



MORETON DIRECTS FOUR INSPECTION TRIPS THIS WEEK

Junior Electricals Visit Plants

Under the leadership of Professor D. P. Moreton, the junior electricals are making a series of important inspection trips this week to study the applications of electricity to industry. These tours are a fitting climax to a semester of work in the class room with the professor.

Yesterday afternoon the zealous juniors journeyed out to the Goodman Manufacturing Company on Halsted Street. Here they were guided through a modern armature winding shop, and many of the details of the work were observed.

Visit Many Companies

This afternoon at 2:00 o'clock, they will set out for the Illinois Central Inspection shops on 18th Street. At this plant will be explained some of the applications of direct current to the electrification of railroads, as exemplified in the electrical equipment of a completed car.

Tomorrow will constitute another full day for the ambitious electricals. In the morning they will tour through the plant of the Wisconsin Steel Company, where some of the largest direct current motors used are engaged in various capacities in the manufacture of steel. In the afternoon a somewhat similar trip will be made to the Illinois Steel Company.

Inspect Stevens Hotel

The last of these inspection trips will take place Thursday, January 28th, when the Stevens Hotel will be opened to the engineers for an afternoon's inspection. Here is maintained the largest privately operated direct current plant in the Middle West. The Ward Leonard elevator motor control system, the application of balancer sets to the three-wire distribution system, and a unique system of refrigeration will be some of the features reviewed.

When these trips are completed, the electricals will have a much better conception of the important uses made of direct current.

Special Math Course Given Next Semester

During the next semester Professor V. B. Teach will have a special course in "Differential Equations and Their Applications." The class is open to juniors and seniors only and will meet on Tuesdays and Thursdays at 1:10 in J. Chapin.

While aimed primarily to take care of the needs of the Electrical Engineers, the theory part of the course will cover for the other engineers the majority of their needs in the field of differential equations. The field has become of such importance that nearly every engineer finds himself in need of knowledge concerning it at some time.

Students who are interested may obtain further particulars and an outline of the course by consulting Professor Teach.

Scherger and Gilkey To Speak Next Month

Two assemblies of the entire student body are scheduled for next month. The first, on Thursday, February 11, at 10:30 A. M., will be in honor of Lincoln's birthday, which, as usual here, is a holiday. The Institute is fortunate in obtaining Dr. C. W. Gilkey, Dean of the University Chapel at the University of Chicago, to address the students on that day.

The second assembly, on Friday, February 19, will constitute the exercises for Washington's birthday. As is customary, February 22 will be a holiday, necessitating the holding of the exercises at an earlier date. Dr. Scherger is to speak on this occasion on George Washington. It is noted that this is the two-hundredth anniversary of his birth.

Final examinations for all Calculus II students will be given in Freshman Drawing Room between 10:30 and 12:30 on January 30.

A. T. A. A. Limits Club Membership

At the meeting of the Armour Tech Athletic Association last Wednesday, it was decided that wrestling and dramatics should not be admitted into the association until they have satisfactorily shown their stability.

Wrestling teams have been started at various times during the school's history, but none of them have lasted very long. As soon as the one who had initiative enough to start the team graduated, the others stopped coming out.

The A. T. A. A. decided to leave it up to the Honor "A" Society, whether any more groups should be awarded the "A".

The first play the dramatics club put on this year was a success. This one performance, however, is not sufficient to warrant the admission of the club into the Armour Tech Athletic Association.

Official acknowledgement of the letters given out for track, baseball, tennis, and golf was made at this meeting.

The association voted to donate money for banners and ribbons to be awarded at the Armour Relays; also, some money was set aside for a dinner to be given to the visiting coaches and managers between the preliminaries in the afternoon and the finals in the evening.

Novel Meeting Held For F.P.E.S. Members

The Fire Protection Engineering Society held its January meeting last Friday. Smoky Kelly, chief instructor of the Fire Department and a very able speaker, was obtained for the occasion. He conducted the meeting on a class-room basis, passing out a sheet containing a true and false quiz on fire protection principles. After these were handed in, the meeting was open for discussing those subjects contained in the quiz.

GRADUATE STUDENTS OFFERED FELLOWSHIPS BY FOUNDATIONS

Throughout the year, numerous universities, colleges, and foundations send out circulars to other universities and colleges throughout the United States and foreign countries, offering their graduating students a chance to continue their education at the school's expense.

Many of these have been received at Armour Institute. The qualifications necessary for obtaining a fellowship, or scholarship, are explained in each circular.

In order to obtain a fellowship to the Charles A. Coffin Foundation, established by the General Electric Company, the Fellowship and Research Committee must decide if the graduate is eligible. They limit application to graduates of universities, colleges, and technical schools of the United States, who have shown by the character of their work that they could, with advantage, undertake or continue research work in educational institutions either in this country or abroad.

Travelling Awards Offered

This foundation awards these fellowships in the fields of Electricity, Physics, and Physical Chemistry. They offer a minimum allowance of \$500 a year.

The graduating student is given a chance to travel and study abroad by the American-Scandinavian Foundation. They award fellowships of \$1,000 each for graduate study in the Scandinavian countries: Sweden, Denmark, and Norway. The subjects for which these fellowships are awarded are unlimited, ranging from scientific to social subjects.

Massachusetts Institute of Technology offers a large number of fellowships and scholarships every year in order to assist graduates in pursuing courses of study and

BIDS FOR JUNIOR DANCE ARE READY FOR DISTRIBUTION

For the first time in the history of Armour's social functions, a colored orchestra is to furnish the music. Not only the unique idea, but also the national reputation of Cass Simpson's "Band from Harlem" is proving to be a factor which will probably make the junior dance of this year one that will be long remembered.

Cass Simpson is noted for two very distinct types of dance music. The first is the slow and dreamy syncopation which is usually favored by Armour men, while the other is a perfect antithesis, being characterized by really red hot, fast and furious jazz, and accompanied by the leader's mirth provoking capers and antics. Such a combination will undoubtedly afford a most pleasant and enjoyable evening.

The date, Friday, February 19, is well chosen. The dance comes near the beginning of a new semester when there will be little home work, and Monday will be a holiday because of Washington's Birthday.

Enough cannot be said about the Oriental Room of the Knickerbocker Hotel. The illuminated glass dance floor, and the exotic decorations will be well remembered by those who attended the junior formal last year.

Bids are now on sale at the usual price—\$2.50. They may be obtained from any member of the junior social committee which is composed of the following men:

Harold Bodinson, chairman
Arthur Oberbeck
William Lange
Jack Pechman

JEWELRY ARRIVES TODAY

The second order of senior class jewelry will be distributed today. All those who have ordered jewelry should see E. A. Scanlan, chairman of the committee, and they will receive their orders. Anyone who still wishes to have jewelry will have to place his order direct with Spies Brothers.

There will be no issue of the Tech News until February 16 due to the final examinations and the accompanying holidays.

Architects Hear Sound Pictures

Sound pictures were heard and seen by the architectural students at the Grand Ballroom of the Palmer House last Monday afternoon, January 18. The subject was the "Manufacturing of Pane, Opaque, and Safety Glass."

Professor A. C. Wilmanns obtained the invitation for the students through the courtesy of Libbey Owens Ford Glass Company.

The picture showed how glass is manufactured from the very beginning of mixing the constituents to the finished product. After the composition is mixed, it is introduced into a large furnace, where a chemical change takes place, resulting in molten glass.

The scum is then removed, and the liquid glass drawn into sheets. Then the glass is slowly annealed and cut into required sizes. The glass is then glazed and tested for flaws. After being inspected they are cut into commercial sizes and distributed for application.

The world's tallest structure, the Empire Building, is completely glazed with this flat drawn glass.

In Chicago, over five miles of store fronts in the new Merchandise Mart are glazed with glass made by Libbey Owens Ford. Many motor cars are also equipped with this glass. Manufacturers and dealers of hand mirrors recommend this glass, because it is most essential in the making of mirrors to use perfect plate glass.

This glass is noted for its high polish and brilliant finish. It is uniform in thickness, and remarkably free from imperfections.

Chi Epsilon Initiates Six New Men Friday

Chi Epsilon, honorary civil fraternity, initiated the following men last Friday evening:

C. H. Fox, '32.
W. H. Hornberger, '32.
L. A. Mueller, '32.
E. J. Wiltrakis, '32.
H. Ensz.
E. C. Grafton.

The initiation banquet was held on Friday night at the Triangle fraternity house. The faculty members: Dean Penn, Professors Wells, Heald, Huntley and Stevens were present at the banquet, and also attended the show, "Three's a Crowd", afterward.

WINSTON VISITS AUSTIN

Professor S. E. Winston of the department of Mechanical Engineering spoke to the upper classmen of the technical division of Austin High School, Thursday, January 21.

Engineering as a science, and the opportunities of the technical man constituted Professor Winston's talk.

CALENDAR

Tuesday, Jan. 26

2:00 P. M. E. E. Inspection trip to Illinois Central Inspection shop.
4:00 P. M. Band rehearsal in assembly hall.
5:00 P. M. Boxing practice in Armour gym.

Wednesday, Jan. 27

8:30 A. M. E. E. Inspection trip to Illinois Steel Co. and Wisconsin Steel Co.

Thursday, Jan. 28

2:00 P. M. E. E. Inspection trip to Stevens Hotel.
5:00 P. M. Glee Club holds final rehearsal.
5:00 P. M. Boxing practice.

Friday, Jan. 29

8:10 P. M. Finals begin.

FOURTH ANNUAL INVITATIONAL TRACK MEET TO BE HELD AT THE NEW U. OF C. FIELDHOUSE

All of Big Ten Colleges and Thirty Smaller
Schools Have Been Invited to
Compete

MEET IS SCHEDULED FOR SATURDAY, APRIL 2

TECH RIFLE TEAM LEADS IN SCORING AT STATE MATCH

Armour's Rifle Team scored the highest number of points in the first match conducted by the Illinois State Rifle Association. The team's closest rival, the Slifer Post, was only four points behind. These matches are extended over a period of six weeks, and the team having the highest aggregate score at the conclusion will have won the state championship title.

With regard to the above, it may be remembered that Armour won the title last year, and in addition, the five members of its team took the first five places in the individual ranking, competing against the members of eight other teams.

Armour's team also succeeded in defeating the Appleton Rifle Team, of Appleton, Wisconsin, by the close score of 1874 to 1868. Appleton has long been an outstanding opponent, Armour having suffered a defeat at their hands last year by a score of 1897 to 1904.

Including these two matches, the Armour Tech Rifle team has established the record of twelve consecutive wins in as many matches, not having been defeated since September, 1931.

This week the team has matches scheduled with Appleton, Wisconsin, and the Stuyvesant Rifle Club of Stuyvesant, New York. On February 23, a shoulder to shoulder match will be held with the Western Rifle Club at the Hawthorne Gun Club range. A number of matches have also been scheduled for the near future with various state universities, and it is hoped that the team's unbroken string of victories may be lengthened.

The following is the complete results of the first match for the State Championship held the week of Jan. 15:

1. Armour Tech	932
2. Slifer Post	928
3. Des Plaines Post	877
4. 183d Inf., I. N. G.	856

The individual high score of 192, was made by G. Lindgren of Slifer Post.

Dramatic Club Will Hold Meeting Today

A meeting of the Armour Tech Dramatic Club will be held this afternoon at 4:50 o'clock at the Tau Beta Pi rooms. This meeting was scheduled for last Thursday but for various reasons had to be postponed.

The choice of a suitable name for the club will be the first thing discussed. Recognition by the A. T. A. A., which was petitioned last week, has been withheld until another successful performance has been produced.

The group will also discuss the possibilities of a trip to the famous Hull House to witness the performance of three one act plays, one of which may be produced here at Armour. This play, written by Eugene O'Neil, contains eight male parts, and the scene is set in a machine shop. Professor Hendricks says that this play would be ideal for production here.

The final decision as regards the play will be made this month, and casting will start immediately at the beginning of next semester. It is intended to make this play a more imposing spectacle than the last one, and it is to be given at night.

Armour's fourth annual Indoor Invitational Track Meet will be held on Saturday, April 2, at the new University of Chicago fieldhouse. This year, the Invitational has been enlarged to become a Relay Carnival, and will include relay events for both universities and colleges.

Invitations have been sent out to all of the Big Ten universities and about thirty smaller colleges in the Middle West. So far, it appears that the following universities will enter: Chicago, Iowa, Michigan, Michigan State, Northwestern, and Notre Dame. Replies have not been received as yet from the other schools.

Many Colleges Entered

The following colleges will also be entered in the meet: Beloit, Crane, Lombard, Milliken, Illinois Wesleyan, Culver, Loyola, De Paul, "Y" College, Chicago Normal, Wheaton, Butler, North Central, Concordia, North Park, Thornton, Knox (Galesburg), Monmouth, Mooseheart, Morton, Elmhurst, Lake Forest, Milwaukee State Teachers', Marquette, and Armour.

John Griffith, Athletic commissioner of the Big Ten, will be the official referee and starter; Ted Canty, the official announcer; and President Howard M. Raymond, the honorary referee.

Enthusiasm in Meet Seen

An enthusiastic reception has been accorded this meet everywhere, and indications already show that the meet will assume a place as one of the most important indoor meets in the Middle West. With the coming of the Olympics this year, healthy competition in track is more than ever desired for all athletes competing for the United States.

The following events are scheduled: College Relays—half mile, one mile, and two mile; University Relays—one mile, two mile, and distance medley; Special Events—75 yard low and high hurdles, 440 yard dash, 880 yard run, one mile run, high jump, broad jump, pole vault, and shot put.

Awards Given Winners

Beautiful banners will be awarded the winning relay teams, and very handsome ribbons will be given to winners of the first five places in each of the special events.

The finals in the shot put and the preliminaries in the dashes, hurdles, 440, broad jump, and 880 yard college relay will be held in the afternoon, starting at 2 P. M. The college and university relays, and the finals in the special events begin at 7:30 P. M. No admission will be charged, and about five thousand people are expected to attend the meet. The Armour Tech Athletic Association is financing the meet, and the program is to be arranged under the direction of Professor John J. Schommer, Director of Athletics.

Armour Wins 1930 Meet

The three previous Invitational meets for colleges were won by the University of Chicago, Armour Tech, and Loyola University. The U. of C. easily won the first meet in 1929, by winning eight first places out of eleven events. Over one hundred college and university athletes entered the meet.

Captain Don Paul, '30, led his team to victory in Armour's second annual Invitational Meet, by winning the shot event with a heave of 46 feet, 9 inches, which tied the Bartlett Gym record held by Weaver of Chicago. This record still stands as an Armour indoor track record, and it is the only Invitational track record.

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