



JINX STILL HOT ON TRAIL OF ONE MAYNARD VENEMA

Senior Chemical Tries Hand at Mural Decorating

REACTION GOES AWRY

Maynard Venema has again revealed those hitherto unsounded depths of technique which won for him the unanimous election to the exalted ranks of Schmier-Chemiker last week.

While it is discouraging to view this concentration of talent in one individual, a man who can repeat that which others can hope to do only once, his cloud is one which has a silver lining. If any doubt existed about Venema's eligibility for last week's award, the sulfonation affair of last Monday has removed any forebodings.

Speaking of clouds, however, at once brings memories of the Industrial Lab ceiling. Painting a cloud is something of an accomplishment for even the most skillful artist; painting a cloud on a ceiling must be harder yet. Venema claims that it takes practically no time and very little effort. Anybody who can point to his achievement with justifiable pride the way he can, is entitled to speak with authority, for his is truly the work of a master.

Of course, this sort of thing can be overdone, especially in view of the high costs of interior decoration, since chemicals, unlike oil paints, have the unhappy faculty of changing color with time. For this, and other reasons, the appearance of more and bigger clouds on laboratory ceilings may be frowned upon by the custodian of the bankroll.

On this account we suggest that future aspirants to the exalted brotherhood refrain from such violent and colorful demonstrations to prove their worth.

After all, a cloud of smoke or a minor blaze is just as full of possibilities for excitement and under the right conditions, easier on the surroundings.

Ratner, who also won the cherished honor last week, seems to be highly exhausted from his efforts and is at present recovering from that tired feeling by seizing judicious and very beneficial naps in Professor Carpenter's metallurgy class.

Professor Bibb Is Rapidly Recovering

Professor Bibb, of the mathematics department, underwent a thyroid gland operation on Monday, October 26.

He has been absent from school because of illness since the beginning of the semester, but is showing rapid recovery after the operation. Anyone who wishes to see him and cheer him up will find him convalescing at the Woodlawn Hospital, Sixty-first Street and Drexel Boulevard.

It is hoped that he will recover sufficiently to return to school and resume his teaching some time before Christmas.

Bell Representative To Speak Here Friday

Through the courtesy of the Illinois Bell Telephone company, a representative of the American Telephone and Telegraph company has been obtained to speak at the meeting of the Armour branch of the A. I. E. E. to be held Friday at 10:20 in D-Mission.

The intricacies of the telephoto system will be explained in the talk. The name telephoto applies to the transmission of photographs by wire, and the service includes also the sending and receiving of facsimiles of such things as important documents, checks, fingerprints, and photographs.

Chemicals Visit New Coke Plant

An inspection trip to the Coke plant of the Youngstown Sheet and Tube Company at East Chicago, Indiana, occupied the afternoon for the senior chemicals last Tuesday, October 27.

In the process of obtaining coke from coal, numerous other industrial products are obtained, such as coal gas, ammonia, benzol, toluol, creosote, and pitch. The coke is manufactured for use in the main plant where iron is obtained from its ores.

The most impressive sight on the trip was the large and powerful elevator, which lifts a car containing 100 tons of coal every three and one-half minutes and dumps the coal into large bins.

This coal is taken to the distilleries where all volatile matter is removed. The four fractions obtained from the first distillation are coke, coal tar, coal gas, and ammonia liquor.

The latter three fractions are broken up into the constituent chemicals. Creosote and pitch are obtained from the coal tar, phenol and ammonia from the ammonia liquor, and phenol and toluol from the coal gas. The waste heat from the ovens is used in the distillation of the coal tar.

A new plant has been installed recently to recover the chemicals present in the ammonia liquor.

Ogden Avenue Bridge Inspected by Civils

The Ogden Avenue Improvement was the scene of an inspection trip by the Senior, Junior and Sophomore Civil students last Friday.

The students met at Division and Halsted streets at 1:00 P. M. Professors Wells, Ensz, Grafton, and Jacobson were the faculty members that were present.

The improvement is being constructed by the Ogden Avenue Construction Company. Mr. Langdon C. Hardwicke, who is Superintendent of Construction, graduated in the Civil Department of Armour in 1924.

The portion of the Ogden Avenue Improvement now being constructed forms the last link in the improvement and connects up the two completed portions which extend from Lincoln Park at Clark and Center Streets to Division and Halsted Streets and from Randolph Street to Chicago Avenue. This portion is two-thirds of a mile in length and extends from the right-of-way line of the Chicago and North Western R. R. to the west street line of Rees Street. It will eliminate two street car crossings, the grade crossing of thirteen railroad tracks; separate the traffic on Ogden Avenue from that on North Halsted Street and through-routing Ogden Avenue through one of the busiest industrial sections of the city.

The improvement crosses the North Branch of the Chicago River by means of a two-leaf trunnion bascule bridge. In designing this bridge it was necessary to use three railing height trusses in each leaf, thereby permitting a reduction in the depth of the floor beams. This reduction was necessary in order to

(Continued on page 2)

Professor Spears Lectures to W. S. E.

A meeting of the Western Society of Engineers was held last Friday at 10:30 a. m., in B. Mission.

Professor Spears delivered the lecture. His topic concerned the building of a hanger for the "Akron," the navy's newest and largest dirigible.

Because of the great size of the dirigible, some interesting problems in the design and construction of the hanger were encountered. The hanger is built up of parabolic arches. In the preliminary construction the three-hinged arch is employed but it is finally built up into an arch of two hinges by the introduction of permanent upper and lower chord members at the top hinge.

PROFESSOR ROESCH MAKES TESTS ON NEW INSTRUMENT

A new device for determining the completeness of combustion in gas engines is now on exhibition in the Automotive Laboratory and is being tried by Professor Roesch and his senior mechanicals. This indicator, developed in the last two years, is called the Casam-instrument. It has already been put to good use by Captain Hawks in some of his recent record-breaking flights. Its merit lies in its permitting the most economical setting of the carburetor by observing when the combustion efficiency approaches 100 per cent.

Briefly, this efficiency is determined by passing a sample of the exhaust gases, mixed with a considerable amount of air, over the two arms of a Wheatstone Bridge. One of these arms is arranged to act as a catalyst to cause the unburnt gases to burn at a lower temperature. The additional heat produced renders an unbalanced circuit in the Wheatstone Bridge thereby deflecting a galvanometer.

When there is no combustible material in the exhaust gases, the two arms of the bridge are equally heated and the scale of the galvanometer is marked 100 per cent. Most gas engines, however, show some unburnt or partially burnt gases in the exhaust such as CO, CH₄, and other hydrocarbons unless mixtures are so lean that starting is difficult.

Practical ratings for automobile engines are 85 per cent combustion efficiency as indicated by this instrument. Captain Hawks was able to adjust the carburetor from the pilot seat and so maintain the heat mileage or maximum power from the gasoline.

See Water Softening and Treating Plant

As one of a series of inspection trips planned by Professor Bentley, the junior chemicals visited the Hinsdale Water Softening Plant last Thursday, October 22, from 2:00 to 4:00 P. M.

This plant, which is one of the most up to date water treating plants in the United States, was finished in 1925. It was completed in a year and one half at a cost of 175,000 dollars.

The region including and surrounding Hinsdale abounds in limestone deposits, and hence the well water is very hard. This water caused trouble in steam generating plants, such as are in most homes, by the precipitation of various dissolved chemicals which clogged up pipes and reduced the efficiency of boilers. These troubles are eliminated by the present water softening plant.

The efficiency of the plant is unquestionably high in the matter of removing undesirable chemicals.

It is properly spoken of throughout the country as the "one man plant." W. P. Case is in charge of all operations, his official titles being Foreman, Chemist, Head of Maintenance Department, etc.

The only operation in the treatment

(Continued on page 3)

Christmas Concert Program Planned

At the last meeting of the Glee Club the newly elected officers assumed their duties in full force.

As an inspiration to the more or less irregular members, the fact might be mentioned that the director, Dr. Protheroe, has been late for rehearsals only once in his six or seven years of service. This noteworthy event occurred last week, when he was five minutes late for rehearsals.

The probable date of the winter concert is set for about December 17th. Among the numbers sung at this time will be: "The Song of the Jolly Roger", "A Song of Ships", "Jolly Fellows", and "A Little Close Harmony".

Warther Display of Models Here

Dean John C. Penn has recommended seeing the Warther Collection that is now on exhibition at the Sherman Hotel. The collection consists of every model of locomotive from the very first to the latest type of heavy mountain design. Ebony, ivory, and abalone shell were used in the carving of these unusual models.

Ernest Warther, an American of Swiss descent, made the locomotives from sketches and blueprints that he was able to procure.

Many of the models that are usually seen at exhibits of this nature are merely models from the standpoint of appearance. Those in this collection however, are true in every detail, even down to the tiny bolts and nuts which have actual threads and screwdriver slots.

All movable parts on the originals have been made movable in the models. This results in giving the exhibits a very finished and realistic appearance. Since the parts were made to specifications taken from scale drawings, all proportions have been preserved to a scale of one half inch for one foot.

The range of locomotive models includes about twenty-five units and is in itself an eloquent history of the progress in mechanical engineering which has given us a great modern convenience.

While the early types were built chiefly to satisfy given load conditions without breaking down in service, the most recent developments in engineering have made it possible to get other desirable features. Among these are the high efficiency and speeds characterizing the passenger trains operating on through schedules between distant cities.

To read a history of railroading from the very beginning would take considerable time, more time, perhaps, than we can very well spare. However, the subject is too interesting to pass by and the opportunity offered is one that may not be repeated in the near future.

A. I. Ch. E. Will Hold Meeting This Friday

Students in the department of chemical engineering will hear a lecture on the crushing and sampling of ores, at a regular meeting of the A. I. Ch. E. to be held this Friday, November 6, at 10:30 in the Physics Lecture Room.

The lecture promises to be an interesting one and is to be given by a representative of the Raymond Brothers Impact Pulverizing Company.

Speakers for meetings, which are held every two weeks, are obtained by correspondence with many industrial organizations. At present an attempt is being made to secure R. B. Harper of the Peoples Gas Light and Coke Company to lecture on the World's Fair Exposition to be held at Chicago in 1933.

Students in other branches of engineering are invited to attend the various meetings.

CALENDAR

Tuesday, November 3

5:00 P. M. Orchestra practice, Assembly Hall.
5:00 P. M. Meeting of candidates for basketball team, Gymnasium.

Wednesday, November 4

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

Thursday, November 5

2:00 P. M. Junior Chemical Inspection Trip.

Friday, November 6

5:00 P. M. Boxing Practice, Gymnasium.
10:30 A. M. A. I. E. E. Meeting, D Mission.

Monday, November 9

5:00 P. M. Boxing Practice in Gymnasium.

Honor "A" Plans Annual Banquet

The annual banquet of the Honor "A" Society will be held December 1, after the Varsity-Alumni basketball game. This was decided at a meeting held last Friday, but the place has not been chosen definitely, except that it will be held at one of the campus fraternity houses.

An election of a secretary was held and of the two candidates, E. Sade-man and R. Carlstrom, the latter was elected.

Bids to membership are being extended to a number of upperclassmen who have been active in sports.

H. C. Rossing is president of the society, and F. A. Ustryski is vice president.

Society Founded in 1914

The Honor "A" Society was founded in the spring of 1914 and is one of the oldest existing organizations at Armour. It was organized originally as the governing body of athletics at Armour, being supplanted in that capacity by the Armour Tech Athletic Association. It now exists as a society to promote athletics and to bind the letter men together. As a mark of distinction on the campus the members wear small gold "A" charms, a star being engraved for each sport award.

City Papers Await Adorning of Frosh

Interest in freshman hats has now risen to such a point that before long actual specimens may be seen and appreciated on our campus.

The upper classes have been thoroughly canvassed and the majority seem enthusiastic about the plan. The facts at hand indicate that most of the freshmen are not opposed to the idea of wearing skull caps. They realize that such an increase in collegiate atmosphere would be very desirable. Since skull caps are so common at other schools, the adoption of such a distinguishing mark would achieve the desired result without subjecting the freshmen to the ignominy of the more revolutionary Eugenie.

Dailies Getting Anxious

This venture is attracting almost as much interest outside of school as it is in. Recently a photographer from the Evening American hurried to school to take pictures of the hating event but was disappointed. Last Wednesday, a Herald and Examiner representative telephoned the school officials and asked to be informed of the developments of the idea.

The committee, in charge of this work, consisting of J. R. Jackson, Jr., J. R. Fernbach, and J. L. Lynch of the senior, junior and sophomore classes respectively, is of the opinion that the time honored skull caps are more appropriate for Armour than the recent Eugenie style.

Freshman Breaks Arm In Gymnasium Mishap

Mitchell Dojnick, '35, fractured his arm last Monday between 10:30 and 11:30 while participating in a basketball game in the school gymnasium.

Playing the position of forward, Dojnick dribbled the ball down the floor with a burst of speed. In some manner he collided with two other players and was hurled toward the wall. In order to check himself, he extended his right arm, but crashed with such impact that the arm was broken.

He was taken to Mercy Hospital by Dean Penn, where Dr. J. F. McNamara, the Institute's medical adviser, administered first aid, and set the fractured arm. It is expected that Dojnick will return to his classes some time this week.

Students taking gym should take notice of this unfortunate injury, and be more careful while playing basketball.

FOUR COMMITTEES OF SENIOR CLASS COMPLETING WORK

Jackets on Exhibition in Trophy Case Today

PRICES REDUCED

Four of the senior class committees have started the work for which they were formed and will announce the results of their activity in the near future.

The jacket committee has visited seven companies and has finally decided upon the firm of Rexford and Kelder. This firm manufactures senior jackets for Northwestern University, and the Universities of Michigan and Wisconsin. Their price is more reasonable than that paid in former years. Seniors may obtain jackets this year at \$7.50, a saving of one dollar.

It is planned to have a sample jacket on exhibition today in the trophy case, on the first floor of the main building. In the near future a man will be sent to the Institute by the company to measure those who wish to order jackets.

The following men compose the committee:

T. A. McGill, chairman.
V. R. Candberg.
L. G. Wilkie.
J. Palma.
R. E. Long.

The photograph committee, working in conjunction with the Cycle editorial staff, has received bids from four studios. The cost of pictures this year will not be more than that in previous years, but may be less. The company to which the contract will be awarded will be decided upon by the end of this week. The committee is headed by Oscar Eskonen.

The decision as to which of two concerns to chose for the job of handling the senior announcements lies with the committee headed by J. R. Jackson Jr.

E. A. Scanlan, Jr. reports that his committee on senior jewelry is at work and will soon show results.

Dramatic Club Holds First Meeting Nov. 6

There will be a meeting of the Dramatic Club, which is in the process of being formed at Armour, next Friday, Nov. 6, in the Tau Beta Pi rooms from 5 to 6 o'clock.

The rooms are located on the third floor, first entrance of Chapin Hall. To date about twenty-five men have signified their intention of joining the club. The prospective members are equally proportioned between all the departments of engineering, and in view of this fact the drama club should be a success from the technical standpoint.

Among the business to be taken up will be the choosing of an appropriate name for the organization. A mysterious name or one which must be looked up in the dictionary for the meaning is wanted. Anyone with ideas on the subject please express them to the committee in charge. There will also be an election of officers so as to get the club organized and in working order as soon as possible.

The object of the Dramatic Club is to furnish entertainment in the form of one act plays at any of the various smokers or meetings of the student body, where such entertainment is needed.

SALAMANDER PLEDGES CLANTON

Carl Clanton, F. P. E. '33, has been pledged to Salamander, honorary F. P. E. fraternity. The pledging took place Wednesday, Oct. 28, at 2:00 P. M. Clanton the only man pledged, has the highest scholastic average of the junior fire protection engineering class.