



ALTER ELECTRICAL LABORATORY; PLAN EFFICIENT SYSTEM

Improved Lights Provide Better Working Conditions

MORETON IN CHARGE

In order that the laboratory equipment may be used to the best advantage for and by the student, the electrical laboratory located on the second floor and at the south end of the Main Building, is being remodeled.

The rearrangement was initiated following the appointment of Professor D. P. Moreton as supervisor of all the electrical laboratories. Both Dr. Raymond and Mr. Allison are cooperating.

The moving of the machine shop from the electrical laboratory at the beginning of last month to a place near the boiler room, inaugurated the changes taking place in the electrical department. The carpenter shop, which was previously located in the Mission Building, is now near the mechanics' shop, thus giving the maintenance department of the Institute a more central location.

Professor Moreton during the Christmas holidays, superintended the work in the electrical laboratory, which is now rapidly nearing completion. With the labor and materials at hand and in a most economical manner, the ceiling of the laboratory has been stripped of all the unnecessary wiring and pipes, the ceiling has been washed, twelve Goodrich lighting fixtures of 500-watt rating have been installed, arrangements have been made for obtaining at several points in the room both alternating and direct current, several exhibit cases have been fixed, and the laboratory benches have been arranged for best efficiency in work.

In addition to the above important improvements, the cases housing the electrical instruments and apparatus have been placed in a more symmetrical order. The final arrangement of case permits Mr. Falk, who is in direct charge of the distribution of apparatus, a better discharge of his duties.

The advantages of the installed improvements are many. Among the most important is the fact that the working plane of the student is now illuminated to an excellent degree by the new lights. When completed the room will lend maximum aid to the student, both in running experiments and in study.

Changes in the dynamo laboratory will mainly involve the installation of new lights and probable other improvements. We are informed that the work is a part of the electrical laboratories only and that the improvements have been carried on without outside help, the men employed being regular Institute employees.

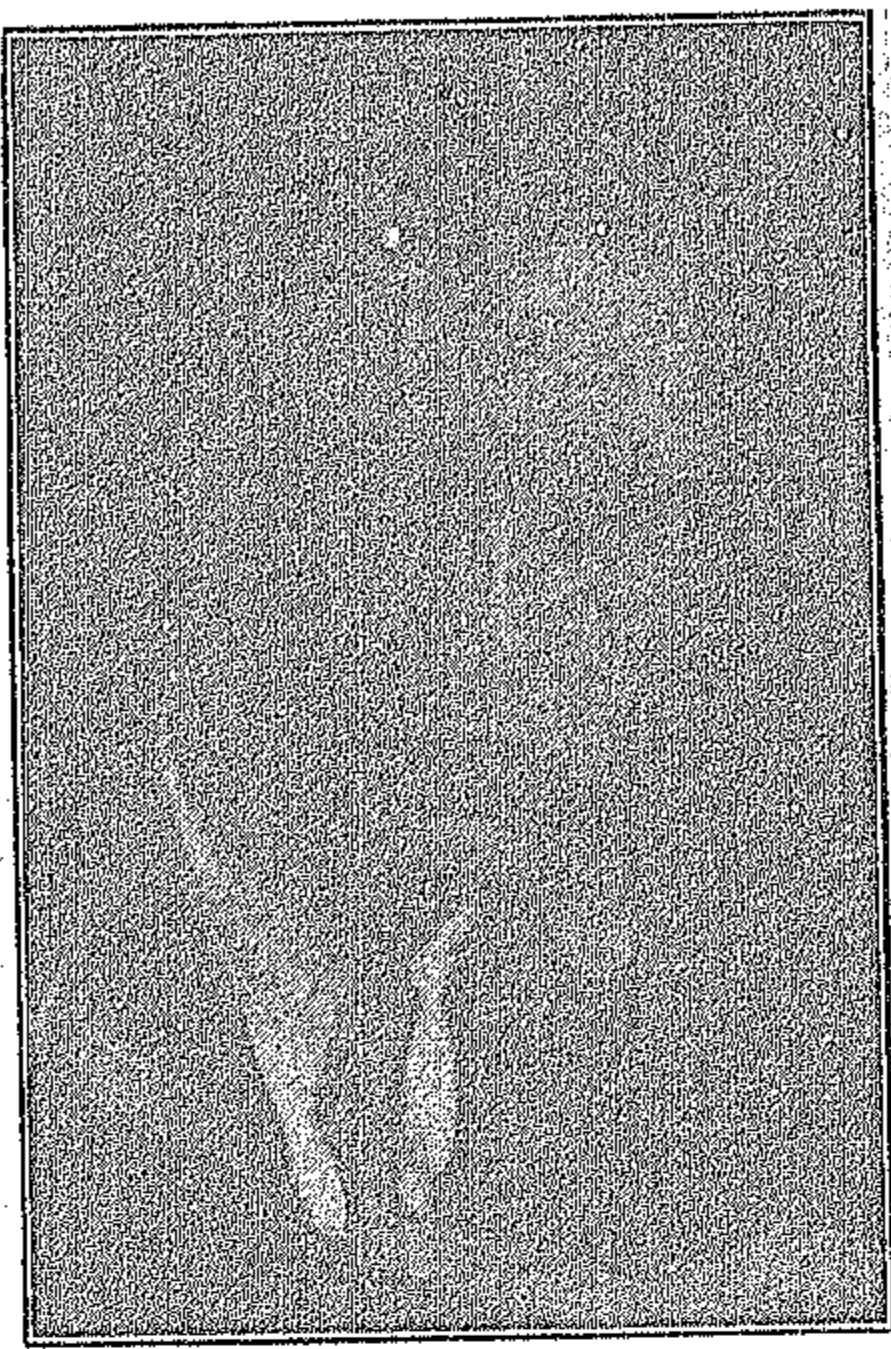
Rifle Club's Trophy Now on View in Hall

The beautiful silver cup, recently won by the Armour Tech Rifle Team, is now on display in the showcase near the Office of the Deans'. The Rifle Team should be proud and justly commended for securing this pompous and imposing addition to Armour's trophies, won in the fields of competitive sport.

According to an announcement by A. H. Helmick, a postal meet is to be held with Lane Tech next Friday. Meanwhile, the members of the team are going through a rigid practice in preparation for this and the coming Chicago Tribune meet.

A meeting of the club is to be held sometime next week.

RETIRING AND NEW EDITORS



Fred B. Attwood



Wilbur H. Rudolf

Junior Informal Draws Big Crowd

The Junior class was host to over two hundred-twenty-five couples at their annual informal dance held Friday, January 16 at the Steuben Club with Jinx Bryants classy band entertaining.

The resulting gala time was due to active work on the part of the promoters and it was the opinion of everyone that the first social event of the college year was a success.

The twenty-fourth floor of the Steuben Club is scientifically built to eliminate distortion in sound. The orchestra pit is so situated that the music can be heard in all parts of the hall easily. The outcome was that Jinx Bryants' band, under this ideal condition provided music in Paul Whiteman style.

In keeping with the occasion were the fine programs which were obtained for the dance. Here a black kid cover was employed with the Armour Tech seal set upon it in gold letters.

The ballroom was large and beautifully decorated, as were the several associated lounges. Pictures of the dance were taken during the evening and will appear in the Cycle.

Chairman James J. Casey announced that the Junior class did not suffer a loss, as in former years, but that a complete checkup will show a profit. Thus the committee feels that the dance was a success financially as well as socially. The committee members were:

- J. J. Casey, Chairman.
- J. E. Bryant
- A. J. Jungels
- G. W. Schodde.
- R. F. Waindle.

The invited guests of the evening were Professor and Mrs. E. T. Heald and Professor and Mrs. E. C. Grafton.

Sophomores Guests at Alpha Chi Sigma Meet

Alpha Chi Sigma, professional chemical fraternity, held a smoker last Thursday evening, January 15, at the Sigma Kappa Delta Fraternity House.

The sophomore chemical engineers were invited as a body to fraternize with the chemicals of the upper classes at this meeting. Professor Tibbals and many alumni were present.

The evening began with various groups gathered around card tables participating in games of select nature. After due time was spent with the pasteboards, the evening was turned over to a game of Monte Carlo, in which green and yellow bills were flashed right and left without reserve.

After taking pictures of the group, and assimilating some food, the smoker broke up.

Sophomores Hear Of Dance Plans

A report of the sophomore social committee was given at the class meeting held at 10:30 Monday in Science Hall. Elmer Sademan, president of the class, called the meeting to order, and after a short talk, turned the discussion over to the social chairman, Otto Staib.

The group was told of the progress of the social committee in their work on the Sophomore Dance. Although an orchestra has not yet been engaged, several orchestras have been heard, and the process of elimination begun.

No definite date for the dance has been set, but it was tentatively decided that it would be held sometime during February. The question of the cost of the bids came up, and the usual two dollars and a half was voted as the best price.

J. O. Cavanagh Elected Head of Campus Club

A meeting was held by the Campus Club Thursday, January 15, in their rooms in Chapin Hall, to make preparations for the annual midyear banquet and to elect officers for the coming year. This banquet, held every year between semesters, took place in the Great Northern Hotel last year.

Several committees were appointed by the president to make arrangements for the place and exact date, and for the notification of alumni members. An appreciable amount of support is expected from the newly re-organized Campus Club Alumni Association which acts in an advisory capacity to the club. After a short discussion the election of officers was held. The new men who are to assume the duties are:

- J. O. Cavanagh, President.
- N. C. Cannon, Vice-President.
- S. F. Winegar, Recording-Secretary.

The executive secretary and treasurer is to be appointed by an Institute committee on the recommendation of Professor Mangold, the faculty representative. These officers will then be formally installed at the banquet.

Organizations Asked for Data by Office

The Office of the Deans' has mailed to the various social fraternities, honorary fraternities and clubs a letter requesting a list of all the members, pledges and the name of the faculty advisor. Included in this letter there was a reprint of the regulations of the administration with regard to the fraternities and clubs on the campus. This request was formerly made by a notice placed on the bulletin board white this year it was mailed.

New Engineer To Be Out Tomorrow

A sketch of the Palmolive Building by Spencer Cone, architect '33, is to be the cover design for the Armour Engineer which is to be distributed tomorrow, Wednesday, January 21.

This issue will contain an article by Professor Daniel Roesch on Aircraft Engines. It is the first of two articles to be written; the second will appear in the March issue.

These articles will incorporate results of original tests and experiments which Professor Roesch has performed in the Automotive Laboratory. They are written so that its matter will be of general interest to everyone as well as to those who are taking aircraft design.

The operation and the outstanding features of the Lindbergh Beacon together with comparisons with other beacons, are discussed at length by R. M. Krause. A comparison of its surface intensity to that of the sun is made among other interesting comparisons.

The highlights of the manufacture of acetylene gas for commercial use are described by Chester Stempkowski who writes in detail of the various processes which convert carbide into the gas that is extensively used for heat and illumination in isolated districts.

There is also an article by P. C. Peacock who describes his experiences as a Civil Engineer in Liberia, Africa.

He has incorporated many comments on the life of the natives which are used with good effect in his story.

Illumination To Be Topic of A. I. E. E. Talk

The Armour Branch, of the A. I. E. E. will hold a meeting at 10:30, Monday morning, January 26, in Room D, Mission Building.

Mr. O. P. Cleaver, of the Westinghouse Lamp Co. will address the students on "Illumination." Mr. Cleaver has promised that his lecture will be accompanied with interesting slides and examples of modern lighting fixtures.

Chairman K. A. Knittel has prepared plans for the coming semester and wishes to announce them at this time. This is the last scheduled meeting, of the branch, for this semester and promises to be most interesting in character.

S. E. Winston Elected Faculty Club Head

Faculty Club held its regular annual meeting on Thursday, Jan. 15. Aside from attending to regular business, the club elected officers for the coming year. Those elected are as follows:

- S. E. Winston, President.
- H. T. Heald, Vice-President.
- E. E. Gill, Auditor.
- D. P. Moreton, Treasurer.
- S. F. Bibb, Secretary.

CALENDAR

Wednesday, Jan. 21
8:30—Engineer distributed in Main Lobby.

2:00—Alpha Chi Sigma meeting in the P. L. U. rooms.

4:30—Tau Beta Pi meeting in the Tau Beta Pi rooms.

Thursday, Jan. 22
8:00—Basketball: Armour vs. Wheaton at Wheaton.

Friday, Jan. 23

7:30—Track: Chicago, Loyola, and Armour at Bartlett Gymnasium of the University of Chicago.

7:45—American Chemical Society meeting at the City Club, 315 Plymouth Court.

Monday, Jan. 26

5:00—Boxing: Chicago Armory Headquarters vs. Armour in the Armour Gym.

TECH NEWS STAFF PASSES INTO HANDS OF JUNIORS; RUDOLF TO BE NEW EDITOR

J. J. Casey, M. J. Schinke, E. W. Carlton Other Members of Managing Board

TAKE OVER DUTIES WITH THIS ISSUE

Electricals Make Trip To Goodman Factory

The Junior electricals, together with Professor Moreton, made an inspection trip through the armature winding department of the Goodman Manufacturing Company, last Thursday, January 15. This organization, with main offices at 4834 South Halsted Street and covering an area of several city blocks, specializes in the manufacture of electric mining locomotives and machinery.

The men arrived at the plant at about 1:30 and were divided into four groups, each being provided with a guide. The coil winding department was visited first. Here the coils are wound usually by hand, since the coils for mining machinery must be accurate. After this the coils are taped and impregnated with a protective compound in an evacuated tank.

Commutator segments are placed on a form with the proper insulation, tightened, and baked, after (Continued to page 3)

In accordance with the tradition established by the previous staff, the management of the Armour Tech News passes with this issue from the seniors to the juniors. Wilbur H. Rudolf is the new editor-in-chief, assisted by Max J. Schinke, managing editor, and Edward W. Carlton, news editor. The business staff is to be headed by James J. Casey, business manager, and Harold Monger, advertising manager.

Other Tentative Appointments

The other positions on the staff are tentatively filled, the qualifications of the men to warrant their retaining their positions. The feature editor is to be John R. Jackson, and working with him will be the departmental assistants. Fraternity news will be handled by Harold Bodinson, architectural news by E. C. Kubicek, art work by Dave Chapman, and the Slipstick will be run by Phil Jordan with George Bonvallet as associate conductor.

The reporters will work under O. T. Barnett, the assistant news editor, and the sport writers under H. P. Richter, sports editor, and Chester Stempkowski, the associate editor.

In the business staff, the advertising assistant will be Milton Collick, and the circulation manager, James McCall. A group of men will probably be needed in the circulation department, although it is planned to change the distribution system next semester under the compulsory subscription plan.

Advisory Board Formed

The retiring managing board, consisting of Fred B. Attwood, retiring editor-in-chief, Arthur H. Jens, Alvin B. Auerbach, the retiring managing editors, and Frank Spalding, retiring business manager, will constitute the advisory board to the new staff. They will actively supervise the new men for the first few issues, and then serve solely in an advisory capacity.

Hendricks Again Faculty Advisor

Professor Walter Hendricks will again serve as the faculty advisor for the News, a position that he has had since the paper was founded under his assistance. Under the new plan of subscriptions, the financial responsibilities will not bear upon him, but he will again keep a strict supervision on the literary quality of the paper.

Vacancy in Program Of Upper-Classmen

The Friday 10:30 class on the programs of Sophomores, Juniors, and Seniors will be left vacant this coming semester. The office has scheduled no classes at this time in order to put a new plan into effect. In the future all meetings of the various societies will take place at this time if possible. In that way students will not be forced to miss out on their classwork.

In an event that some meeting or assembly must be held some other time during the week, the classes scheduled for that hour will automatically be made up at 10:30 on the following Friday. It is suggested, however, that except in unusual cases, all meetings be held on Fridays during this open hour.

The next issue of the Armour Tech News will contain a complete schedule of examinations.

According to the Institute calendar the examinations are to take place February 2-4.

John Schommer Wins Prize for Big Fish

Professor John J. Schommer has recently been awarded first prize by the *Field and Stream*, sportsmen's magazine, for catching the largest wall-eyed pike in the United States during 1930. Professor Schommer landed the fish at Wildcat Lake, Wisconsin and the measurements of the fish are: length 34½ inches, weight 14 lbs., girth 8½ inches. Professor Schommer is proud of his catch and justly so, for the prize carries with it fifty dollars worth of sporting goods.

Chi Eps Elect New Officers At Meeting

Chi Epsilon, Honorary Civil Fraternity, held a meeting in their rooms in Chapin Hall last Tuesday, January 13. The following officers were elected to hold office during the next semester.

- R. H. Meagher, President.
- A. B. Auerbach, Vice-President.
- C. H. Miller, Secretary.
- L. H. Dicke, Treasurer.

Press Club Begins Membership Drive

A concentrated drive for membership has been started by the Press Club. The drive will last about one month and will culminate with a big smoker to be given at the Sigma Kappa Delta House, February 26. According to R. G. Kellner '31, who is in charge of the arrangements, a speaker who is prominent in the field of literature will present a talk. The membership fee is fifty cents and will be used to defray the expenses of the smoker.

The Interfraternity Council held a meeting last Wednesday in the Tau Beta Pi rooms. C. Robin presided and called the meeting to order at two o'clock. Discussion centered itself about the recent basketball tournament which was won by Phi Pi Phi.

The fraternities were urged to send in their assessments for the basketball cup. The meeting adjourned at 2:30 o'clock.

Armour Tech News

Student Publication of the
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CHICAGO, ILLINOIS
Published Weekly During the College Year



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\$2.00 Per Year Single Copies, 10 Cents Each

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H. Bodinson, '33 H. Pilgrim, '31
A. Myers, '31

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"Lord of himself;—that heritage of woe,
That fearful empire which the human breast
But holds to rob the heart within of rest."
George Gordon Byron.
Born Jan. 22, 1788.

ACHIEVEMENT

At this time, when those who have been in charge of the Armour Tech News have just retired, and others are endeavoring to fill their places, it is perhaps appropriate to look back for a moment and see what has been accomplished by the retiring staff members and their predecessors.

For many years before the first issue of the Armour Tech News appeared the student body in general had felt the need of a school newspaper. The freshmen came from high schools where weekly or monthly publications were accepted as a matter of course. These new men constantly kept up the cry for some method of unifying the student body—a task that can be accomplished only by a newspaper.

An attempt was made to start the publication of a college weekly but this failed when the student organizer left school through ill health.

Several years passed and then, three years ago, another group of journalistically minded men succeeded in producing the first issue of the Armour Tech News on April 9, 1928. Four more issues were published that first semester and the following September it was made a weekly newspaper.

The Armour Tech News has made an enviable record during its life of nearly three years. Thirty issues have appeared each school year and never has an issue varied from its time of distribution by more than ten minutes.

The News has had for its policy the unbiased dissemination of school news and has adhered to that policy to the best of the ability of the staff members.

The News has filled a hitherto vacant place in the school life and is here to stay. That the student body has come to appreciate and want the News was proven at the last assembly by the unanimous vote to support the News. That declaration on the part of the students as a whole has removed the most difficult and most constant problem the paper has had to cope with during its life—namely, that of financial backing.

The incoming staff of the Armour Tech News is composed entirely of men who came to the paper after it was founded. The last members of the original staff have now retired and left the News in our hands. We appreciate the honor thus given us and accept the responsibility it entails. To us is given the task of maintaining the high standards on which the News has always been operated. We will give our best, and we sincerely hope that our best may be found satisfactory.

W. H. R.

"The Slipstick"

Cleave to "The Slipstick"; let the Slipstick fly where it may.

TELL ME

Tell me, friend, oh, tell me!
Who was Paul Revere?
Do Jersey cows wear jerseys?
Is near-beer very near?
Are humbugs bugs?
And why are bugs?
Do swallows swallow fast?
Are highbrows really always high?
Do flies like to be cast?

And if you think I'm going bats,
Be lenient, worthy brother,
I found a dusty old book
That's called, "Ask Me Another."

If some of the boys don't scrape Gillettes over their faces pretty soon the janitor is going to use them to clean up the classrooms.

Abie: "Poppa, vot is science?"
Poppa: "My goodness Abie, how could you be so dumb? Science is dose thinks wot says, "No Smoking."
—Dutch.

Instinct

Little Isaac was crying bitterly on one of the main streets of a big city. His sobs soon brought a large crowd about him. He was a miserable looking little wretch and his howls were loud and terrifying. An elderly woman stepped from the crowd and, placing an arm around the boy, asked sympathetically: "What's the matter? My child, are you lost?" The boy sobbed for a moment and then paused. He looked all around at the large audience he had assembled. Then, lifting up his voice, he shouted, loudly:

"Yes, ma'am, I'm lost. Will somebody please take me home to Jacob Silverstein, the well known clothier of the West End, who has just got in his new stock of spring overcoats, suits, neckties, shirts, hats, and umbrellas, which he will sell cheaper than anyone else in the city?"
E. K.

CURSES ON NOAH

We have to shoo and swat
The fly from dawn to dark,
Cause Noah didn't swat the two
That roosted in the ark.

SOUP

"If not delivered in five days, never mind," said the parcel post inscription on a shipment of ice cream.

Patron: "May I have some stationery?"
Hotel Clerk (haughtily): "Are you a guest of the house?"
Patron: "Heck, no. I'm paying twenty dollars a day."

No Choice

Kelly and Cohen were having dinner together. Cohen helped himself to the larger fish and Kelly said: "Fine manners you have, Cohen. If I had reached out first I would have taken the smaller fish."
"Vell," Cohen replied, "you got it, didn't you?"

A man's life was saved the other day when he tried to look into the gasoline tank of a cigar lighter.

An Eye For An Eye

Motorist—"Five gallons of gas."
Gas Man—"Yes, sir; and any oil?"
Motorist—"No, just gas."
Gas Man—"Want the car washed?"
Motorist—"No, just the gas, I said."
Gas Man—"How about some skid chains?"
Motorist—"No. Gas is all."
Gas Man—"Does she need greasing?"
Motorist—"No! Gas, gas, gas! Nothing but gas. Cut the chatter."
Gas Man—"Yes Sir." And as the motorist drove away very hot under the collar, the garageman added, "Well, that's one time I got even with my barber."

Students may come late, but the professor who comes late is very scarce. In fact he's in a class by himself.

NOW HE HAS A HEADSTONE

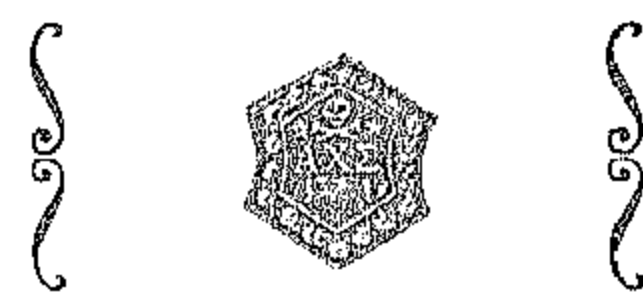
Prof. Scherger: "We have stones upon which the ancient Gauls wrote centuries ago."
Voice: "Aha! Gaul stones!"

"Gotta flat tire."
"Musta been that fork in the road."

Yessir—with this new system of advance registration we feel that it will be just one more step until we'll probably register in real comfort.
—Phil J.

ALPHA CHI SIGMA

Professional Chemical Fraternity



Alpha Chi Sigma, national professional chemical fraternity, has the distinction of having established most recently a chapter of a national fraternity at Armour. On December 13, 1930, the members of the local fraternity known as Flask and Beaker were initiated into Alpha Chi Sigma, and the forty-seventh collegiate chapter, Alpha Psi, was founded.

The charter members of the new chapter are Professors C. A. Tibbals, A. H. Carpenter, and W. J. Bentley; C. E. Morris, '30; P. M. Ruzevich, '30; J. E. Tarman, '30; W. R. Trognitz, '30; L. C. Brunstrum, '29; J. J. Doheny Jr., '27; M. P. Johnson, '28; M. E. Lovejoy, '27; Eugene Naef, '28; G. L. Parkhurst, '27; C. H. Seeley, '27; A. J. Stabovitz, '29; E. A. Armit, '26; F. B. Attwood, '31; O. J. Flala, '31; H. J. Latham, '31; I. B. Lehman, '31; L. V. Melcarek, '31; C. J. Stamborg, '31; A. F. Bigelow, '32; R. H. Blom, '32; J. O. Cavanagh, '32; O. G. Linnell, '32; O. R. Steinert, '32; and G. J. Stockmann, '32.

Flask and Beaker club was founded early in 1926 under the leadership of G. L. Parkhurst, J. J. Doheny, the late John Urban, M. E. Lovejoy, and other members of the senior class. One of the purposes of the organization was to petition Alpha Chi Sigma fraternity for a chapter at Armour. Correspondence was established with their officials, and last fall it was

decided to grant a charter to the members of Flask and Beaker.

Aims of Society

The fraternity does not conflict in its aims with Phi Lambda Upsilon, honorary chemical fraternity. The purpose of Alpha Chi Sigma is to bring chemical students and men in the chemical profession in closer contact, and to strive for the advancement of chemistry both as a science and a profession in every way possible. Phi Lambda Upsilon is an honor society formed for the purpose of rewarding students who have attained a high scholastic average in their collegiate studies.

In addition to the forty-seven collegiate chapters located throughout the country, there are seventeen professional chapters situated in the principal cities of the United States. These chapters are made up of men formerly members of collegiate chapters. A placement bureau is maintained by these chapters for the purpose of securing positions in the chemistry field. Candidates are elected twice yearly from the members of the sophomore, junior and senior classes in chemical engineering. Election is based on ability, personality, and scholastic standing.

The pin of the fraternity is shown at the head of this article. The pledge pin is of similar shape and size, but bears the alchemical background.

Each year the fraternity awards a membership in the American Chemical Society to the Freshman in the chemical department with the highest scholastic average.

The officers of the local chapter are: F. B. Attwood, pres.; G. J. Stockmann, vice-pres.; J. O. Cavanagh, reporter; I. B. Lehman, treas.; R. H. Blom, recorder; O. R. Steinert, master of ceremonies, and A. F. Bigelow, alumni secretary.

Arx News

It is with this biography, that of Robert Adams, that we begin a series of short biographies of notable architects.

Adams was born in Kirkcaldy, Scotland, in 1728 and is supposed to have studied at the University of Edinburgh. He spent three years studying in Italy—1750 through about 1754—and while there was struck by the fact that so little material existed on Greek and Roman architecture other than public buildings. The private palaces, which had been thought so highly of by Vitruvius and Pliny, were practically all gone.

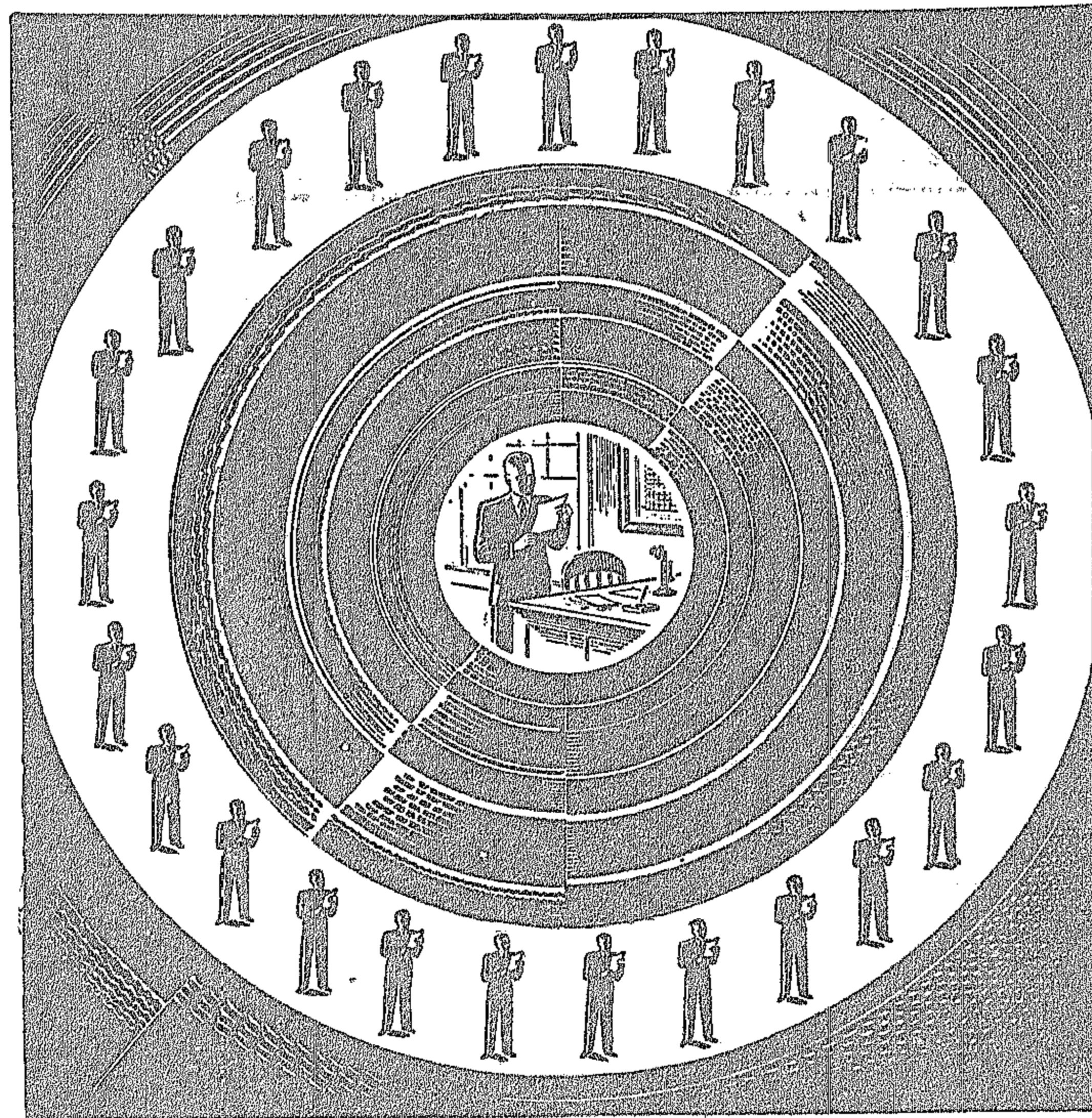
In his enthusiasm he visited the ruins of the palace of Diocletian at Spalato, in Dalmatia, and with three assistants in five weeks time managed to accumulate enough material and measurements, in the face of much opposition from the Venetian governor and the population, to produce a restoration of the entire building. He published his findings under the title, "The Ruins of the Palace of Diocletian."

His work, done in conjunction with his brother on a series of terraces, the Adelphi, in England, showed much skill and taste. He then turned his attention to the study of furniture design and interior work, such as doors and mantelpieces.

Upon his death, in 1792, his burial took place in Westminster Abbey.

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Chemicals Hear Talk on Celotex Products

E. C. Lathrop, Research Director of the Celotex Company, addressed the Armour Branch of the A. I. Ch. E. last Tuesday morning at 11:30 in the Physics Lecture Room. He presented a talk that illustrated many of the problems that confront a chemical engineer in the field today. In order to better illustrate his many points he showed a reel of motion pictures.

The motion pictures showed the group the various steps in the manufacture of Celotex from the time it is cut on the sugar cane plantations until it is packed into box cars for shipping to the different parts of the civilized world. Dr. Lathrop passed out samples of Celotex that carried a printed slip telling of its insulating properties. The data for these sheets was compiled by Professor Peebles of the Institute. Professor Peebles has made many determinations of the heat resisting properties of the various types of Celotex.

Isadore Abraham, '31, is being congratulated as the most recent recipient of the Schmier-Kemiker trophy. The accomplishment bringing him this honor is a reduction experiment which gave a beautiful splatter finish to an otherwise monotonous wall in the senior chemistry lab. The award was made by unanimous vote of his fellow students.

TO THE STUDENTS OF THE INSTITUTE:

The *Armour Tech News* was put on a compulsory subscription basis on Thursday, December 18, 1930, by unanimous vote of the student body.

The placing of the *Armour Tech News* on this basis came as a result of several conferences in which various plans were discussed by the managing board of the paper and the officials of the Institute. As a result of these conferences, it was decided to put the following motion before the student body: "That one dollar be added to the student activity fee each semester for the creation of a fund to be used in operating the *Armour Tech News*." This was the motion carried by unanimous vote of the assembly.

The immediate need for this move was the accumulated debt with which the *News* was burdened. From figures obtained through a study of the operating expenses in the past and the probable expenses in the future, it was seen that it would be impossible for the *News* to continue on its original basis.

The first use to which this added income will be put will be the wiping out of this debt of past years. The next act will be the improvement of the content of the paper in order to make it compare favorably with student newspapers of institutions of a similar size and type to Armour Institute. It is not the intent of the staff to squander the money in putting out a paper which would be beyond the needs of the student body.

At the end of the first semester, Spring 1931, it is the intent of the staff carefully to examine the expenditures and income of the paper with the idea in mind of reducing the subscription price to \$.75 a semester. This price is a fairer one to the subscriber in comparison with the policies adopted by other institutions. It is believed by the staff that it is possible to operate the paper satisfactorily at this subscription rate (\$.75), and quite possible to make a profit.

Any profits which accrue from year to year shall be maintained in the *Armour Tech News* Fund until of a size, which in the opinion of the staff and their faculty advisor, is unwieldy and unnecessary to maintain. In such an instance, the staff shall confer with the officials of the Institute regarding some plan by which a portion of this amount may be turned over to the A. T. A. A.

FRED ATTWOOD.

Electricals Make Trip To Goodman Factory

(Continued from Page 1)

which the commutation surface is turned down. Armature core laminations are stamped in one operation by a large machine and then placed on the shaft and fastened. After the windings are put on, the armature is tested for static and dynamic unbalance by a machine which gives the location and the amount of any unbalance in inch pounds. The baking room, kept at a temperature of 200 degrees F. for drying the armatures, proved too hot for a few men who entered.

Motors for locomotives which travel through low passageways are made very compact so that the total height of the locomotive is only eighteen inches. The motors used in gaseous mines must be totally enclosed, according to Bureau of Mines specifications, so that any sparking at brushes or controller does not cause an explosion. Since the use of trolleys or third rails is out of the question for a similar reason, a reel, attached to the rear of the locomotive and wound with a feeder five hundred feet in length, pays out the cable as the machine leaves the entrance of the mine.

When the trip was finished, at about 3:30, the men left the plant after thanking the guides for the interesting experience.

Rivetless Ship Built at Charleston, S. C.

A new type of ocean-going craft has been launched.

The first rivetless cargo vessel is now riding the waves in Charleston harbor awaiting her service tests, after which she will begin a life of usefulness as a 2,500-barrel oil tanker.

Rivetless scows and rivetless yachts have been made, as well as several vessels combining both riveting and welding, but never before a completely welded, ocean-going carrier. The ship is 120 feet in length, 23 feet in width and has a ten-foot draft.

The arc welding was done under a new system of dove-tailed lock-notched plates, developed by Richard F. Smith, a young ship designer and inventor. It effects a saving of 20 per cent. in weight and 25 per cent. in cost compared with riveted vessels.

Only 8,000 pounds of welding wire were used instead of 85,000 pounds of rivets. The cargo capacity is also greater because of the absence of rivets, bolts and angles. Nine workmen were employed to operate the acetylene cutting torch and electric arc welding machine used.

The vessel was built by the Charleston Dry Dock and Machine Company for the Texas Oil Company.

Professor George L. Scherger spoke Wednesday evening, January 14, at a banquet given at the Evangelical Lutheran Church, Michigan Avenue and Seventieth Street. The subject of Dr. Scherger's address was "European Conditions."

Among the 660 guests present were Judge Lyle, one of the foremost candidates for Mayor of Chicago, and Dr. Herman J. Shirk, pastor of the Evangelical Lutheran Church.

"Age Of The Earth" To Be A. C. S. Talk

A lecture which should prove of interest to Armour students in general and to chemical students in particular may be heard at the regular meeting of the A. C. S. at 7:30 p. m. Friday, January 23, in the City Club of Chicago, 315 Plymouth Court.

Dr. G. Hevesy, Professor of Physical Chemistry at the University of Freiburg, will be the lecturer. His topic, which is, "The Age of the Earth" will be developed from his research dealing with radioactivity. Dr. Hevesy, who is a Hungarian by birth, has done much investigating along these lines, including two years' work with Rutherford. His experimenting at Copenhagen in collaboration with Dr. Caster, noted Dutch chemist, led to the discovery of hafnium. Research in such fields as atomic structure and the separation of isotopes, has given Dr. Hevesy a perspicuity which should make any lecture he offers well worth attending.

Group meetings of the A. C. S. at 8:45 p. m. on the same night hold forth: in the Inorganic and Analytical section, a discussion on new developments in Paints and Varnishes by Robert J. Moore, in charge of the Varnish Development Division of Bakelite Corp.; and in the Chemical Education section, a recollection of Moissan and Curie by C. J. Moore, Crane Junior College, speaking on Student Days in Paris, 1906-07.

The school of petroleum engineering of the University of Oklahoma is the largest in the world and its enrollment this year has increased ten per cent.

"Wisdom is the principal thing." —Solomon.

A. I. E. E.'s Hear Talk On Plant Operation

An opportunity to come in closer contact with some of the phases of power plant operation was afforded the members of the A. I. E. E. when R. B. Kellogg of the Northern Illinois Public Service Co. addressed their meeting last Thursday evening at the Engineers' Building.

In presenting his subject, "Power Plant Operation," Engineer Kellogg first stressed a side of his topic the importance of which is often overlooked, that of personnel organization. Then turning to the mechanical side of power plants he outlined various factors indispensable to the efficient operation of boilers, turbines, and other equipment.

His points were well backed up with numerous curves, carefully compiled data, and the necessary statistics.

NEW BOOKS NON-TECHNICAL

Talks and Talking
Kleiser, Grenville.

Marks of an Educated Man
Wiggan, A. E.

TECHNICAL

Conduction of Electricity Through Gases
Freeman and Hoppe.

Electrical Transmission and Distribution
Kapp, R. O.

International Critical Tables
National Research Council.

Legal Elements of Boundaries and Adjacent Properties
Skelton, R. H.

FRATERNITY NEWS

PHI KAPPA SIGMA

The actives and pledges of this chapter are invited to be the guests of the Chicago Alumni Association of Phi Kappa Sigma at a banquet to be held February 5 at the Inter-Fraternity Club.

Among the better known Phi Kaps to be present are Mr. Dyche, who built the Dyche Stadium at Northwestern, Wally Knutson, Red Clark, and our own John Schommer. Clark was voted the most valuable man on the Northwestern football team last year, and to Knutson belongs the honor of being Chicago's most valuable player.

TRIANGLE

Norman Beggs, vice-president of the National council, has completed this year's annual chapter inspection.

Things are now rather quiet as the boys are familiarizing themselves with slip stick and text books, preparing for the final exams.

SIGMA KAPPA DELTA

The House has been the scene of the greatest activity in the past week. Pictures were being taken for the Cycle, the brothers being "decked out" in their best for the occasion.

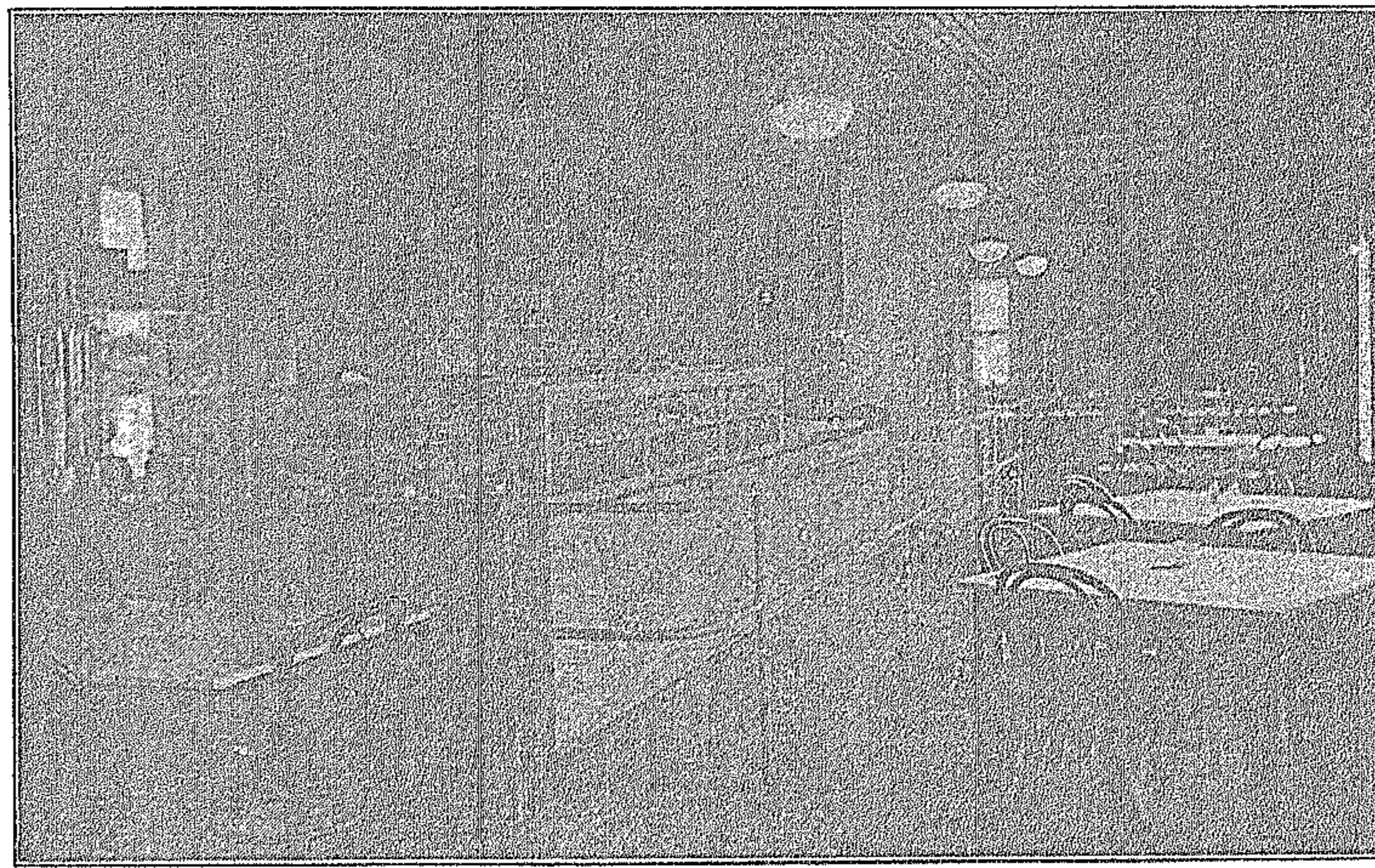
BETA PSI

Beta Chapter will hold an alumni smoker at the house Friday, January 23. At that time alumni living in Chicago and nearby areas will get together.

DELTA TAU DELTA

Francis Montgomery, '24, came in from Creighton, Neb. and spent the week end at the House. Butch Beal, '30 and Walt Healy, '29, have also been by for a visit.

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ARMOUR CAGEMEN LOSE TO "Y" AND AUGUSTANA FIVES

Free Throws Spell Tech Defeat in Close Game

RALLY FAILS

Armour's basketball team was administered its third straight defeat when Y. M. C. A. College outscored the locals 38-24 in the game played last Monday at the "Y" gym.

Wilson and Meyer, Y. M. C. A. forwards, lead the attack for Y. M. C. A. College by scoring 27 points. Their contribution of field goals and free throws was enough to give "Y" its victory.

Armour's quintet fought consistently throughout the entire game. They executed their plays in good fashion, only to lose the ball, four out of every five times that an attempt was made to ring a field goal.

First Half Tense

The game in the first half was closely contested. Shortly before the first period ended Armour came within one point of "Y" college to enjoy holding 15 points against "Y" College's 16.

The final period, enlivened by the brilliant shooting of Wilson and Meyer, gave Armour but little opportunity to make any serious threats towards attaining a score that would throw any fright into the victorious team.

BOX SCORE

Armour—24			
	B.	FT.	P.
Ott, f.	1	2	3
Robin, f.	0	0	0
Rossing, f.	2	2	1
Moskowitz, f.	0	0	0
Beemsterboer, c.	2	2	1
Rutkowski, g.	2	0	2
Miran, g.	1	2	4
Omicemski, g.	0	0	1
	8	8	12
"Y" College—38			
	B.	FT.	P.
Wilson, f.	5	2	3
Timm, f.	0	1	0
Meyer, f.	7	1	0
Collins, c.	0	1	1
Sandvig, g.	0	0	3
McFarland, g.	0	1	2
Showley, g.	3	2	2
	15	8	11

Armour's spirited rally in the last half, fell four points short of their desired quota forcing our men to submit to Augustana College, 34-30 in the game played at Rock Island last Thursday.

The score at the end of the first half stood 26-16 in favor of Augustana. Armour made a comparatively poor showing in this period and showed no promise of providing any greater amount of competition.

Tech Outplays Augustana

When action was resumed in the second half, Coach Krafft's staff showed a complete reversal of

Armour, Wheaton To Mix Thursday

The Armour Tech basketball season continues with a game against Wheaton on the Wheaton College floor, Thursday evening, January 22.

In thinking of this game, we recall the 36-33 victory which Armour attained over the Wheaton five on December 16, at the Armour. It must be remembered that the game was not "in the bag" until the final gun went off, and also, the encounter took place on the Tech floor.

Although, in the last few games, Armour has been unsuccessful in attaining a victory, all the games have been very closely contested. A lack of spirit has been shown in the games with Chicago Normal and "Y" College, Armour's early lead being wiped out in each case. If the boys come out of their slump and play with their snappy attacks and accurate shots, which typified the early season games, our chances of victory will be greatly magnified.

form. They executed brilliant passing plays, located the hoop from all angles of the floor and kept Augustana well guarded. Armour reigned as the superiors in the final period and displayed real basketball art in the closing minutes.

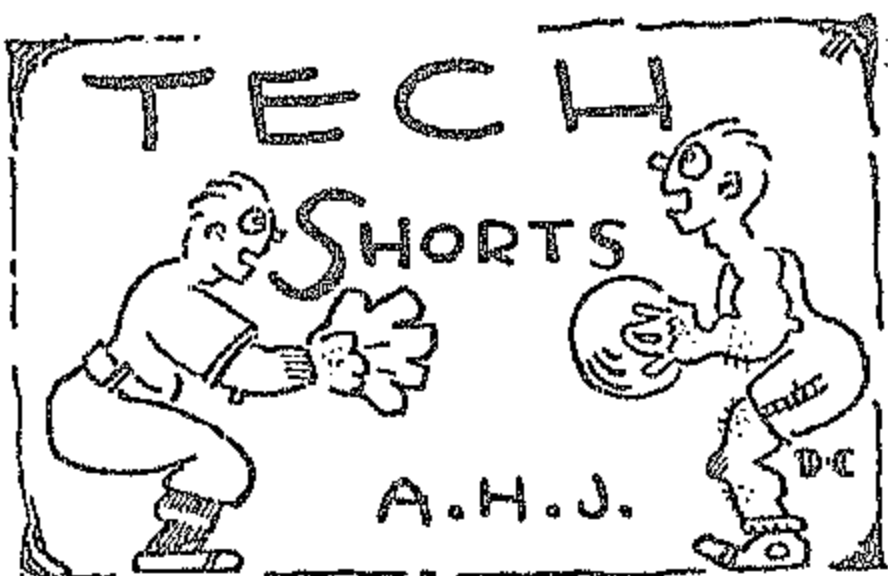
The 10 point lead, however, was too great for our men to overcome. Their offensive power although greatly intensified was not forceful enough to bring them the victory to which they were entitled. The four point margin which decided the winner of the contest was annexed on free throws. Both teams scored 13 field goals, but Augustana succeeded in sinking 8 free throws as compared with Armour's four.

BOX SCORE

Armour—30			
	B.	FT.	P.
Robin, f.	6	0	2
Rossing, g.	2	3	3
Beemsterboer, g.	2	1	2
Omicemski, g.	0	0	3
Ott, f.	1	0	0
Rutkowski	2	0	3
Totals	13	4	13
Augustana—34			
	B.	FT.	P.
Thoman, f.	2	2	1
Lindberg, f.	1	2	0
Peterson, c.	2	1	2
Anderson, c.	6	1	2
Jones, g.	1	0	1
Schroeder, g.	0	0	0
Chelstrom, g.	1	2	2
Totals	13	8	8

We scrawl experience on our brain and, although we wash its memory in fresh adventure, the ink has sunk indelibly to mark our character forever.—Charles S. Brooks.

The average Russian and the average American speak a fundamental language and appreciate the same wisecracks.—Vice-president Mooney, of General Motors.



Wheaton on Thursday

Winter athletic teams are in the midst of their schedules at this writing. Basketball has plenty to look forward to, with Wheaton to be played on Thursday. Since this game is to be played away from the home floor, the outcome is much in doubt. In their last encounter with the Wheaton outfit, Tech came through in fine style with a 36-33 victory.

Two Plus Two Equals Loss

In the game played with Augustana, last Thursday, several interesting facts were revealed. Armour, although outscored in the first half by 10 points, outplayed the Rock Island team and very nearly won the game. In other words, Tech won the second half 14-8, while Augustana won the first 26-16. Adding these together we have for a final score: Augustana 34, Armour 30.

Coach Krafft was forced to start a substitute in the guard position usually occupied by Miran. Miran is again troubled with weak kidneys. It was this condition which forced him to abandon all athletics several years ago.

Boxing Tournament Soon

Captain Ustryski of the varsity boxers tells us that an all-institute boxing tournament is contemplated. Tournaments of this type are annual occasions in a large number of the Conference schools. If this idea should materialize, all of the bouts will be fought in the school ring in the gymnasium.

Indoor track has attracted a large number of new men, especially members of the freshman and sophomore classes. Coach Stagg has hopes for these men if they will continue to practice.

Hockey Team to Use Rink in Jackson Park

The A. I. T. hockey team is getting off to a good start this year although their first scheduled game has been postponed indefinitely. The first meet of the season will probably be with "Y" College.

The new hockey rink that has just been built on the baseball diamond in Jackson Park at 63rd St. and Stony Island Ave., will be the practice grounds of the Tech squad on Monday evenings from 8 to 10 and Saturday afternoons from 12 to 2.

The South Park Board cooperated to their full extent with the Armour manager in arranging a schedule for them on the rink.

The puck pushers had their first game scheduled with the Midway Rangers but were unable to play it because their rink permit was canceled in favor of league games of the Central A. A. U. hockey league.

There have been about five practice sessions so far and there is still plenty of time to grab a berth on the squad.

Anyone wishing to try out for the team see Manager O. T. Barnett.

Chemicals Nose Out Electrical Cagers

The Junior Chemicals are on a rampage. They have taken on both the Electricals and Mechanicals of the Junior Class in basketball and have emerged victorious each time. Last Wednesday the Chemicals played the Electricals and defeated them by a score of 20 to 18. Led by Goldman, who caged 4 baskets and 2 free throws, the attack of the Chemikers proved too much for the doctory Juicers. The game was nip and tuck throughout, however, and the result was always in doubt until the final whistle blew.

As can be imagined, the defeat did not rest easily upon the Elec-

Tech Pugs Meet Tough Opposition

Armour students will have the opportunity to view our fast stepping, scrappy, boxing squad in action when they tangle with the Headquarters Regiment fighters sometime during the week of Jan. 26 to 30. The definite date will be announced as soon as Colonel Reilly of the Regiment verifies the date.

This encounter will represent the squad's third meet, with each individual exerting himself to the utmost to register a victory.

The Headquarters Regiment boasts a group of picked fighters, selected from 52 possibilities. As a result a hard fought and heated argument will take place in every weight. Although these pugs rate higher than ours, their challenge was accepted so that the student body might view the Tech squad laboring under adverse conditions.

Since its inception as an accepted school sport there has been only one similar previous opportunity. The team is accustomed to performing before hostile crowds and will appreciate a large turnout of the student body.

The remaining meets will all be outside of Chicago, namely, Springfield, Ill., February 14; Bloomington, Ill., February 28 and Culver, Ind., on March 14.

tricals and they have challenged the Chemicals to a second game which will be held in the near future. This being the first time the Electricals have played together, they feel that the next game will tell a different story. If the Chemicals are again able to bring home the bacon it will be up to the Fire-Protects or the Civils or

IMPROVED TANK SQUAD TO FACE CRANE COLLEGE

Seek to Avenge Defeat In Meet With Culver

OTHERS ON SCHEDULE

The swimming meet scheduled for last Tuesday with Crane Junior College had to be postponed due to the illness of two of Armour's mainstays, Carlstrom and Davisson, and also because of program interference. The meet probably will be held next Thursday, January 22nd.

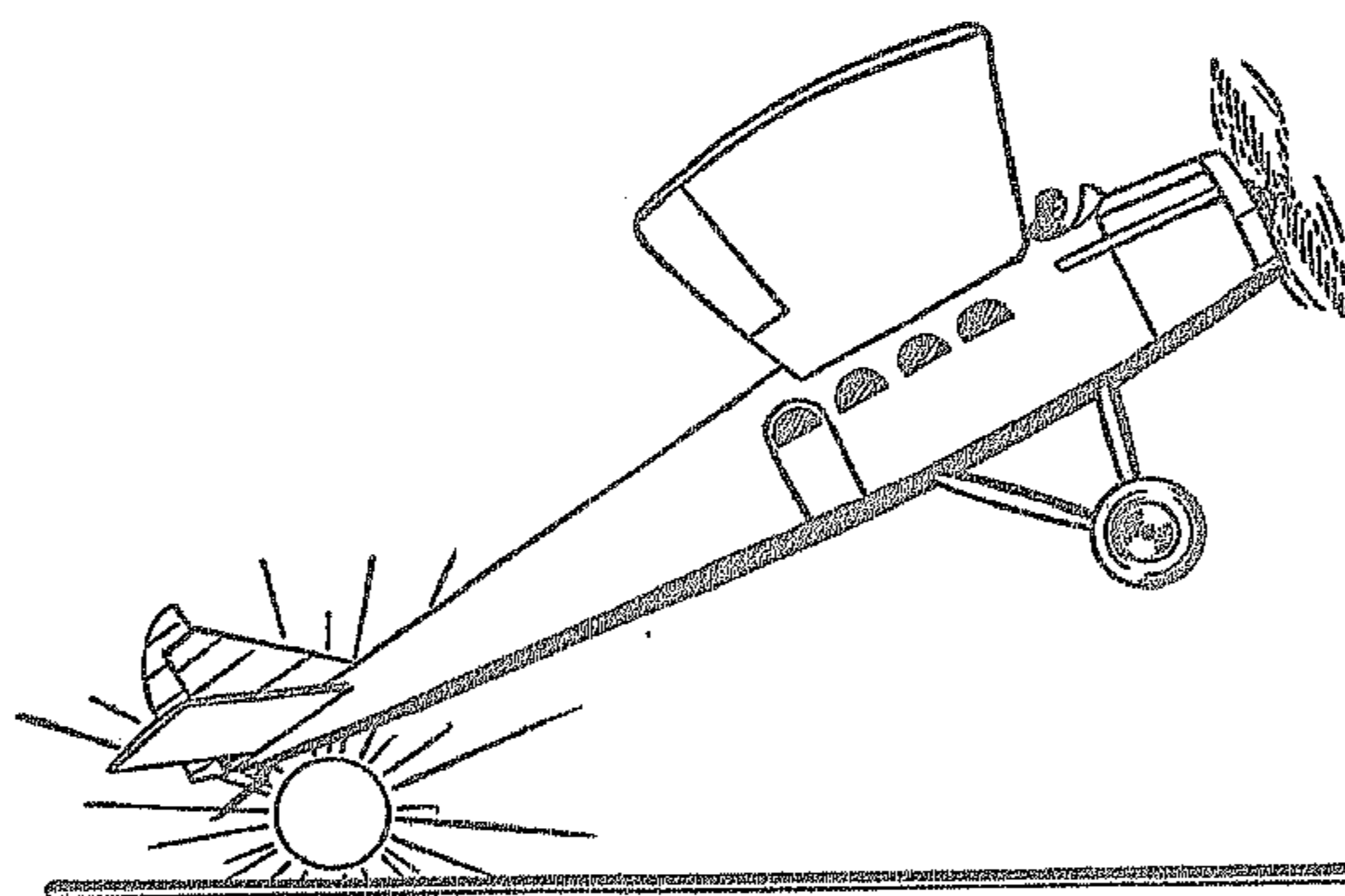
The Culver Military Academy meet, slated for Saturday, January 31st, will be an outstanding one for this season. Culver's teams are usually successful and were so last year when the Armour tankers met them. This year the worm may turn. Armour's team is practically the same as last year with a few additions in the breast-stroke.

As will be recalled from last year the Armour team won most of the meets. One of those lost went to Culver. The count 33-25 was not overwhelming and with a bit of luck Armour may emerge successful.

Other meets for this season will include schools like Normal College, American College of Physical Education, several of the Y. M. C. A.s and perhaps Wheaton College. No definite dates have yet been set but Manager Davisson is doing all to arrange these meets for the near future.

someone to take the cocky Schmier Chemikers down a peg or two.

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