turning out the world's most popular automobile.

The men were first taken into an immense storage room, where all parts are kept in readiness to be taken out and assembled. In this room are stored enough motors, fenders, wheels, etc., even down to the smallest of bolts and screws, necessary for the assembling of hundreds of cars.

From the storeroom the Society was shown the repair department, where Ford cars are repaired by contracts from such firms as the Edison Light Company. The cars coming to this repair shop are also cleaned and painted in a novel way. The radiators, for instance, come in coated with mud and grease which is removed by dipping them into a large tank of potash. After cleaning the radiators are tested for leaks by a high air pressure machine. The painting is done by dipping the smaller parts, while the large parts are coated by a fine spray machine.

The assembling department was next visited. The chassis is first put on a platform which moves automatically while the different parts are added to the frame. A crew of mechanics first put on the motor and as the platform continues down the line all the various parts are added. The car then passes inspection and gasoline and oil are put in for immediate use. The whole car is then lifted from the platform by a gigantic crane which lets the completed Ford down into freight cars four stories below the assembling room. The output of this particular factory is from seventy-five to one hundred and six cars, according to the demand.

It is the plan of the Society this year to have a small trip every two weeks and a long trip every month. The trips are limited to Society members and have so far been unusually well attended.

BILLY SUNDAY NIGHT

One Thousand Tickets Distributed Among the Students

The T. C. A. has distributed the one thousand tickets reserved in the Technology section for the "Student Night" at the Billy Sunday Tabernacle. The tickets were all gone by noon yesterday. There is still a large demand for tickets and the T. C. A. wishes that those who procured tickets and who do not expect to use them will return them to the T. C. A. office.

The men who expect to go should plan to get at the Tabernacle between 6.30 and 6.45 o'clock, since the tickets will not be valid after 7 P. M. There will be a Technology banner near one of the entrances and the Institute men are asked to gather here. Just before the sermon starts the various colleges will give their cheers and songs.

The tickets which have been distributed must be presented at entrances 24, 25, 26, 27, 28 and 29. Those who have been unable to obtain tickets, and who wish to attend, should gather with the Technology crowd and on effort will be made to procure seats for them with the rest of the students.

N. E. INTERCOLLEGIATE CROSS-COUNTRY RUN

Maine Picked as Winner—MacMahon Will Run—Five Tech Men Expected to Score—Meet Will be at Franklin Park

RUNS WILL START AT ELEVEN

Tomorrow morning at 11 o'clock the New England Intercollegiate Cross-country run will take place at Franklin Park. The teams of ten New England colleges are entered. Maine is favored to win, inasmuch as they won the New England and the I. C. A. A. A. last year and are undefeated this year. Dartmouth, however, will put up a strong fight for first place. They have been beaten by Syracuse, but have defeated Pennsylvania. Brown's team is also considered as a possible winner.

Tech took third place last year, and Coach Kanaly thinks that the present team is superior to the one of a year ago. Although it has lost to Harvard, North Dorchester and Princeton, the team will go into tomorrow's meet stronger than when it raced these teams. By the ruling of the N. E. I. A. A., freshmen are allowed to compete. This adds to the team McMahon '20, who has been showing good speed. Halfacre '18 and R. Rimbach '19, who were unable to run against Princeton, will also be in tomorrow's race. Tech has no man as fast as Capt. Brown of last year's team, but the general average is better. This will be of great advantage, as the first five men will score.

The best of the smaller colleges of New England will be represented. Bates, Bowdoin, Brown, Colby, Dartmouth, Maine, Massachusetts Aggies, Tech, Williams and Worcester Polytech. have all entered teams.

Technology will be represented by the following men: C. M. Dean '17, Captain B. F. Dodge '17, G. F. Halfacre '18, H. A. Herzog '19, W. K. MacMahon '20, G. McCarten '19, and R. Rimbach '19.

A week from tomorrow the squad will go to New Haven for the big Intercollegiate. At this meet all of the big colleges of the East will contend for honors.

MUSICAL CLUBS

A sudden lack of interest is becoming apparent in the Musical Clubs, especially the Mandolin Club. At the last rehearsal more than half the club were absent, while in the Banjo Club conditions are much the same. There will probably be no other concert before the Winter Concert, so that everything must be done at rehearsals, and it is imperative that every member attend every rehearsal. The time of the Mandolin Club rehearsals has been changed from 4.15 to 4.30 on Tuesdays and Fridays, so as to accommodate more men, and each man is expected to attend all rehearsals.

"NOT A CHANGE" TITLE OF COMING TECH SHOW

Irving B. MacDaniel '17 Announced as Author of Book at Kommers Smoker Last Night—Hume, Howard and Virginia Tanner to Coach



IRVING BARRY MACDANIEL '17, AUTHOR OF "NOT A CHANGE"

ROBERT VALENTINE DEAD

Instructor in English Department and Later Secretary to Head of Bureau of Indian Affairs

Last Tuesday Robert Valentine, who was a member of the Instructing Staff of the Institute for a number of years, died suddenly in New York City. His career is especially noteworthy because the position he has attained for himself has many points of interest to Technology men.

After his graduation from Harvard in 1896 he was for three years later an instructor here in the English Department, and later, in 1902, served for another year. He brought to his work marked individuality and great enthusiasm, and made a distinct impression on the students who came under his instruction. After leaving the Institute, he was for a time in business in New York and in the West. At the beginning of President Roosevelt's second term he went to Washington as secretary for Francis E. Leupp, the head of the Bureau for Indian Affairs. He brought the same energy and enthusiasm to this work that he had shown in his teaching at the Institute, with the result that he rose rapidly and in 1909, early in President Taft's administration, was made Mr. Leupp's successor. During the three years and more in which he was head of the Indian Bureau he effected many reforms in its administration, and stood stoutly for the protection of the rights of the Indian against the numerous grafters, in high places as well as in low, who seek to make the Indian their prey.

Mr. Valentine's most distinctive work, however, has been since the year 1912. He practically invented a new profession for which he saw the need in the industrial conditions of the present age. He called himself an "industrial conciliator." He made it his business to examine the industrial side of the affairs of any large corporation and to give the management advice with regard to their treatment of their employees. The same sort of service he stood ready to offer to groups of working men. He conceived that his advice as an impartial observer would be valuable to labor and to capital at all times, and he was specially called in by one party or the other at times of sharp

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150 ATTEND MEETING

It was estimated that nearly one hundred and fifty attended the "Kommers Smoker" held last night in the "Caf." The show management decided to do away with the Kommers Banquet this year and institute in its place a "Smoker" in hope that more would attend.

The "Smoker" was in charge of G. M. R. Roberts, general manager of the Show, and speeches were made by MacDaniel, the author, G. B. Hutchings, business manager, and "Rusty" White, stage director of the Show last year. During the evening the Banjo Club gave several selections and were heartily applauded by the audience. The management created a sensation when they introduced "movies" into cafeteria entertainments. Pathe's Weekly and the electrification of the Chicago, Milwaukee and St. Paul Railroad were shown.

At 7.45 Manager Roberts arose and gave a brief talk. He outlined the plans for the coming Show, announcing that after careful consideration, Mr. Rogers, of the English Department and a member of the Alumni Advisory Board, had chosen the play written by Irving B. MacDaniel, called "Not a Change." Manager Roberts said that he expected it to be the best Tech Show ever given. He also announced that Frederick Bernard had been chosen assistant general managers. MacDaniel, the author of the book, was chosen stage director because of his wide experience in dramatics. The coaches of

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THERE WILL BE AN IMPORTANT MEETING OF ALL MEMBERS AND CANDIDATES OF THE SPORTS DEPARTMENT OF THE TECH IN THE TECH OFFICE, ROOM 1-075, TODAY AT 1.05 O'CLOCK.

THERE WILL BE AN IMPORTANT MEETING OF THE NEWS DEPARTMENT OF THE TECH IN THE TECH OFFICE NEXT MONDAY AT 1.05 O'CLOCK. ALL MEMBERS OF THE STAFF ARE EXPECTED TO BE PRESENT.

CALENDAR

Friday, November 16, 1916

- 1.15 P. M.—Institute Committee Picture. Notman's, 3 Park St.
- 2.00 P. M.—C. E. Trip. Starts Building 1.
- 3.00 P. M.—Mr. Sutherland's Discussion Group. Room 10-267.
- 4.00 P. M.—Mr. Turner's Discussion Group. Room 10-267.
- 4.10 P. M.—Prof. Riley's Lecture: Internal Combustion Engines.
- 4.15 P. M.—M. I. T. Geological Conference. Room 4-345.
- 4.30 P. M.—Mandolin Club. Tech "Caf."
- 4.30 P. M.—Memorah Society Meeting. Room 10-275. Address by Hon. Samuel Markell.
- 5.15 P. M.—Freshman Candidates for Show Business Department. Room 1-150.
- 6.00 P. M.—Finance Committee Meeting. Tech "Caf."
- 7.00 P. M.—Student Night, "Billy" Sunday Tabernacle.
- 7.15 P. M.—Chess Tournament, Tech vs. Harvard. Room 1-190.
- 8.00 P. M.—Prof. Cram's Lecture Before Lowell Institute, Huntington Hall, Rogers.

Saturday, November 18, 1916

- 11.00 A. M.—N. E. I. A. A. Cross-country Championship Run. Franklin Park.
- 8.00 P. M.—Architects' Social for Schools of Allied Arts, Huntington Hall, Rogers Building.