Armour Tech News

Vol. VIII No. 10 — Armour Institute of Technology, Chicago, Illinois — Tuesday, November 24, 1931

COMMITTEE HAS SENIOR JEWELRY SAMPLES READY

Three Kinds of Rings and Keys Are Displayed

DEPOSIT REQUIRED

Class jewelry is now on display in the trophy case outside Mr. Allison's office, and seniors may place their orders by leaving a deposit with some member of the senior jewelry committee. There will be someone taking the orders between one and two o'clock each day at the table in the main floor hall.

The rings and keys are being made by Spies Brothers, there being two designs in the former and one in the latter.

New Ring Design

The eight dollar ring is of solid ten carat yellow gold with a fourteen carat face. The head has a curved onyx top upon which is overlaid the A. I. T. monogram. This emblem is not similar to the seal that appears at the top of the Armour Tech News. In the monogram, the numerals "32" appear between the horizontal bar and the peak of the A. The rings are quite massive. On one side of the head appear three symbols: a gear, a sprinkler head, and a transit, to represent the mechanical, fire protection, and civil departments. On the other side are the symbols for the architectural, a Doric column; chemical, a distilling flask; and the electrical department, a resistance schematic. A deposit of three dollars is required at the time of ordering.

Small Deposit Required

At a price of four dollars and a half is a ring identical with the first excepting that the shank is of silver instead of gold. A deposit of two dollars is required on the silver-shafted ring.

The key is of solid fourteen carat yellow gold with the onyx face and monogram like the rings. The price of it is five and a half dollars with a deposit of two and a half with the order.

Members of the committee on jewelry, any of whom will be willing to take care of orders, are as follows:

E. A. Scanlan, Jr., Chairman.
E. W. Carlton.
W. H. Hornberger.
W. A. Holland.
G. W. Schodde.

Armour Engineer Was Distributed Friday

Friday, November 20, "The Armour Engineer" was out for distribution. Among the articles is "The Well-Rounded Engineer," by Dr. Allen D. Albert. This is a copy of the commencement address given by him to the Armour graduating class of June, 1931.

Other articles are James W. Juvinall's prize-winning Eta Kappa Nu contest essay, "Sunspots and Radio", G. W. Schodde's "The Hoover Dam", C. W. Farrier's "Illumination Features of the Century of Progress Exposition", and A. R. Viel's "The Eleventh Annual E. C. M. A. Convention".

Professor Krathwohl Is Officer of M.A.A.

Professor W. C. Krathwohl, head of the Institute's mathematics department, has been elected recently to the position of vice-chairman of the Illinois section of the Mathematical Association of America. Armour is an institutional member of the Association, which is designed, primarily, for college and high school teachers.

The interests of the Association are not only in the pure research field, but extend considerably into the application of mathematical principles and into the fundamentals of teaching itself.

Improvements in Chemical Labs

Work on the chemical engineering laboratories is now practically completed, with the result that much better distribution of the apparatus is possible, and more space is available.

New equipment for heat flow measurement has been installed in the metallurgical lab, and all of the apparatus has been rearranged to give more convenient set-ups.

By shifting equipment about, it has been possible to reserve a whole room for the preparation of metallurgical samples. In this room, which was formerly the industrial lab, there is the machinery for the microscopic examination as well as the preparation of the sample. The equipment includes grinding wheels, metallurgical microscopes, electric furnaces, and dark room accommodations for the examination of microphotographs.

The physical and electro-chem labs have been reorganized to give more locker space. When the work is done, the apparatus will be all that is necessary for the two subjects, and some equipment for the other courses will be housed as well. The calibrating equipment for pyrometry, the bomb calorimeter, and the apparatus for the most accurate gas analysis will be in this laboratory also.

Senior Jackets Are Distributed Today

Senior jackets of the first shipment will be accessible to purchasers today, in the Electrical Lecture room at 10:30 A. M.

The representative of the Rexford and Kelder Company will take measurements of those who did not place their orders the first time. This will be the last time any measurements will be taken at the school. The seniors placing new orders need pay only a reasonable deposit. After today all measurements must be taken at the Rexford and Kelder Company, 25 E. Jackson Boulevard.

Since considerably more jackets have been ordered to date than were ordered at the same time last year, it is reasonable to assume either that the jackets are better looking, or that the present senior class has more collegiate spirit than their predecessors.

COUNCIL MAKES SCHEDULE

Thursday, November 19, an Interfraternity Council meeting was held in the Tau Beta Pi rooms and pairings were drawn up for the interfraternity basketball schedule. The results of the pairings will be posted on the bulletin board in the main lobby.

THANKSGIVING HOLIDAYS

The Armour Institute of Technology will be closed Thursday, Friday, and Saturday, November 26, 27, 28 for the annual Thanksgiving holidays.

Dramatic Club Is To Present Play

The Dramatic Club held its meeting last Thursday at 5:00 P. M. in the Tau Beta Pi rooms. At this meeting the cast for "A Night in the Inn" was definitely selected. Lines were read and the parts were thoroughly reviewed. The one act play will be presented by the Club as a part of the Christmas Concert. The cast chosen for the production will include the following men:

S. H. Morris.
W. W. Davies.
C. C. Schultz.
L. Gabriel.
E. L. Curran.
J. J. Gura.
A. D. Burnett.
S. Finlay.
H. J. Monger.

The Club has been presented with some courtesy tickets to the Goodman Theatre, which the Office was kind enough to obtain. It is hoped that the members will be able to see one of the Goodman presentations during the Christmas holidays. In this way the aspiring actors can get an intimate view of a fine theatrical performance.

Rehearsals Being Planned

H. J. Monger and J. W. Juvinall recently visited the Chicago Arts Theatre, 410 S. Michigan Blvd., and studied the lighting and scenic effects. Their discoveries and plans were made known at the meeting.

Men were appointed to head the various groups that will take care of the presentations. The lighting and stage managers of the Dramatic Club will cooperate with the business manager of the Musical Clubs in order that there may be no conflict in the program.

Rehearsals are being planned, with the culminating dress rehearsal coming just before the actual presentation.

Musical Clubs Plan Christmas Concert

Plans for the Christmas Concert by the A. I. T. Musical Clubs are now under full sway.

The date has been set for Thursday, December 17, and the concert is to be in the Assembly Hall between 10:30 and 11:30. The meeting at which the plans were formed was held last Friday, at eleven o'clock, in the Eta Kappa Nu rooms. A tentative program was also drawn up.

University of Illinois Honors Professors Leigh and Mangold

At the University of Illinois, Associate Professor of Theoretical and Applied Mechanics, Jasper O. Draffin, is gathering together the portraits of prominent men in the field of mechanics. These portraits will soon appear on the walls of the new Materials Testing Laboratory at the University.

In this connection Professor Draffin has sent letters to Professor Leigh and Professor Mangold asking them for permission to include their pictures in this gallery. He says, "— wish to have a group of contemporary authors in these different fields so that the students may come to know something of the appearance of the men who write the books which they are using or to which they are referred from time to time."

While we are all more or less familiar with the textbooks written by these members of our faculty, there are other equally interesting facts about their lives which we shall set forth in the following abbreviated biographical sketches:

Illinois conferred a B. S. degree upon Charles Wilber Leigh in 1897. His first position was that of an instructor at Fort Worth University, where he was the head of the mathematics department for three years.

In 1901 Professor Leigh came to Armour and he has been with us ever since. His activities as an author extend also into the field of trigonometry and arithmetic; he having revised arithmetic texts for the American School of Correspondence and written some of their texts on trigonmetry.

"Plane and Spherical Trigonometry" used here as a textbook was written by the late Dean Palmer and Professor Leigh.

"Practical Mechanics and Strength of Materials" which was first published in 1923 is a well-known textbook which has been used for a number of years at several state universites. Among the more extensive writings of Professor Leigh was a series of articles which ran for two years in the "American Builder" magazine under the title "Three Simple Stresses" which, as the name indicates, dealt with tension, compression and shear.

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SOCIAL ACTIVITES COMMENCE WITH SENIOR INFORMAL

Dance to Be Held at Medinah Athletic Club

Social activities at Armour will begin on December 11, in the Grand Ballroom of the Medinah Athletic Club.

The occasion will be the Senior Informal, which promises to have all the requisites of a good time for all concerned. Music will be furnished by Waddy Wadsworth and his R. K. O. Orchestra, composed of ten pieces. This orchestra is one that plays at private dances only and specializes in school functions.

The Medinah Athletic Club is located on Michigan Avenue north of the bridge. Thus it is easily accessible to all. It also has an excellent floor.

Bids are Distributed

Bids will cost $2.50, the usual charge for this dance. They may be obtained from any member of the senior social committee which is made up of:

J. J. Casey, Chairman.
M. R. Beal.
W. E. Baumann.
W. M. Trauten, Jr.
H. W. Yount.

Pictures will be taken of the dance for publication in the Cycle, according to the editor, Glen W. Schodde. Several alumni have already asked for bids to the dance. They made reservations when they found the tickets were not yet available.

Professor Libby at Convention in Texas

Professor Libby of the Mechanical Department attended a four day convention of the National Association of Refrigerating Engineers, which began November 10, in Houston, Texas.

A large number of the association's 3000 members attended the convention this year.

The majority of the members are operating engineers, chief engineers, and superintendents, who look after the production and operation of refrigerating devices.

The purpose of this association is primarily to further the education of its members in the art and science of refrigeration engineering. The yearly meetings are devoted to the business of the association and to all topics relating to the education and instruction of its members.

Libby is Chairman

Professor Libby is the chairman in charge of educational work for the association, and has published a handbook dealing with various phases of refrigeration engineering, the operation of certain ice machines for example.

The educational work helps to perfect the technique of the operator. and it thereby makes him more efficient in his work.

In order to develop interest in this branch of engineering, the educational committee conducts paper contests in the universities and colleges throughout the United States each year on subjects pertaining to practical operating work. The association has a questionnaire every month which is circulated to the operators who are expected to answer it.

Next year's convention will be held in Chicago. The Chicago chapter has 500 members.

Six New Men Pledged By Musical Honorary

Pi Nu Epsilon, honorary musical fraternity, pledged the following six men, last Friday in the Eta Kappa Nu rooms:

W. C. Breh, '32.
J. A. Clear, '32.
W. W. Lange, '33.
J. S. McCall, '32.
H. P. Richter, '32.
H. W. Richter, '32.

New Telephony Inventions Seen

Last Tuesday, November 17, in the Grand Ballroom of the Stevens Hotel, a demonstration and lecture was given by Mr. Sergius P. Grace of the Bell Telephone Laboratories, New York. A large number of faculty members of Armour were present in addition to some members of the student body.

During the course of the evening the following features were explained and demonstrated.

High notes were turned into low ones, low notes into high ones, producing a strange language when words were spoken into the "scrambled speech" machine. When "unscrambled", the inverted notes resumed their original positions. "Scrambled" speech from London was brought across the Atlantic to the audience by telephone and then "unscrambled".

A direct long distance telephone connection into the radio dispatching station of the United Air Lines hundreds of miles away enabled the audience to hear communications between pilots and dispatching operators.

By using a special alloy in a long coil of wire coupled to a control circuit, words spoken into one end of the coil were made to come from the loud speakers from one to four seconds later.

Telephotos, familiar sight in newspapers, are sent over telephone wires in the form of electric impulses which can be changed into sound or light, depending on what receiving apparatus is used. In the sound reception, the high notes represented the light spots, the low notes the shadows.

By using a sensitive microphone and a powerful amplifying device, the sound of a heart beat can be recorded, just as words or music. Other muscles of the body also make a noise when they contract. With the ultrasensitive microphone and a powerful amplifying unit, these contractions were heard in the loud speaker.

In telephone calls from a dial exchange to a manual exchange, the new automatic call announcer changes the dial impulse to a voice, calling the numbers without human intervention.

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Professors Now at Work on Wave Forms

Professor Moreton and Professor Nash of the Electrical Engineering department are working together to make practical a method for determining the wave-form of A. C. voltages varying from 50 to 50000 volts.

The system makes use of the parallel operation of radio tubes of either the 245 or 171A types as amplifiers in conjunction with a voltage divider resistor. This imposes a low voltage on the grid of the vacuum tube. Accuracy is possible because the grid circuit draws practically no current. An oscillograph connected to the plate circuit gives the wave form either visually or as a photograph

It may not be praticable to reach the desired high potential of 50000 volts as the cost of resistors is very high. The resistors for use at 25000 volts cost $35.00 while those for use at 50000 volts are priced at $75.00.

CALENDAR

Tuesday, November 24th

5:00 P. M. Orchestra practice, Assembly Hall.
Triangle Basketball practice, Gymnasium
Drama Club meeting Tau Beta Pi rooms.

Wednesday, November 25th

5:00 P. M. Stresses and Strains practice, Assembly Hall.

Thursday, November 26th

Thanksgiving Holidays Begin.

Monday, November 30th

5:00 P. M. Boxing practice Gymnasium.

TECH CAGE SQUAD CONDITIONING FOR OPENING CONTEST

First Game with Alumni Looms as Test For Team

BANQUET AFTER GAME

Now that the Armour Tech basketball squad has moved to the Armory for their nightly workouts, the grind is on in preparation for the season's schedule.

This year's squad is one of the strongest in years, and competition is very keen for each position on the varsity. There are six regulars back from last year's team, including Captain Rossing, ex-Capt. Robin, Lind, and Setterberg who are forwards, Beemsterboer, center, and Rummel and Omiecinski, guards. With all the good material on hand, Coach Krafft said that he would probably use at least three teams in the first game of the season, which is with the Alumni, December 1.

Last year's Alumni game was rather a rout with the Varsity winning easily by a score of 44 to 18. But according to Professor Kuehn, who is in charge of the Alumni team, the score this year will not be so lopsided. However, he qualified his statement with a few "ifs" by saying that if enough of the alumni come out so there will be plenty of substitutes, and if all the men he has asked to come, will turn out, the Alumni will present a strong lineup composed of many stars of former years. The tentative starting lineup for the Alumni is: Ott and Simpson, forwards, Havlicek, at center, and Hofer and Kuffel at the guard positions.

Because he wishes to see what each man can do in actual competition, Coach Krafft will change his men around until he finds the best combination, and so no lineup is available.

But even without a starting lineup, the dopesters maintain that Tech's Varsity should win the game because of the size of the score last year, and the probable strength of this year's squad.

An interesting sidelight on the Alumni game is the fact that there will be five registered referees at the contest. These five include the official referee of the game, Osborne; Coach Krafft; and Downs, Kuehn, and Schumacher, who are alumni.

After the game a banquet for the members and pledges of the Honor "A" society will be held at the Phi Kappa Sigma house.

Civil Engineers to Hold Inspection Trip

November 30, the civil engineering department is going to hold an inspection trip to the Municipal water treatment plant at Waukegan, Ill. This is a sanitary water plant designed by the firm of Allen and Vagtborg of Chicago. The latter member of the firm is Assistant Professor of Municipal and Sanitary Engineering at the Institute.

Waukegan's sanitary plant is electrically operated, and has been a highly successful undertaking. It is considered one of the finest in the country.

Professor Vagtborg says that the trip will prove very interesting and very instructive to the students. The plant will be in actual operation, filtrates being washed and all other processes carried out as usual. One of the units will not be action in order that the students may study more closely the principles underlying the system.

Arrangements are being made to inspect other plants in the vicinity so that other systems may be studied also.

Both seniors and juniors are to go on this trip.

Professor Vagtborg will post any further information on the bulletin board the first part of the week.