



Kruse, Tullgren Take Office as Union Managers

Eight Board Members Selected to Govern Union Policy

Bernard "Sonny" Weissman, newly elected Student Union manager, has chosen his two assistants. These two men representing the student body are Willard Kruse and Ralph Tullgren. Weissman was chosen by the Armour Tech Student Association. The plan for the operation of the Union calls for the managerial staff consisting of one manager, two student managers, and five assistants. The assistants who are now working, and who will probably continue for the duration of the semester, are Colant, McDaniel, Horton, Rothenberg, and Till. A faculty member may be appointed in addition to this student staff. Along with this group, a Student Union Board will govern the Union and its policies.

Chosen by A.T.S.A.

Members of the A.T.S.A. chose the Board members. They are to work with coach Weissman on the organization of the rules to be placed in effect. The Board will consist of eight students. The senior class will be represented by B. Bernstrom while J. Fahey is to be the representative of the juniors, J. Waber, the sophomores, and R. Tatge, the freshmen. The Co-ops will be represented by the president of the Co-op Club. The group just leaving will be represented by F. Krahulec. The "A" group will be represented by F. Heidenreich. The evening division will be represented by the president of the Night Hawks, W. J. Koch. The graduate department will be represented by Clark Crawford, chosen by Dean Grinter of the Graduate Division. Crawford is a graduate student in Civil Engineering, who received his degree in Duke University where he played football.

Discuss Regulations This Week

These men will meet this week to discuss the regulations to be enforced in the Union. Any suggestions that any members of the student body have to make regarding the operation of the Union, or, if a room is desired for a meeting, those men will carry the suggestions to the board.

At the present time students are

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Help Keep Our Union Clean

Frosh Election of Officers Tomorrow

Climaxing the stormy battles which have featured the freshman elections, the final closed ballot will be held tomorrow, December 14, in the main lobby of the Student Union. The hours for voting have been limited by the committee to the time between 9:30 and 12:45.

The order to eliminate any favoritism in the arrangement of the ballot, the committee has seen fit to place all of the names in alphabetical order. This step was taken to eliminate the advantage which accrues to the man who has the first position in his respective field.

This year the freshmen have been active in setting up a temporary form of government, prior to their adoption of an official body of men. Several wild sessions have been held for the selection of temporary officers, and now that the class seems to be fairly well acquainted, the permanent positions are ready to be filled.

All offices are wide open in this election. While several of the men who are running for office have had the position on a temporary basis, no one man has any real hold on a given office. Because of this, the election promises to be a hotly contested battle.

An innovation has been incorporated in the freshman ballot—that of printing instructions at the top, before the list of candidates. Only two items are on the ballot, but they are both of importance. The first note concerns a rule in counting.

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Fathers' and Sons' Banquet Scheduled For Jan. 11 in Union

Contrary to the practice in previous years the annual Fathers' and Sons' Banquet will be held during the first semester of the current year. The affair is to be held in the new dining room of the Student Union. The date set is Wednesday, January 11, at 6:30 p.m. Tickets are on sale for \$1 per plate and are available through members of the committee.

It has been the practice in previous years to hold the Fathers' and Sons' Banquet at some outside hall or in a hotel dining room. The opportunity to use the newly-rehabilitated Mission building is in itself enticing enough to make the affair successful. The banquet is sponsored by the A.T.S.A. and is mainly for the purpose of bringing the students, their fathers, and members of the faculty into a more familiar, closely-knit group. It also arouses parental interest on the part of the fathers of the students and gives them a better insight as to the function of the institute.

An outside speaker has been obtained to headline the affair. The committee has not yet revealed his identity but has promised that he will meet with enthusiastic approval. The menu, also as yet officially unannounced, will undoubtedly be superior.

Help Keep Our Union Clean

Senior Dance Big Success; Balloons Add Color to Hop

Opening social life at the Student Union, the Senior Dance last Saturday was a huge success. With over 200 couples attending the function, it opened a new field for future dances of a similar nature. The presence of the balloons, streamers, and spotlights on the orchestra lent a very pleasant atmosphere to the occasion.

Edmund Francone, a junior mechanical student, won the radio that was presented as a prize to the holder of the lucky number. The drawing was made by President Heald before a group of students in the lobby at 4 o'clock on last Friday.

Lounge space was at a premium in the new lounge. The presence of the public address system made it possible to hear the music of Charles Gaylord in all portions of the Union, including the lobby and the lounge. Among the notables present were President and Mrs. Heald, Dean Tibbels, and many faculty members and their wives.

Dance Club Re-opens; Forecast Successful Season for Members

Formal opening of the dance club was inaugurated Monday, December 12, with a meeting in the new Student Union. Organization was conducted by acting chairman J. W. Duncan and D. V. Stone. During the progress of the meeting many particulars of the operation of the club were discussed.

It was indicated that the fact that the organization is known as the "dance club" does not imply that there will be any dues or assessments imposed. Officers for the group are to be elected later.

Instruction for the series of classes is to be handled by D. V. Stone, professional teacher of dancing, who is at present enrolled in the co-op department at Armour. The first class will be held on Monday, January 9, in Room 2 West in the Student Union and classes are to be held there every Monday thereafter until the completion of the series.

This year the instruction will be divided into two classes, one from 4 to 5 p.m., the other from 5 to 6 p.m. Each class will consist of two groups, those who wish to improve their dancing and those who wish to learn. Through the efforts of Mrs. Oreutt, faculty advisor, a twelve piece Armour Tech orchestra, under the direction of J. D. Charleton, has been obtained to furnish the music.

The attendance record of the dance class, held last year, proves the popularity of this form of extra-curricular activity.

The organization chairman wishes to stress the point that no charge will be imposed on members of the dance club.

Help Keep Our Union Clean

Dr. Meech to Attend New York Language Conference

Dr. Sanford B. Meech, member of Armour's language department and president of the Middle English Group of the Modern Language Association, plans to attend the Association's annual meeting in New York, December 27-29.

The three-day program is so arranged that, besides the main assembly at which several hundred members are expected, there will be 20 to 30 group meetings concerned with special subjects. The meeting of the Middle English Group will be under the direction of Mr. Meech.

Players Present 'Journey's End' on Sixth of January

Friday night, January the sixth, at eight o'clock, will see the Armour players in all their glory. The occasion will be the presentation of the famous war drama, 'Journey's End', by Robert Cedric Sheriff. This play, familiar to all Armour men, is to be the first full length program that the players have attempted in the last two years. Advance sales of tickets, priced at fifty cents, indicate a complete sell-out and the possibility that the play will have to be put on again on Saturday, the seventh of January, if the demand is to be satisfied.

All Seats Reserved

In regard to the tickets, it is to be noted that all seats are reserved. The tickets that are purchased from the members of the players must be exchanged in the book store, if a particular location is desired. Practically all of the seats have been taken, so it is deemed advisable to exchange the tickets at the earliest possible date, if a good location is to be had.

Work on the play has been progressing rapidly in the last few days. All of the members of the cast have had thorough preparation in their lines, and are now starting on the actions. With the opening of the Student Union the cast began working on the stage, rather than in the English offices, and in this way they have become familiar with the dimensions and general characteristics of their battleground.

Large Technical Staff

Work has also been going on in the technical division. This play requires a considerable number of properties, costumes and light and sound effects. For this reason the work has begun early to allow ample time for all of the details to be worked out in good order. Designs for the set have been worked out and the accumulation of the necessary materials has started. Sound effects, of which there are many, have also been taken into considerable detail in the preparations. Costumes, which are primarily British world war uniforms, are being measured and will come into the picture during the Christmas vacation.

According to the play director, Merrill Christophersen, there will be at least three complete rehearsals for the cast each week during the holidays. A great deal of real work can be accomplished during this lull in school activity, and Mr. Christophersen intends to make the most of the

(Continued on page three)

Glee Club and Orchestra Give Christmas Concert 10:30 Friday

School Offers Five Tuitions To Graduates

Five one-year scholarships will be awarded by Armour Institute to male graduates of February 1939, from accredited public or private high schools. The awards, valued at three hundred dollars each, provide tuition for the second semester of the academic year 1938-39 and the first semester of 1939-40.

In awarding the scholarships, the scholastic record in high school, the extra curricular activities, and general fitness of the candidates, will be considered in addition to a written examination. The former will be judged by means of a personal interview with a member of the scholarship committee. The written examination will consist of the following subjects: mathematics, primarily in algebra, although questions in plane and solid geometry may be included; physics and chemistry, general in scope, but including a short essay on an assigned topic; and English, which will be judged by the candidate's ability to express himself in the essay prepared in connection with physics and chemistry.

Three Hour Examination

The written examination will be held at Armour, on Saturday, January 7, 1939, at 9 a.m., and will be three hours in length. After the written examination the candidates will be the guests of the Institute at an informal luncheon. Each candidate must present himself at the Institute for a personal interview between December 1 and January 1, inclusive. Interviews will be held between the hours of 10 A.M. and 4:30 P.M. each week day, except Saturday, when the hours will be from 9 to 11:30 A.M. No interviews will be held during the Winter Recess, December 19 to January 2, inclusive. For students residing outside of Chicago and suburbs, special arrangements will be made for both the interview and the written examination.

Interviewed by Faculty

Members of the Scholarship Committee who will interview the candidates are as follows: Professor S. E. Winston, chairman; Dean C. H. Tibbels, ex officio; and Messrs. S. E. Bibb, W. M. Davis, W. B. Fulghum, H. A. Giddings, C. E. Hammett, S. H. Harper, C. O. Harris, W. E. Kelly, W. J. McLarney, R. H. Manley, J. B. Rodgers, J. A. Schaad, A. W. Sear, W. H. Seegrist, S. M. Spears, and A. D. Sprague.

Help Keep Our Union Clean

American Welding Society To Present Lecture Series

The American Welding Society is presenting a series of lectures on welding Monday evenings from 6:45 to 8:30 P.M. The series consists of seventeen lectures which began on the evening of December 5th.

Enrollment in the lectures is open to all interested persons. The fee for enrollment is \$5.00 for members of the A.W.S. and \$10.00 for non-members. Lectures given in Room B Mission will take up the fundamental methods of welding, the inspection of adequate welding, and treatment of welded structures.

This series of lectures given by men outstanding in the field of welding and design of welding equipment have made a course of interest to both the theoretical and practical engineer.

Help Keep Our Union Clean

Members of Tech News Staff Plan January Social

Plans are now under way for an evening social next January, for men of the Tech News' staff. A year ago, staff members held a party for members of the staff of Chicago Teachers' College which was very successful.

Only members of the staff will be admitted and "press" cards will be used as admittance tickets. Music will either be supplied by a public address system or radio.

Mothers of Students Receive Special Invitation

Armour's combined musical clubs will offer a special Christmas concert, Friday morning at 10:30 o'clock in the spacious auditorium of the Student Union. This concert follows a tradition obeyed at Armour since the musical clubs were organized. As was the case in the past, the annual holiday concert will be free of charge, all students and faculty members being expected to attend the inspiring program. In contrast to such previous occasions, the mothers, sisters, and sweethearts of the students are cordially invited and urged to be present. An especially interesting and entertaining combination of selections has been prepared for the guests of the institute by the clubs' director, O. G. Erickson. The order of presentation of the various numbers is as follows:

Christmas Program

<i>Agnus Dei</i>	Bizet
Orchestra	
<i>Beneath the Holly</i>	Tocaben
Glee Club and Orchestra	
<i>Adagio</i>	Godard
<i>Ave Maria</i>	Bach-Gounod
<i>Blind's Dream from Lohengrin</i>	Wagner
Orchestra	
<i>A Moonlit Night</i>	Wennerberg
<i>Redman's Death Chant</i>	Bliss
<i>Hymn to the Night</i>	Campbell-Tipton
Glee Club	
<i>Malaguena</i>	Lecuona
<i>Petite Suite</i>	Coleridge-Taylor
Orchestra	
<i>Invictus</i>	Huhn
<i>Midnight and Roses</i>	LaMare
<i>Jolly Rogers</i>	Candish
Glee Club	
<i>Waltz from Dornroschen</i>	Tschaikowsky
Orchestra	
<i>The Rangers Song</i>	Tierney
Glee Club and Orchestra	

Highlights of the performance will be the renditions by the five soloists. Donald Charlton will provide the trombone solo in the orchestra's first selection; William Mashinter, the violin solo in "Ave Maria"; Harold Doolittle, trumpet solo in the excerpt from "Lohengrin"; George Danforth, at the piano in the rendition of "Malaguena"; and Thomas

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Help Keep Our Union Clean

A.S.M.E. Smoker Tonight; Offer Varied Program

Tonight is the night, as far as the Mechanicals are concerned, for tonight will be held the A.S.M.E. smoker in the Student Union. Advance ticket sales have indicated a large gathering will be on hand to hear the chief speaker of the evening, a government official from the Department of Justice, who will give a timely talk on "Counterfeit Money." Also on the program are movies, two colored gentlemen of swing who will present novelty musical numbers, card playing, free cigars, cigarettes and refreshments and other features. The smoker will start promptly at 7:30 p.m. Tickets are still available. Students other than mechanicals and A.S.M.E. members are invited to attend.

At the meeting held last Friday, George Parkhurst, 1927 Alumnus of Armour and a patent attorney for the Standard Oil Co., gave a very interesting talk on "Patents." In a brief summary of his talk, it was said that patents are of interest to all technical men and engineers. "All engineers are potential inventors, and as such must be familiar with patents." Mr. Parkhurst explained the true definition of a patent, the procedure followed in the obtaining of one, how the patent office in Washington functioned and what a patent application should contain.

The patent attorney further stated what procedure was followed if a when a patent application is rejected.

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A Vote of Thanks

The Student Union Building is complete. Professor Moreton has done a superlative job in conceiving of the plan and seeing it carried out. The excellent designing of architects Loeb and Schlossman is shown by the distinctive interior of the building. Professor Seegrist did most of the necessary mechanical engineering work.

It is with heart-felt thanks to these men that the student body takes over. Their job, so indispensable, is completed, and the students' begun, for it is the students who will have to bear the brunt of the directing of the new building.

Of course the active managing and administration will be done by Mr. Weissman, the manager, and his staff. The ultimate power, however, is vested in the student board of control which will be elected yearly by the students. This is only just and fair, for it is the student's building, paid for by the students and operated for the benefit of the students.

This doctrine of the Student Union for the students must be preserved with the years. The present students know their rights in this matter, but will the students of future years know them too?

Many problems will have to be ironed out by the board of control. For example, suppose the alumni, who have been invited by President Heald in his "Homecoming Day" address to hold their affairs and functions at the Union, want the same date that some student group desires? Who has preference? Suppose the school, which certainly lost some valuable teaching space when the Mission was remodeled, desires to use some of the rooms as class-rooms. Can the board of control deny them this?

Fraternity Notes

By EDWARD CHEVALLER

All fraternity notes must be received by the fraternity editor before 5 P.M. Thursday in order to appear in the next issue.

SIGMA ALPHA MU

Sigma Alpha Mu extends its congratulations to those members of the faculty and student body of Armour Tech who were instrumental in the production of the new Student Union. May its warmth and spirit promote friendship and co-operation for many years to come.

Harold Fisher defeated Bob Abrahamson to win the fall ping-pong tourney. The competition was grueling, both men playing hard, steady, offensive games, each of which went far past deuce. With these two men and A. Levenberg and R. Barrett, Sigma Alpha Mu expects to go far in the interfraternity struggle in the Spring.

Tentative arrangements have been made for the Annual Fall Toboggan Party which will be held on Dec. 18, weather permitting.

Congratulations to Robert S. Kohn on being pledged to Pi Tau Sigma, honorary mechanical engineering fraternity.

PI KAPPA PHI

Alpha Phi chapter of Pi Kappa Phi takes pleasure in announcing the pledging of:

Edward H. Collender, Ch.E., '42.
Founder's Day banquet was a huge success, the attendance being 75—very gratifying.

Members are looking forward to the Christmas dance which is to be held on Dec. 17.

PHI KAPPA SIGMA

At the Alumni Banquet held Dec. 1, 1938, the old grads enlightened the members as to the entertainment that would be theirs when they attend the Phi Kap National Convention to be held in New Orleans during the Christmas Holidays. It looks as if delegates will enjoy coming back to school after the holidays to get rested up.

The Phi Kap Mother's Club engaged in a Rummage Sale Dec. 5, and now it can be seen that the only adjective that can be used to describe any venture in which they participate is "successful."

Donald Charlton has been elected president of the Fraternity.

It is not to be supposed that only student functions should be held in the Union. Such events as the recent Terzaghi talk or a national engineering society convention are much to be desired, because they aid the school and students alike.

Since it is the students' building, it is right that they should treat it as such. The sort of horse-play which was so prevalent among a certain element of the student body in the past is absolutely out of order now. One naturally has pride in one's possessions, especially if they are worth it. Let's treat the Union as a valued possession—let's keep it clean!

Intramural Awards

A SPORTS EDITORIAL

Last June, a group of school-spirited students got together and agreed to try to reorganize the present setup of the Armour Tech Student Association charging inefficient performance of duties. This department, agreeing with the committee, has carefully watched to see what effect the accusations of this committee would have on the Board of Control. It is apparent that there has been little effect.

One of the main grievances against the Board was its ignoring of the main group of athletes of the school—the intramural and interclass tournament participants. More students take part in intramural and in interclass activities, athletically, than in any other sport connected with the school. It seems not only just and ethical, but also mandatory that these activities be given consideration by the Board worthy of the student interest expressed in the activity. **This has not been done.**

Let's look at the evidence of the committee from one member's experience. First, the case of the Frosh "Meteors" who won the softball tournament in May, 1937. They immediately went through the requirements for application of awards. Despite the constant demands of the group it took the Board eight and one-half months to obtain the awards for the freshmen. True, the Board had passed on the awards in June, but they had no executive force to change the words into action.

The same case applies to the then Junior Chemists who won the touchball title in November, 1937. They received their awards after an impatient wait of two and one-half months.

Now, again, the Board is sitting back and ignoring the intramural awards. The Board has passed on medals to the Sophomore baseball team who won awards last September, and the Senior Chems who won the touchball tournament a month ago, but again they have just set down words and have failed to apply action. This procedure has become monotonous. Despite the fact that a very minute amount of time and effort would be necessary to carry out this mere detail, this small consideration has been denied to intramural activities. **When will the Board wake up and do something about it?**

At present the reorganization committee is watching the Board, waiting for self-reorganization, for any system should be able to correct its own defects when they are self-evident. This committee has been by no means backward. They are going to take action, but will withhold until the Board of Control has time to do something.

The present setup of the Board is such that when the faculty members neglect their duties, the student members are the only ones who can bring about the efficient handling of the activities at Armour Tech. Here is a case, student members. You are our chosen representatives. We voted for you as men of action and men of action we still believe you to be. . .

—By Jim Fahey.

Scarab Fraternity Holds Alumni Banquet Tonight

The Armour Chapter of Scarab Architectural fraternity held a meeting last Tuesday in the Art Institute. The selection of new pledges was made and the plans of an Armour Architectural Alumni Banquet were completed.

The banquet is to take place tonight at the Swedish Club of Chicago, on North La Salle street, at 7 o'clock. The entire architectural alumni has been invited to attend. This is the first time any such banquet for the benefit of graduates of Armour has been held. The purposes of the banquet are multi-fold, among which are to inform the graduate of what Armour is doing now, and, also, to have a "get-together" of former classmates.

Initiation of the pledges of last October was done at the home of L. Johanson of Evanston, a past-graduate of Armour. It was a very lively affair, as all initiations prove to be.

Some of the events included on this month's Sport and Social Calendar are the Interfraternity Ping Pong and Bowling Meets, the Pledge Dance, and a New Year's Party.

The Slipstick

Cleave to the slipstick; let the slapstick fly where it may.

Let's see, this is Tuesday. Then there's Wednesday, Thursday, and Friday. And then there is WHOOP-EEEE!! "Gee, I just can't wait. . . Two whole weeks to do nothing but home-work." BANG. Be sure and lower the coffin slowly.

He loves her in the springtime,
When birds all bill and coo;
He loves her in the summer,
And swears that he'll be true;
And in the fall he loves her,
When the harvest moon is new.
But he hates her in December,
When Christmas gifts are due!

The chiropodist entered his office and found his assistants loafing: "All right, boys," he snapped. "On your toes."

Charlie: Say, Bergen, have you a piece of sandpaper?
Bergen: No, Charlie. Why?
Charlie: My face is dirty.

What We Want for Christmas

Pajamas
Russian pajamas
Fraternity ring
Straight A's
Trip to Europe
What We Will Get
Red neckties
Woolen underwear
Book of Mrs. Browning's poetry
Cold
Call from dean's office

Marion: My boyfriend was a Boy Scout when he was a kid and it's still in his veins.

Eleanor: What does he do, make a fire without matches?

Marion: No, every time a pretty girl passes he does his daily good turn.

Disgusted Prof: This class reminds me of Kaffee Hag. 99% of active element has been removed from the bean.

Up to sixteen a lad is a Boy Scout, but after sixteen he becomes a girl scout.

ONLY 12 MORE DAYS UNTIL CHRISTMAS.

"... And dear Santa Claus please fill our stocking with Hedy LeMarr and a new joke book for the Slipstick. . ."

Hi Yo Silver.

Stoopbrain and Santa Claus Ride Agayne; Danze 'till the Cows Cum Hoam to Roost

By ART HANSEN

Dear Sally:

"Jingle bells, jingle bells, dashing threw the streets; oh wat fun to bea jolly, riding on a darn olde trolley, unquote. Wel, deer Sally, those our my exact sediments az Christmas approaches and wonce agin it iz tyme for mea tew cum hoam for the Christmas and New Yeers holidays. Woopy! Know more skool fore tew weaks. Yowsah, nothing like hollyday cheer, and the anticipation of gifts tew kum frum Sandy Claus. I look forward tew no grater pleasure than stringin lites and tinsel in grandpappy Lame-brain's seven foot beard. I got a keen present fore yew, itz a secret, but I'll tel yew no I kan't keep a secret. It iz a prize pig frum the recent stock show hear, so awl next year awl yew'll half tew due iz look at Hamstooop (that's hiz name) and think of mea. Simple, aren't I, I meen izn't it?

Iz Unyon Swei, and How

Did yew no why a hen lays an egg? Wel, I figured out that if shea didn't lay it, it wuld brake. Tew get back tew the point, tho, the unexpected haz finalley hapened. Yew, yew guest it. The new Stewardt Unyon haz finalley opened. They even fooled owr grate skool paper ("Last withe the first" buy opening it a weak later than the paper's flaming hedlines announced. However, it iz open and that iz the mayne thing. The bewtiful lounge (I reely mean it) iz so inspiring that on the opening day a couple of fellows surveyed it and sed, quote: Chee, iz thiz fore us, unquote, and then promptly floped their muddy size 12's on the plush upholstered divans and whont tew sleap. Guys like that ought tew be thrown owt, especially wen they think the ashtrays our owtgrowths of the floor and burn a hole in the chairs withe their cigarettes.

Danzez Awl Laste Weak

The Stewardt Unyon iz so nice that they held the Senior Danze there laste Friday nite in the rejuvenated auditorium, and it wuz kean. Faye Pairidge and hiz orck. suplied the music, and I suplied the moste glamorous woinin after awl. I took that scincalating, sizzling, searing siren of swing, none other than Suzsie Q. Shea iz nown (now) az the belle of toidy-toidy and the tracks. And can shea truck—like Mack. Wen shea does the Lambeth walk yew're feat feal like they're the walk. Oh, well, I had a swel tyme. Also went tew a Xmas danze given by sum coeds at

the Chicago Abnormal College, wear they train teachers tew teech. It iz fun tew sea these bewtiful young things befour they are 70 yeers of age, old, yellowed, mellow and wrinkled and fuzzy, wen they are sent-owt tew awl the grammer and high skools tew teech stewoodts. Befour thiz I never thot teachers were young wonce.

I hav news, Sally, splendid news. The Armoe Star hams iz going tew produce "Journey's End" on the first Friday nite next year, and I hav won of the leading roles. I wil giv yew a synopsis of my grate part. Scene I, Act I. General speaks: "Take that, yew dog!" Mea: "Yew mean mea?" General: "Yes!" Bang! Bang! Bang! Thud! Mea again: "Ugh yew got mea!" (Silence.) Act II, Scene I and II. I am on stage the hole act as a corpse in the corner. Act III, IV, V, VI, etc.; I repose ofstage as a bugle blows tappets (quick taps). I feal shure the audience will relize a superior actor wen they sea mea and throw theyre ripe fruit at sume-one else.

Merry Christmas Anyhow

Az the year draws tew a close, and I look bak and survey the laste 12 months, I feal I hav accomplished many things. Wat they are, I don't no. So I guess after awl I haven't accomplished anything. Shucks, a hole year wasted. It brings bak tew my mind a quotation by that world-famous orator—Augustus Adolph Eureka Sameuloso Mortimer Blank who quoted, "Yew can drive a horse tew drink, but yew can't make him water." Wel, Merry Christmas, an yew can Nick him later fore alimony. Happy New Year!

Yures,

Stoopbrain Bliss.

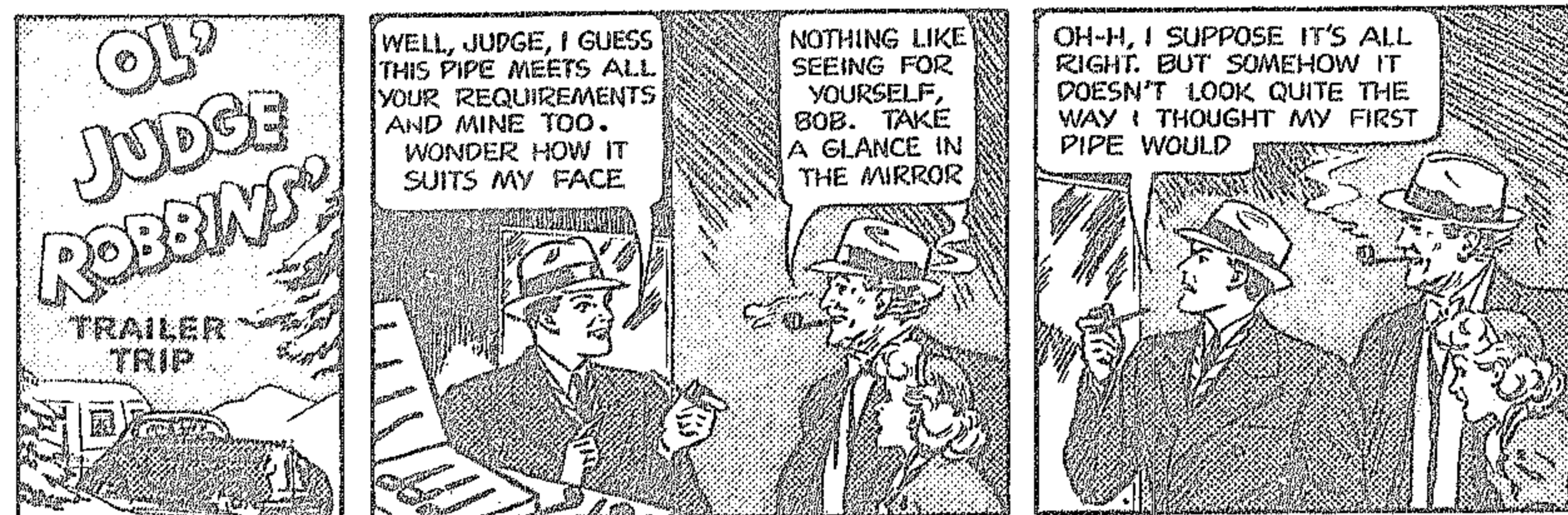
CONCERT—

(Continued from page one)

Yeakle, baritone solo in "Redman's Death Chant."

Immediately following the last number, an inspection tour of the newly remodeled Student Union will be conducted for the benefit of visitors.

According to future schedules, a social afternoon will be enjoyed by the clubs on Sunday, January 15, at 3 p.m. at the Shawnee Country Club in Wilmette. The program for the afternoon will consist of a full concert for the "dates" and members of the country club, followed by the serving of tea.



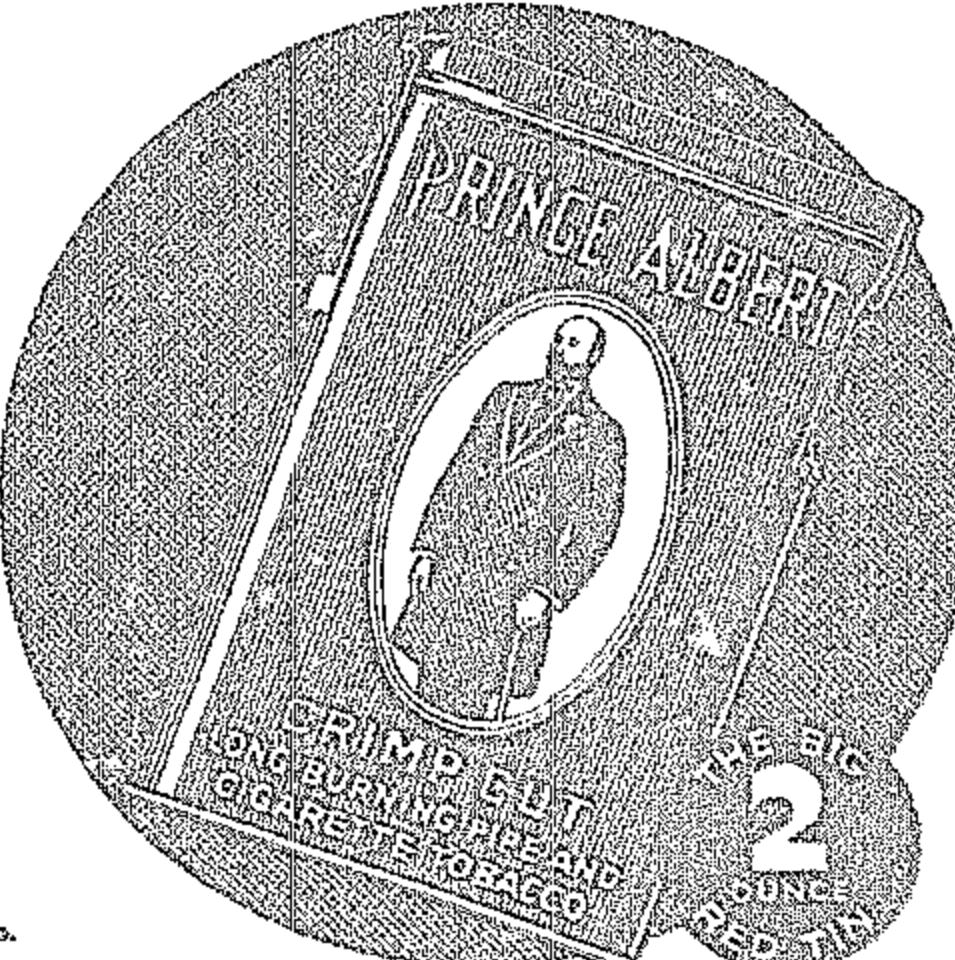
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SMOKE 20 FRAGRANT PIPEFULS of Prince Albert. If you don't find it the mellowest, tastiest pipe tobacco you ever smoked, return the pocket tin with the rest of the tobacco in it to us at any time within a month from this date, and we will refund full purchase price, plus postage. (Signed) R. J. Reynolds Tobacco Company, Winston-Salem, North Carolina

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PRINCE ALBERT THE NATIONAL JOY SMOKE



50 pipefuls of fragrant tobacco in every 2-oz. tin of Prince Albert

SIDELINES

GERMANY'S PRINCIPLE exerts today its propaganda. Nevertheless, at subsequent intervals poignant truths are injected concerning the more unpleasant aspects of Germany's national life. Decisions about Herr Hitler's sanction, and the singing and shocking facts have been given voice in the country's liberal agencies of publication, even the *Chicago Tribune* carrying leftist and publishing a list of the least important facts.

OF COURSE concern to the civilization today is the extremely unpleasant predicament of the German Jews, about which everyone is talking, but doing very little. It is known that the Jews are persecuted in Germany and Austria, and in Italy, too, of late—perhaps use a common code. Few are acquainted with the purposes and methods of the Nazi program. Several issues previously, it was stated that minorities, by the very nature of their being minorities, are subject to oppression and maltreatment, the ruling empowered majority. The Jews are a minority, but they are not a race. They represent a religiously cohesive group with a perhaps overemphasized, but nevertheless important cultural and historic heritage. The scape goat of every ruling class, they are again running the gauntlet. Different than ever before is the unfortunate complication that no frontiers are now left for them to take refuge. Whereas New England was the Puritan's recourse for freedom from tyranny, and the far west offered abundant farm lands for the unsatisfied in eastern United States, no equivalent geographical area now presents itself for Jewish settlement. Expansive capitalism of a past era is now contracting. Alaska, the equatorial areas, and similar humanly unfit and isolated regions have been suggested as possible havens for refuge. The futility of these suggestions is obvious.

FOR WHAT OTHER purpose than a means of promoting a pseudo-nationalism has the Nazi party oppressed the Jews. It is a known fact that the German exchequer is depleted. Industry and individuals are taxed to their maximum. Yet tanks, ships, military highways, a standing army, and expensive foreign propaganda departments cost considerable money to maintain and operate. And acting on the provocation that a crazed Polish Jew shot a German petty officer in France, the Nazis are taxing the Jews in Germany a neat billion marks. The method of collection is simple—a capital levy on the race. Property and goods are "assumed" by the state with no recourse to legal satisfaction. This \$400,000,000 will maintain the party for a period, and the churches appear as a likely source of revenue in the near future.

NOT ONLY direct superimposed taxation has been pushed onto the Jew, but far more cruel, has been his personal maltreatment. He has been rounded into concentration camps with thousands of other unfortunates. He has been brutally handled and made a subject of scorn and derision. Nationally sponsored propaganda has depicted him as the diabolical source of the chaotic fascist condition in which Germany finds herself. We have our own shameful Jim Crow laws, but Germany's recently adopted code of Semitic treatment is far more discriminatory. Her parks and public places are flooded with posters displaying horrid, grinning caricatures pointed out as sinister plotting Jews. The yellow park benches are allocated for Jewish occupation. The newspaper columns list the un-Nazi like who dare to associate with Jews. Theaters and cultural outlets are closed to them. Mendelssohn's music is heard no more.

MONEY TAXATION is bearable, but no race can withstand the type of cruelty that the Nazi party has inflicted on an unfortunate minority. Hate and intolerance breed unrest and foster nationalistic isolation. The world today needs to cooperate and not to emphasize its differences. The Continental Jewish refugees must be taken care of, or a socially civilized world, and socially medieval world, will make a long slide.

PLAYERS—

(Continued from page one)
opportunity. Properties for most of the scenes will be on hand by the time vacation starts so that the complete actions can become second nature to the men in the cast.

Those who are in the play along with the part, are as follows:

Osborne Charles McAleer
Stanhope Bernard Sternfeld
Trotter Leon Epstein
Hibbert James Duncan
Raleigh Ray Nerhus
Hardy Robert Jaffee
Mason Tom Hunter
Colonel Art Hansen
Sergeant-Major Sid Silverman
German boy Richard Hanneman
Soldier Charles Schultz
Members of the technical staff are:
Production Manager
..... Ralph Erisman
Stage Manager
..... William Buckman
Business Manager
..... Oliver Doe
Assistant Directors
Bernard Sternfeld, Ray Nerhus
Set Designer George Danforth
Properties
Roy Brinkman, Robert Underhill, Walter Kahl, Albert Sanowlska
Costumes Charles Schultz
Lighting
Jerome Pinsky, Howard Tyler
Carpenter
Robert Bartussek, Bert Greis-
bach
Special Effects Art Hansen

Running time for the play has been estimated at a little over two hours for the three acts. Because the play starts at eight, there will still be a goodly portion of the evening remaining when the production has been completed. For this reason arrangements have been made to remove the chairs from the main floor after the final curtain, and to round out the evening with an informal dancing session. Music for the dancers will be furnished by Don Charlton and his Armour Tech band.

Medinah Club Selected for Soph Dance on February 10

Under the guidance of Social Chairman J. W. Murray the sophomore class is making preparations for its annual dance. After debating the merits and demerits of several dance sites, it was decided that the dance will be held in the Grand Ballroom of the Medinah Athletic Club. The date of the dance has been set for February 10.

The social committee, which is composed of F. W. DeMoney, W. H. Grosse, J. G. Hartman, and E. A. Ratzel has been busy auditioning orchestras and although an orchestra has not been selected a good one is promised.

Schaad Speaks on Crystal Structure Analysis to A.I.Ch.E.

Although new in many respects and not well understood by most engineers, X-ray analysis of crystal structure is, nevertheless, extensively applied in industry. In a talk before the A.I.Ch.E. last Friday at 10:30, Mr. Schaad, whose doctor's thesis concerned crystal analysis, introduced the field, discussing the discovery of X-rays, methods of applying the X-ray to crystal analysis in industry.

There are five general schemes of X-ray analysis: the Bragg method, the Laue method, and the method involving rotating crystals, powder, and fiber. Laue was the first in the field. He decided that X-rays, discovered by Roentgen and known to have almost all the properties of light, differed from light only in wave length and could be diffracted by a grating comparable to the short wave length. Reasoning that the alignment of particles in a crystal would serve as a grating, Laue obtained the first diffraction pattern and interpreted it mathematically.

Laue's method was to pass polychromatic X-ray emanations through a single fixed crystal and observe diffraction by a plate sensitive to X-rays.

In industry X-ray patterns differentiate between crystalline and amorphous substances, reveal crystal structure, and frequently identify a substance. In metallurgy they are valuable in revealing crystal distortion and in studying the effects of heat treatment.

J. Holmberg Talks To Civil Engineers On Hero Surveying

"Aerial Surveying" was the subject of the talk given by Mr. J. H. Holmberg at the last meeting of the civil engineering society. Mr. Holmberg, who is the head of the firm bearing his name, has had a great deal of experience in this type of work since the World War. For six years the speaker was a member of the air corps, and he resigned in 1922 in order to form his own company.

Survey work as done from the air, involves a great number of problems that have been gradually surmounted. A great many of the difficulties still remain unsolved. The question of photographic plates has been almost solved. At the beginning photographic plates were made of glass. The fact that they would not distort during development was very important, but their bulkiness and fragility more than offset this advantage. Film as developed at the present time suffers practically no shrinkage during development. Specifications state that this shrinkage cannot exceed one part in two thousand. The accuracy of the final map depends on the true representation of the original negative.

Vary Types of Lenses
Cameras of various types are used for this work. A large variety and number of lenses are used in these cameras. Cameras with two, five, and seven inch lens openings are used; cameras have been developed for the Coast and Geodetic Survey with nine inch openings. The larger the number of lenses in a camera, the wider the angle that can be photographed, requiring fewer flights for the completion of a particular section. Lenses with various focal lengths varying from six to twelve inches are used depending upon the type of work being done.

Shutters present another problem in the development of the camera. The ordinary focal plane shutter when opening and closing takes a longer time than that for which it is actually calibrated.

Errors Are Small
In order to calibrate a map and determine the scale to which it was photographed, ground control points must be established and the distance between them determined by actual measurement. Errors of less than 1% can be expected with work of this type. A rougher type of calibration is done by determining the height of the airplane with the altimeter and using similar triangles to determine the scale of the map. Accuracies of 95% are the common criterion for work of this type. A great deal of this kind of work was being done for the AAA when crop acreage was determined. In this type of work the actual areas of the fields are measured with a planimeter.

As applied to engineering work, aerial surveys are used in many ways. Route surveys for transmission and pipe lines can be made by this method alone. When a trial line is decided upon, the actual survey can be made at a greatly reduced cost. This type of work as applied to highways was first used by the highway department of the State of Minnesota. Surveys of this type can be made at a cost of only a few dollars per square mile.

Plan New Floor, Fixtures For Basement Washroom

In keeping with the extensive remodeling plans for all buildings of Armour Institute, W. Koster, Superintendent of Buildings and Grounds, announced Friday that improvements have been arranged for the basement washrooms in the main building.

A clean sweep is promised in the remodeling process which is scheduled to be completed during the Christmas holidays. In addition to a new concrete floor, which will replace the old tiles, a complete set of modern fixtures will be installed.

The present equipment is, with some repairs, substantially the same as that installed when the main building was constructed. They have long been out of date, function poorly, and must give way to a modernization program. The south west room is to be converted into an additional locker room, furnished with a number of new lockers.

Rho Epsilon to Buy New 1000 Watt Transmitter During Christmas Holidays

A new 1000 watt transmitter operating on the 1500 phone band is planned for the Rho Epsilon new radio station during the Christmas holidays. The old apparatus will be completely rebuilt. Among its other activities the fraternity will be the Chicago representative of a nation-wide network of college amateur radio stations. It will handle news from other colleges in cooperation with the National Intercollegiate Press Association. Regular schedules should be established early next month on frequencies of 3585 and 7170 kilocycles.

With fifteen pledges this semester Rho Epsilon has no trouble in keeping things humming. The formal initiation will be administered this year in three sections so that the pledges may recover in time for the final exams.

Almost all the pledges are radio "hams," and it is a rule of the fraternity that 80% of the members must be licensed amateurs. The men who are pledged at the present time are W. O. Anthony, WBSXQ; E. J. Bamer; M. Camras, W9CSX; W. Clark, W9QIC; F. Elin; E. I. Hass, W9LQN; L. Holmes, W9JGS; L. Maze; S. Mentzel, W9PBT; E. Minick, W9WLG; C. D. Pierson, W9QYE; H. F. Quarrenstrom; E. M. Resenthad; A. C. Seda, W9BDM; R. Smessaert, W9MDQ.

Senior Electricals to Hold Christmas Party Dec. 17

Members of the senior class of electrical students will hold a Christmas party on Saturday evening, December 17, at 8:30 P.M. The Hal-loween party was attended almost 100 per cent, which induced the planning of this Christmas party.

Music will be furnished either by radio or amplified recordings. Refreshments will be served.

While the party is somewhat restricted to seniors, juniors are also invited. Tickets are priced at 50 cents per couple.

Feeling the need of close cooperation before graduation as a better method of continuing friendship after graduation, the senior electricals have planned a series of social events for the next year.

Good Insulation Is Subject at A.I.E.E. Meeting

An inspection trip is being planned by the A.I.E.E. on Friday, December 16th. A tentative schedule includes either the State Line generating station or Electrodynamic Corporation of LaGrange. Arrangements for transportation are being handled by William Kurtz, vice-president of the A.I.E.E. and students needing transportation are urged to make arrangements with him.

At the meeting of the A.I.E.E. last Friday, E. J. Dahlsten, a representative of the Oakmont Company lectured on "Electrical Insulation." His talk discussed the variation in mechanical properties between vulcanized rubber, varnished cambric, and treated paper as insulating materials.

Temperature changes are probably the most important factor when determining the type of insulation to be used. Rubber is used only up to a temperature of 140 degrees Fahrenheit. New synthetic discoveries at the research departments have introduced a synthetic rubber which is superior to the ordinary type used. The new type can be colored any shade, without affecting the mechanical or electrical properties of the rubber, but it is too expensive for ordinary insulation. The main advantage for rubber insulation is its flexibility which is not found in other insulations.

Paper insulation is produced by washing, steaming and chemically treating manila rope so that it can be manufactured into a good grade of paper. Standards regulate the thickness of paper to be used, the elongation and tensile properties.

Samples of wire produced by the Oakmont Company were shown to members. One sample which particularly interested the group consisted of three large cables between which was a thin oil line through which oil was pumped to reduce the wire temperature.

New Invention Aids Fatigued Students In Regaining Sleep

By R. E. PERRY

There has recently appeared at our Armour a labor saving device of such magnitude and unparalleled ingenuity that Edison, and the inventor of the "Just Dandy" mustache cup, fade into the gray light of obscurity. It is entirely meet that this should be so, for one could always blow on a hot coal instead of turning on the electric light, but who, what genius, may snatch a snooze in class without the protection of an eyeshade filtering out a professor's peering eye and light all but 5200 Angstroms? (Never mind looking it up, that's green light ignorant.)

Confides in Prof. Freud

There have been a number of notably feeble attempts to overcome a teacher's deep rooted superstition that sleeping means the snoring one is not paying strict attention. Notable among these is the one Nikolaus A. Natinchek, the ex-officio chemist, confided in Prof. Benjamin B. Freud; it was, said this optimistic lad, far easier to concentrate with the eyes closed, thus shutting out all but the professor's learned discourse, (also all pertinent formulae on the board.)

Doctor Freud apparently agreed. He now helps Natinchek gather data on the method by requesting his confirmation and derivation of every third theory.

The green eyeshade, to coin a name for the invention, avoids the pitfall noted above by presenting to the wearer the air of a man who studies to the point of collapse, and then, to save his rapidly failing vision, resorts to the shade. Dark glasses formerly served the same purpose save that they failed in lending a learned air and suggested that the eyes were so weak that beautiful ladies were forever trying to help the bearer across streets. Imagine the annoyance!

Before His Time

A theorist had suggested, in his grammar school thesis, an alternative to the green eyeshade, but like most theorists he was sneered at. This man, no doubt several days before his time, declared that if eyeballs were painted on the eye lids it would take a canny pedant indeed to decide from a distance whether the peepers were open or shut. This pioneer was stopped by the fact that as soon as he shut his eyes to paint them he couldn't see himself, and thereupon, in desperation, went off to fight the Martians in New Jersey. Recent developments, however, have cleared up this baffling point, and it is to be expected that any day someone will make a friend and blossom out with the most efficient of all insomnia preventives.

Seniors Begin Courtesy Drive "To Keep Hats Off"

In accordance with opening of the new Student Union Building and the necessity of keeping it as immaculate as it now is, a group of seniors have inaugurated a courtesy campaign to stop the thoughtless wearing of hats in buildings, the throwing of paper, cigarette ashes, chalk, erasers, etc.

It was decided at a meeting of the senior commissioners to begin a drive for courtesy between students. It is hoped that the other classes will get behind the campaign started by the seniors.

Testing of Subway Soils Continues in Armour Laboratory

Work has progressed favorably on the new subway project. The first contract for the North State Street section has already been let, excavation starting Saturday, November 17. Bids for the Clybourn section will be submitted in the near future.

Up to the time of the bidding a large amount of work on the project was in connection with the constituents of the soil; soil tests are still in progress here at the Institute. This consists, to a large degree, of settlement analysis and structural stability of the soil in question. Acting as a general investigator and approver of designs, is Professor Ensz, associate professor of Armour's civil engineering department.

Indicate Best Locations


Many of these soil tests were made at the soil research laboratory which operates under the direction of Prof. Ensz. The soil samples which were taken at various points of the selected subway site were submitted to the soil laboratory for testing. The tests indicated the location as being suitable for the construction of a subway.

In analyzing for settlement and stability the clay samples were determined for water content, plastic limits, and ultimate settlement. These exhaustive tests were started several months ago, and concerned all the physical properties of the soil. Of these the aforementioned are some of the salient features.

Tested by Graduate Students

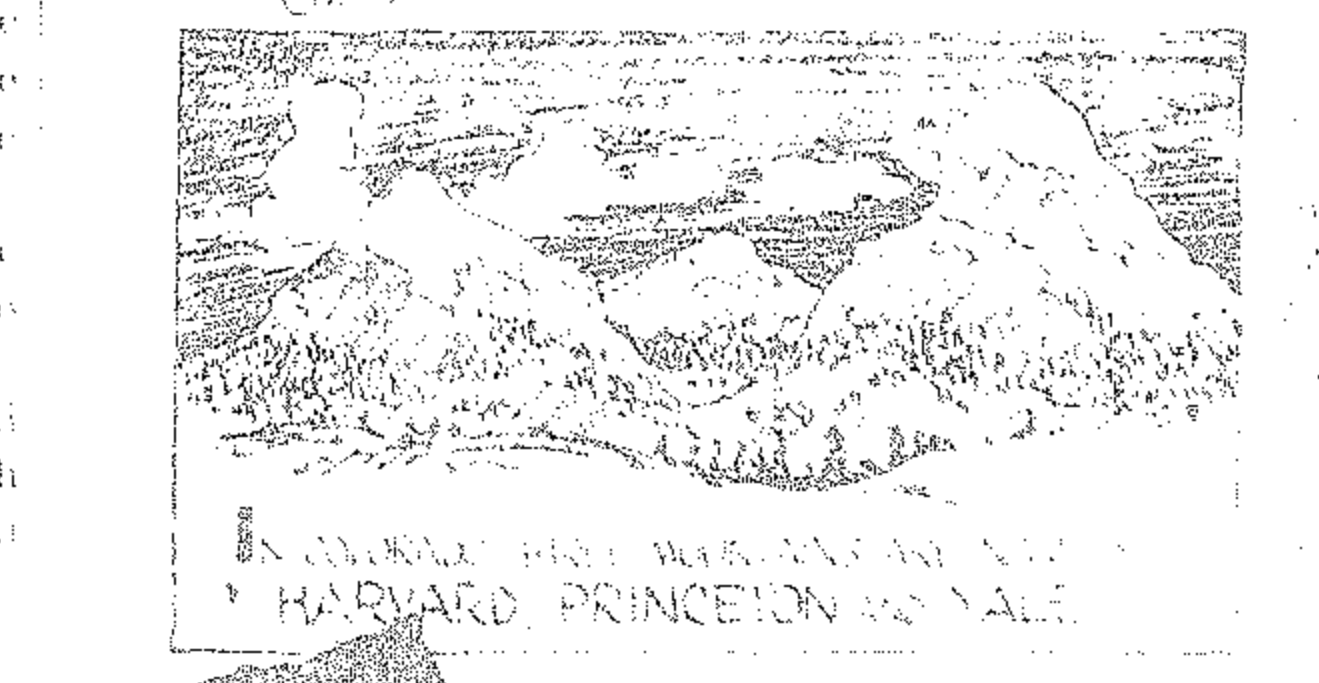
The soil research laboratory, where the soil samples are being tested, has been a part of Armour Tech for two years. It is principally concerned with highly advanced soil mechanics; several graduate students and student assistants are working there constantly. Soil testing consists mainly of determination of water content, liquid and plastic limits of clay, specific gravity, particle distribution, and size and resilience of particles in general. The latter is important from the standpoint of the subway project, since it deals with ultimate settlement of the soil.

The main object of the soil research laboratory is to further knowledge of the true nature of soils under varying conditions.



B.E. HUTCHINSON
OF CHICAGO INTER-
CEPTED A PASS
IN HIS END ZONE
AND RAN 105 YDS
FOR A TOUCHDOWN
AGAINST NORTH
WESTERN IN 1910
HE REVEALED THE
HEAT LAMP IN
THE GAME
FOR 103
YDS

ERNIE BERMAN
MINNESOTA'S GREAT COACH,
ONCE FAILED AS GRID
MENTOR AT THE UNIV OF
MONTANA, GAVE UP THE
JOB AND STARTED
SELLING BONDS



BUCKSHOT

IN A BUCKSHOT WAS AN AN...
HARVARD, PRINCETON AND YALE

Richard E. Vernor Lectures to F.P.E.S. On "Progress in Fire Safety Education"

"Progress in Fire Safety Education" was the topic of the talk by Richard E. Vernor before the F.P.E.S. meeting last Friday. Mr. Vernor has gained a wide reputation as a speaker in this field and has appeared before community groups all over the country. He is also the author of "Chasing the Fire Demons," an article which appeared in the *Armour Engineer and Alumnus*.

Mr. Vernor spoke in a non-technical manner and pointed out the common lack of knowledge regarding fire hazards in simple acts. He pointed out numerous examples, such as the striking of a match or placing a cigarette on a tray. In the case of the cigarette, for example, the lighted end should be on the out-

side so that when the burning stub falls it will fall inside, rather than outside, the tray. The price paid for such ignorance as this is tremendous fire losses and numerous deaths from fire. Over 100,000 people have died by such means in this country alone, since the war.

Mr. Vernor mentioned that the nation's fire loss has been cut in half in the last decade. This is largely attributed to the extensive educational campaign for fire prevention conducted in schools and presented to the general public by three national fire protection organizations. These organizations are the National Board of Fire Underwriters, the National Fire Protection Association, and the National Fire Waste Council. The first mentioned is an association of stock insurance companies established in 1866 which maintains laboratories throughout the country and large departments for arson legislation. The N.F.P.A. is an organization in which anyone interested may hold an associate membership. Its function is to develop fire protective standards for buildings and equipment. It maintains some fifty committees for this purpose.

The last organization described by Mr. Vernor is a non-technical one, the National Fire Waste Council. Its membership is comprised of twenty national organizations, four government bureaus, and many chambers of commerce. Its interests are chiefly in educating and organizing fire councils in various communities. In conclusion, the speaker mentioned several clubs which resulted from the extensive educational programs. The most interesting one was established in Monterey, California, and is called the "Shack of the Week Club." The function of this club is to select an undesirable building each month and compel its possessor to either tear it down or make improvements. This club has been operating effectively since its beginning and offers a model for other similar organizations.

A.S.M.E. SMOKER—

(Continued from page one)

for the first time, the various fees payable to the government for a patent, the definition of patentable material and to what requirements the subject must conform to be patentable.

Prof. Nachman, recently returned from the national meeting of the honorary chairmen of the A. S. M. E., held in New York City, brought back the information that out of the 120 A.S.M.E. college branches, Armour was second in membership ranking, having 137 members and being led only by Purdue with 203 members. The University of California was third with 123 members.

Help Keep Our Union Clean

Foundry Class Runs First Iron Heat of Present Semester

Last Thursday the first iron heat of this semester was run off under the guidance of Mr. Kube, foundry instructor. As in the past it was quite a show, drawing the usual amount of spectators. The furnace was charged to the maximum with seventeen hundred pounds of iron and a sufficient amount of coke to run the heat.

Every thing started off on time with a bang, and with the spectators getting in the way as usual. The first tap from the furnace went to burn out the ladles. This was no sooner accomplished when the second tap was ready and waiting to be poured. This tap was used up with the filling of the large ladle and a few of the hand ladles. The large ladle was handled by the two "mini mountaineers" of the class, who proceeded to pour their moulds in good style. The next few heats were repetitions of the second with the men preferring the smaller ladles. The class was a little jumpy handling the hot metal at the beginning, but after the first couple of taps they settled down like professionals.

As the work progressed the men pouring the large castings ran into a hot mould that proceeded to throw the metal back at them. This was quickly remedied by a few hand fulls of sand thrown in the riser and sprue holes. The men operating the furnace seemed to have the most interesting job, for their labors attracted the interest of most of the spectators. The climax of the iron pouring came when the bed of the furnace was dropped to allow the remaining coke and slag to leave the furnace.

Help Keep Our Union Clean

A.T.S.A.—

(Continued from page one)

needed to use all available space for studying purposes, but, once the new term arrives for the assembly hall, it will be used in preference to the lounge for studying purposes. Other suggestions that will be brought to the board, according to members of the staff, will include regulations regarding the movement of the furniture in the lounge, the use of the ash receptacles placed in the building last Friday, keeping the lights in the room out when not in use, and restraining from the use of the lunch room for studying from 11:00 to 1:15. Numerous other suggestions are to be brought to the board meeting by the members, since at the first meeting the complete regulations and the act forth. After this has been done the board will have few more suggestions.

'Engineer' Ready Before Holidays Says Hendricks

Professor Walter Hendricks, head of Armour Tech's English department and editor of the *Armour Engineer and Alumnus*, announces that the next issue of the quarterly will be distributed before the Christmas holidays.

At least two of the stories in the coming issue will be written by men from Armour. Dr. W. C. Krathwohl, director of the department of educational tests and measurements, will describe in detail the purposes and results of the tests given to freshmen at Armour. The title of his article will be "We Measure Our Freshmen."

From data and results obtained from experiments at the Research Foundation, Dr. Thomas C. Poulter, director, will discuss high pressures in an article on "The Study of Extreme Pressures and Their Importance in the Investigation of Engineering Problems."

Walter Stearns, President of Stearns and Voyt Photo-Engravers Company, will contribute an article on "Engraving." His article will describe the various processes used by engravers, the uses for which each method is best suited, and the equipment used in this work.

Another story to appear in this issue will be written by A. P. Peterson of New Departure, a division of General Motors Corporation. This discussion will be entitled "Ball-Bearings" and will cover the design and uses of a great variety of ball bearings.

Help Keep Our Union Clean

FRESHMAN—

(Continued from page one)

ing ballet; namely, that only one man may receive a vote for a given office. Any ballot on which a notation of this rule occurs will be thrown out. The second item is an explanation of the method of listing the candidates.

Four men are running for the of-

Advanced Freshman Chemistry Class Is Started by Manley

Dr. Manley of the chemistry department has organized an advanced class in freshman chemistry. It is for those students who have already covered the regular freshman course and desire something more advanced.

The first meeting was held last Friday, at which time Dr. Manley explained the purpose of the class and made reference assignments. Each member of the class must read a reference and write a report on it. Various reports will be picked at random and read at the meetings. The next session will be held on the first Friday after the Christmas holidays.

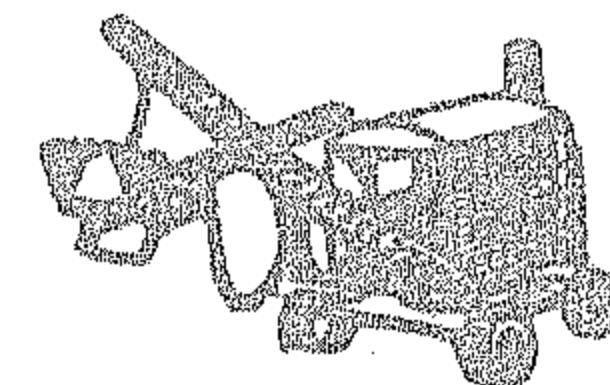
In a short time, the physical chemistry laboratory will have a new constant temperature bath. The tank of the bath will be made of stainless steel and will be large enough to perform large scale experiments. It can maintain temperatures accurately to plus or minus one tenth of one degree centigrade in a temperature range of from twenty-five to ninety degrees centigrade. It is being installed at the present time and will replace one of smaller capacity.

A new periodic chart is being made, for use in Science Hall, by Henry Newman. It will be about eight feet by ten feet in size.

In the research department, Doctors Manley and Kindsater have been developing several new types of jointing compounds for clay pipes. This project is being sponsored by the Clay Products Association.

fice of president, namely: Glenn Backman, Sam Balm, Ted Krupnik, and John Peterson. Only three are running for the vice president's position. They are: Joe Esterle, Ed Tarnowski, and Eugene Ther. The combined office of secretary-treasurer is being sought by William Hasskard, and Dick Talcott. Earle Huxford, Leonard Jindrich, and Joe Vokaty are campaigning for the office of A.T.S.A. representative; while Fred Klein, Frank Mickiewicz, Bill Simonini, and Bob Tatge are running for social chairman.

Steam Shovel



"Bar the doors, I see wolves approaching," probably was the password among the girls at Chicago Normal College last Friday afternoon. The cry did no good, however, for the Armourites stormed the doors as invited guests at the Christmas dance given by the coeds. Was it a success? Wow!

One thing that caught everyone's eye was "Jitterbug Biddle," an ickie if there ever was one. His legs reminded one of Seabiscuit coming down the home stretch. After dashing with a girl in black and white, he took home a blonde. Can't keep a good man down.

KEN OLSON, mechanical co-op, was busy with his pencil and little book taking down LORRAINE CHASE'S phone number. She was a cute little number in powder blue, and Ken wasn't the only one who noticed her.

A tall co-ed in a flaming red dress came dashing breathlessly up to Tom Hunter and exclaimed: "In case I don't see you again, goodbye!" With that she was gone with the wind. Her name is Eileen.

LLOYD NORKUS and JACK CLARK looked on from the sidelines. Overheard Jack remark, "I rode on her feet until she said I owed her another seven cents carfare. Then I quit."

Another dark secret was uncovered at the dance. Although PAUL HENRICKSON is reported going steady, whom should he ride on the "L" with, but MARION CLIFFORD, Normal's senior class president. We have a hunch she was looking for you at the dance, Paul.

HARV ROTHENBERG WAS SO ENGROSSSED AFTER THE DANCE WITH A GIRL THAT HE RODE RIGHT PAST HIS STATION ON THE "L" AND PROBABLY TOLD HER THAT HE LIVED UP HER WAY.

Carroll Peterson went to the dance with the hope of seeing his old flame, who attends Normal. However, other eye-fuls seemed to have captured his heart once he got there. . . .

When a canine friend entered PROF. PAUL'S strength class the other morning, the professor actually invited the homeless beast to stay. However, as soon as the dog sensed what class it was he dashed from the room. Quoter Prof. Paul, "I once brought home a little stray dog and had him for 15 years. By that time he weighed 150 pounds and many's the time that he was sitting on top of me after a wrestling bout."

Congrats to "SWING" FRANK CONE on his winning the radio offered by the senior class as a prize for those who bought senior dance bids. Now "Swing" will be able to swing it with Benny Goodman and the best of them.

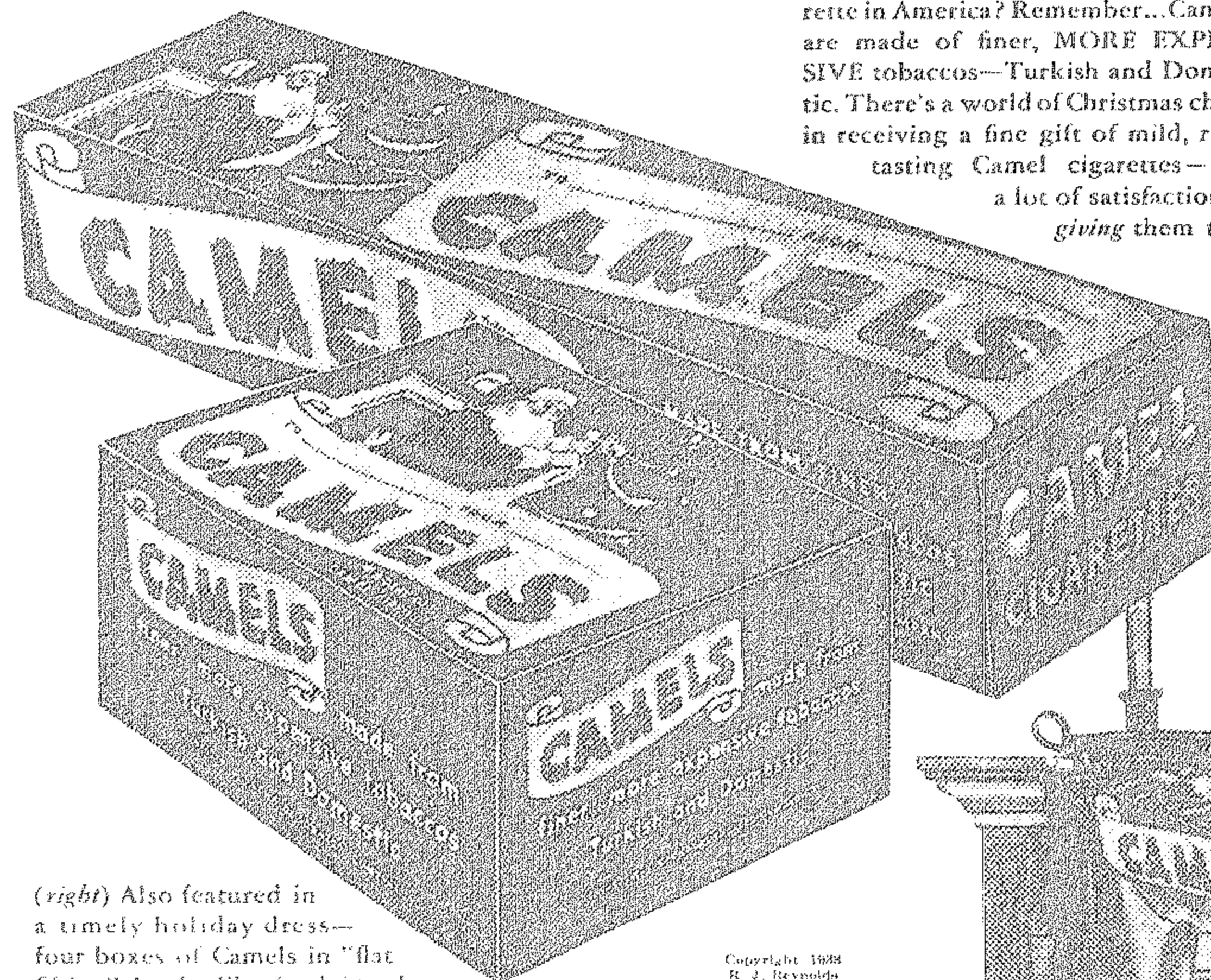
ROY JACOBSEN supposedly went to the opera recently to super, but other interests such as CYNTHIA WALKER of Winnetka, who was also supering, soon made him lose interest in "Faust" and "Jepson."

Those wandering boys of song, and bad boys of the glee club: Winblad, Vandekieft, Danforth, Mead and Yeakle had a swell time with those National College of Education co-eds: Mickey, Beth, Mary, Arlene and Sylvia, respectively, last Thursday evening, and if you smell smoke, it could be Mr. Erickson burning. Beware, glamour boys, you can't cross the swing maestro when you're supposed to be rehearsing with the Glee Club.

Well, so long all youse guys. A very MERRY CHRISTMAS and a HAPPY NEW YEAR. Make one New Year's resolution—not to make any resolutions, and you won't have any troubles. See you in '39!

CAMELS Season's Greetings PRINCE ALBERT

Check the smokers on your Christmas list—
delight them with these gaily-wrapped,
inexpensive gifts—Camels and Prince Albert



(right) Also featured in a timely holiday dress—four boxes of Camels in "flat fifties." Looks like (and is) a lot of "gift" for what you pay!

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Tobacco Company
Winston-Salem, N. C.

CAMELS—What could be a nicer gift for those who smoke cigarettes than Camels, by far the most popular cigarette in America? Remember...Camels are made of finer, MORE EXPENSIVE tobaccos—Turkish and Domestic. There's a world of Christmas cheer in receiving a fine gift of mild, rich-tasting Camel cigarettes—and a lot of satisfaction in giving them too!

(left) The handsome Christmas-wrapped Camel carton—10 packs of "20's"—200 cigarettes. Your dealer is featuring it now.



(above) A pound package of rich-tasting, "no-bite" smoking in this eye-filling gift package of Prince Albert, the world's most popular smoking tobacco. Be sure to see the big, generous one-pound tin on display at your nearest dealer's.



IN
SPECIAL
CHRISTMAS
WRAPPERS

A PERFECT WAY TO SAY
MERRY CHRISTMAS

Cagers Win, Lose; DeKalb, Chicago Maroons Oppose Tech This Week

Foresters Score 33-29 Victory as Long Shots Click Sliwa and Norkus Lead Armour Team

Armour	B	F	P	Lake Forest	B	F	P
O'Connor, f.	2	1	2	Harrison, f.	5	2	4
Norkus, f.	2	1	0	Starkley, f.	1	2	0
Lurz, f.	0	0	1	Gentry, f.	0	0	0
Swanson, c.	3	2	2	Patterson, c.	3	1	0
Scherer, g.	0	0	2	McAllister, c.	4	0	0
Janieck, g.	0	0	0	J. Pedersen, g.	0	0	1
Sliwa, g.	4	1	3	R. Pedersen, g.	0	0	4
Hoffman, f.	1	0	1	Mahon, g.	0	2	0
				McKenna, f.	0	0	1
Totals	12	5	11	Totals	13	7	10

Although showing more fight than it has ever displayed before this year, Armour's Techawks were humbled by Lake Forest to the tune of 33 to 29. The game was played last Saturday in the Lake Forest High School Gym.

Both teams played an open type of game and both overlooked several chances to score when men were free. The deciding feature of the game was the consistency with which the Foresters hit the hoop. Armour took more long shot than the opposition, but they couldn't find the basket and had to score from close in instead.

For the Foresters, Harrison was the outstanding man. This little sophomore tallied twelve points to lead both teams in scoring. Sliwa led the Techawks in point gathering and, with Norkus and Scherer, played a stellar game on defense. However, despite their efforts, the suburbanites got plenty of long shots and consequently tallied.

Armour got off in front in the first minute when O'Connor sank a free toss. Harrison tallied a field goal but Swanson retaliated to make it 3 to 2, Armour. Then Harrison started working and Armour never was in front again. The score at the half was 16 to 9. In the second half, Sliwa and Norkus led a fresh attack which brought Armour within three points of the Foresters, but this rally was stopped and Lake Forest went on to win.

Swimmers Start Against Loyola U. Seven Meets Scheduled; More Expected

In their first appearance of the year, the Tech swimmers will make their debut on January 11 at Loyola. Last year the Techawks won the return meet with the north side school after losing the first by a very tight score.

Three days later, the Cardinals from Naperville will travel to Bartlett pool in a revengeful mood, for last year Armour dealt North Central two defeats. Nevertheless, Captain Winblad is confident that the team, strengthened by the fine show of several new divers, will repeat and again win. A return match with North Central is scheduled on Feb. 11 at the Naperville pool.

Perhaps the brightest, if not the most enjoyable time, in the mermen's schedule, appears on January 21. Forgetting the ensuing exams for a week-end, the boys will travel down to Greencastle, Ind. There the old rival, DePauw, will lie in waiting, hoping to score another victory over the Techawks. Last year, the Indiana school boys walloped the Tech swimmers twice by fair margins.

On either February 27 or 28, George Williams, the college at which swimmers learn how to swim fast and smooth, and Armour will resume its series they stopped two years ago. The meet will be held at Bartlett pool, each team will be trying to beat the other to the draw by winning the sole meet between the two.

Bradley Tech will be the guest of Armour on February 17. Much has not been heard of the downstate team but by the time of the meet its strength will be known. As the grand old Tech '39 season, DePauw will appear in Bartlett pool to meet for the second time. Last year the return meet, DePauw had beaten the Techawks in the best meets of the year. There are now scheduled seven with five different schools. It is, however, by the time the meet is held, that more meets scheduled with colleges such as DeKalb, Lawrence and

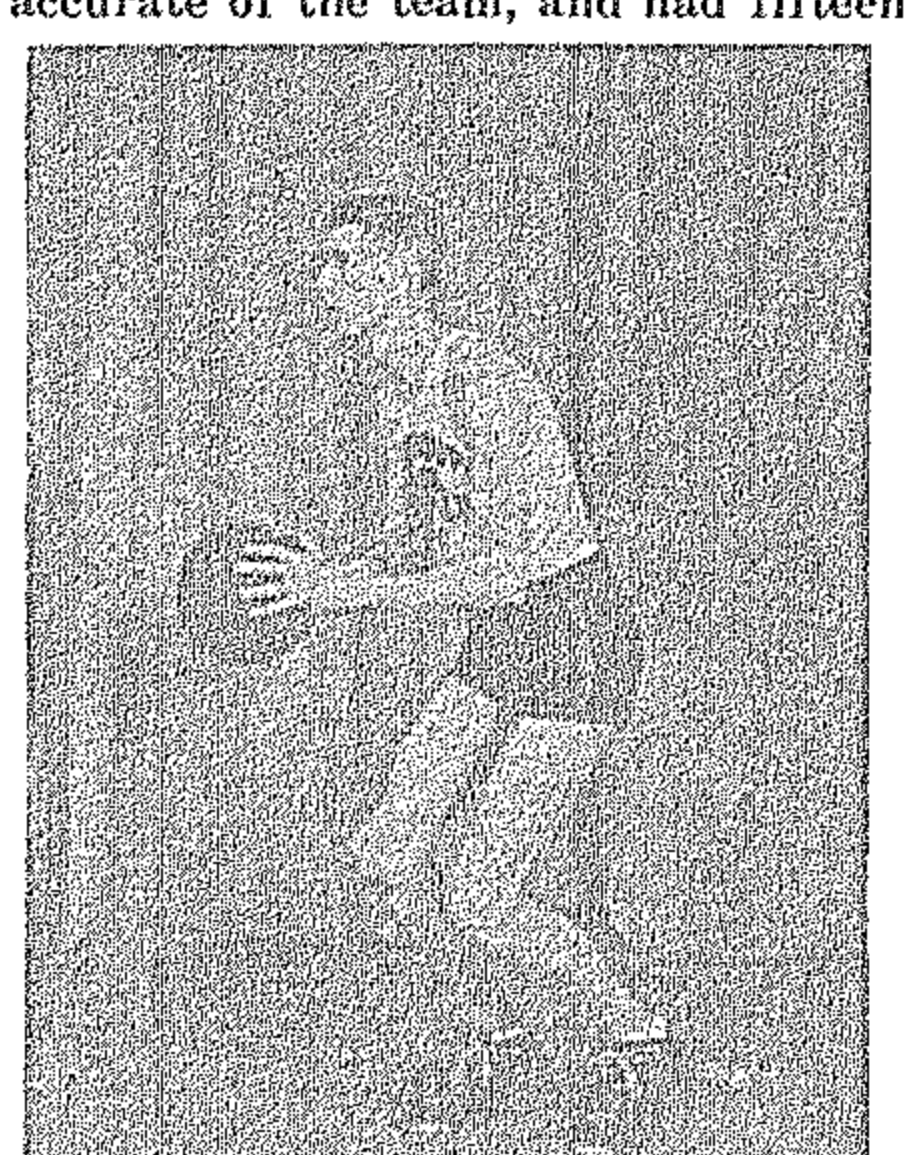
Armour Defeats Arkansas Indians With 37-34 Score

Co-Captain Ed Swanson Paces Score with 15

Armour Tech (37)	B	F	P	Arkansas State (34)	B	F	P
Norkus, p.	1	2	2	Baldwin, f.	4	1	3
O'Connor, f.	3	2	4	Clements, f.	2	0	2
Swanson, c.	5	5	2	Keller, c.	2	2	1
Janieck, g.	0	0	0	Griffin, g.	3	1	2
Scherer, g.	0	2	0	Busby, g.	0	1	4
Lurz, f.	1	0	0	Metzler, f.	1	1	3
Sliwa, g.	2	2	1	D. Keller, f.	2	0	1
Totals	12	13	9	Totals	14	6	16

Armour's '38 version of a basketball quintet won a game and distinction last Thursday by finally beating a stubborn Arkansas State team, 37-34. The distinction was that Coach Stenger's boys were the first Northern team that had not scored at least 60 points against the already scalped Indians.

Although the Techawks barraged their opponents back board with shot after shot, they met with little success in putting the ball through the hoop. Ed Swanson was the most accurate of the team, and had fifteen



High Point "Swannie"

points to his credit, five goals and five free shots. O'Connor followed up with eight marks, while Baldwin, a reputed All-State forward, led the visitors with nine points.

Keller Hoops Long Shots

Arkansas jumped into a four point lead before the echo of the starting gun had died down. By virtue of gift shots and two goals, the score was tied at eight all in the middle of the quarter. Armour's defense stopped momentarily the visitors' fast breaking style of play. However, the dead-eyes from beyond the Mason-Dixon line kept their score piling up mainly by swishing long ones through the hoop from mid-floor. Keller seemed to excel in this art.

For a brief period during the second quarter the Techawks started to click. Sliwa played dead man under the basket and sunk one. Then Swanny had a streak and bounced two in succession through the hoop. However, sloppy ball handling stalled the Tech machine, and the tempo slowed down. Metzler managed to make the score 20-18 just as the half ended.

Plagued by Refereeing

Plagued by the curse of home-team refereeing, the Indians never held the lead for more than a few seconds during the rest of the game. For a large part excellent defensive work by Sliwa and Scherer kept the Indians from taking more Techawk feathers. At the start of the fourth quarter, after O'Connor had put Armour again in the lead with a timely shot, the score was 30-29.

At the start of the final period Lurz and O'Connor both made field goals and Armour enjoyed a five point lead. Then the Statemen stole the ball and raced down to Armour's basket with only Sliwa barring the way. Not only did Sliwa stop this scoring threat, but also seized the ball and dribbled up the floor.

From that moment on, Arkansas was only able to make one free shot. For the remaining two minutes in the game, Armour managed to freeze the ball, and the contest ended with Swanson holding the ball and Armour holding down the long end of a 37-34 score.



By TOM CLARK

Armour's "pill-box" will be a scene of fervid activity come 3:30 p.m. Today, as the seniors and juniors launch the good ship "Interclass Basketball." Long awaited, this classic breaks forth for three day of glory, the finals being played on Thursday, and then settles back to await another year. The juniors are odds on end favorites to take the seniors into camp, having six members on the varsity team who are eligible. Eligibility is determined by tradition, and tradition (which consists of nothing more nor less than looking up in the News files) reveals that only men who have received basketball awards are ineligible to play on the interclass teams.

Boxing and wrestling are other school tournaments that are edging to the fore, and will appear on the scenes shortly after the new year. Last year the tournaments went interclass, and worked so well that it will come under that category again this year. The present seniors took the boxing event last year, and the class of '38 captured mat honors. Incidentally, that's the same class that took Interclass honors for four straight years.

Schommer Announces Relays for March 18

Concurrent with the opening of the indoor track season at Armour comes the announcement by Athletic Director Schommer that the annual Armour Tech Relays will be held on March 18 at the University of Chicago Fieldhouse. Invitations are now being sent out.

This will be the eleventh renewal of this event and as usual a successful meet is looked forward to. Last year the College Division was won by North Central.

The outstanding feature of the evening was the marvelous mile run turned in by Wisconsin crack miler, "Chuck" Penske, who traveled the distance in 4:08.9 for the fastest indoor mile ever run in the midwest.

In the tenth running of this great show with its galaxy of stars, Armour did well in gaining two first places. This year, however, Armour will not have its gold medal winners back, since both have left Armour. Alex Bingham, who tied the record in the 60 yard dash, has received his B.S. in mechanical engineering, while Covington, winner in the quarter mile, has dropped out of school.

Despite this loss, the Techawks believe that they can come back and better last year's results, which were the best Armour had reaped in several years.

Wrestlers Recompense with Morton Win 26-10 as Tech Opens Mat Season

Emerging on top both literally and figuratively, the Armour Tech matmen downed a heavy Morton Junior College squad 26-10 last Thursday night in Tech's opening meet held here at Armour.

Losing only two bouts out of nine, there being an extra exhibition bout in the 155 pound class, the Armour grapplers recompensed for last year's closing defeat received by a detrained Tech squad.

Till took his match in the 121 pound division, carrying the match all the way for the full eight minutes. McDanel, although seeming to have the advantage most of the way, lost his grip and was pinned by Vosen in 3:15 minutes.

Next, Ropak at 135 pounds pinned his luckless opponent in short order. Then Hanna, tearing into a heavier grappler than he, tossed Ptak around the mat much in the fashion of a medicine ball, the punishment succumbing the Mortonite in 3:15. Nigrelli in the 155 division over-

Wrestlers Battle Wheaton 'Little 19' Champs Tomorrow

Expect 500 Spectators at Wheaton Gym

Before an expected crowd of 500 or more Wheaton fans, Armour Tech's wrestlers go to work tomorrow night at Wheaton College to even up an old score and seek their second victory in two tries.

Last year Wheaton beat a strong Techawk squad 20-14 in a close match, and this year Wheaton College again has no team to be underestimated for they have been Little Nineteen wrestling champions for about the last eight years, and have not yet given evidence of slackening down.

The bout tomorrow night is the first of Wheaton's encounters this season. It is not only the first, but it is the most important for the West Suburbanites.

Expect Crowd of Fans

A crowd of anywhere between 500 to 1,000 people are to be on hand at 7:30 when the doors of the Main Gym swing wide and the "bone-crushers" go to work.

This year the fans have had an opportunity to view a newcomer to the Armour Tech tusslers. A. Pocius, a sophomore, is taking the place of Balsewick who has been recently injured. Not only is he being thrown to the tigers with a minimum of experience, but he is being put before the big tigers in the heavyweight division.

Last Thursday the team won its opening match and the boys displayed their skill by copping six out of eight events.

The probable entrances for the bout tomorrow night will be Till at 121; McDanel at 125; Ropak at 135; Hanna, 145; Nigrelli, 155; Kazmierowicz, 165; Capt. "Buss" Tullgren at 175; and Pocius in the Heavies.

All the boys are seniors with the exception of Pocius, Hanna and Kazmierowicz. Till and Nigrelli are both Co-ops.

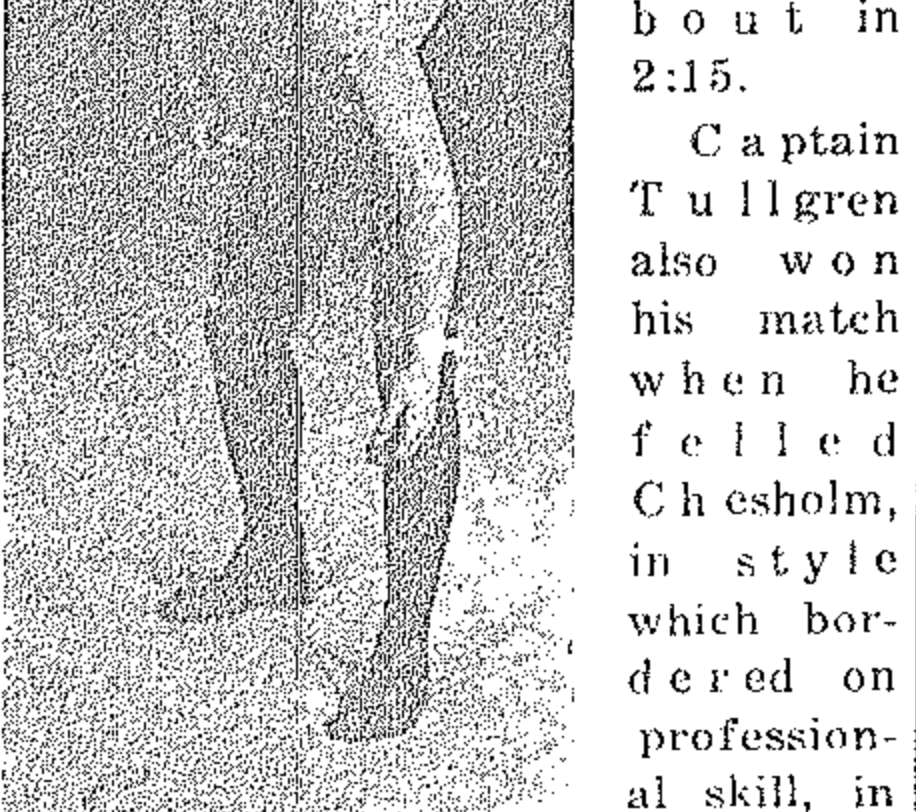
Weissman Reveals Entries

The team, according to its mentor, Sonny Weissman, might use Butkus, the State champ from Tilden in tomorrow's 155 pound bout. Material like this gives Sonny's boys a great outlook for the next four years. Those other men who are biting their nails for the big opportunity are Thodos at 145; Cole and DeBoo at 135.

Judging by last Thursday's performance and by the looks of the men, the Armour "grab and groan" fans can expect a victory. Coach Weissman remarked however, that although the boys looked good they needed more conditioning.

No information has been received on matches with Beloit or Lawrence, but the much hoped for match with Purdue has been definitely slated for January 11, a home bout for Tech.

came Hall in the same quick fashion. Kazmierowicz put his man away in an exhibition bout in 2:15.



Captain Tullgren

In the heavyweight division, however, Pocius lost to Uher after about six minutes of fast wrestling. Wind-up the meet with a win. Thodos pinned Schommel, a game matman from Morton, in a 155 pound exhibition bout.

COACH WEISSMAN



WRESTLING SCHEDULE

Dec. 8—Morton	Here
Dec. 14—Wheaton	There
Jan. 11—Purdue	Here
Feb. 3—Morton	There
Feb. 8—DeKalb	There
Feb. 17 or Mar. 3—Case (Cleveland)	There
Feb. 24—DeKalb	Here
Mar. 18—Wheaton Invitational	

Defending Seniors Face Junior Cage Aggregation Today

Frosh-Sophs Tomorrow; Finals Thursday

This afternoon at 4 o'clock the annual interclass basketball tournament will get under way with the juniors facing the defending champs, the seniors. Tomorrow the frosh and sophs will mix, and on Thursday the two winners will square off for the championship.

The scene, despite the efforts of several to change it, will be the gym on fifth floor main. The tournament has been held up three weeks waiting for the room to be vacated. The juniors, especially, were endeavoring to have the game removed to the Armory, which could have been obtained for a nominal fee. However, this plan was vetoed by the Tech authorities.

In today's game, the juniors are looked upon for a victory. Although the seniors won the title last year, they lost Bill Hofmann, who having won a letter is ineligible, as is any other player who has received either a letter or numerals for basketball. Without Bill, the seniors will be more or less impotent and are not expected to stop the smaller but more prepared juniors.

The sophomores and frosh will both present unknown quantities when they battle. As yet, Bill O'Brien has had little chance to develop the freshman team and consequently their teamwork is not expected to be of the highest order. The sophomores also will present a new set of faces since all members of last year's frosh team that won numerals are ineligible.

Hank Sliwa, a newcomer on the varsity, will be one threat of the sophomores and will join Roy Bosnak, Chuck McAleer, and Charles Schroeder, or others, in facing the frosh turnout on Wednesday.

Trackmen Work-out Today in Fieldhouse

Led by Co-captain Dick Vandekieft and Steve Finnegan, the track lettermen will have their first workout today at the U. of C. Fieldhouse. Thursday the remainder of the squad will be assigned lockers and given equipment.

There is a surprisingly large group of co-ops on the team but there is plenty of room for more talent.

February 3 or 4 will be the date of the first meet with North Central. Interclass track will be scheduled late in January, at which time the seniors, who have been thwarted each year from copping the honors, will be attempting to quell all younger classes for a change.

Techawks Face Teacher Squad At Home Today

To Visit Midway Friday For Annual Game with Maroons

FROSH FACE DE PAUL

Facing a strong De Kalb Teachers five on the Armory floor this afternoon, and an especially fast and powerful University of Chicago squad Friday night at the Midway fieldhouse, Armour Tech's basketball squad will test itself against plenty of skill this week. Both teams whipped Tech last year and are reputed to have even superior squads. DePaul University, meanwhile, will form the first opposition for the Tech freshman squad when the two frosh cage quintets meet at DePaul this week.

DeKalb's Northern Illinois State Teachers have more power than last year's men, who deluged the Engineers with baskets to the tune of 44-28. In fact, three of last year's lettermen on the DeKalb outfit lost starting assignments to newcomers. The Armour boys will have to be in top form to overcome their opponents.

DeKalb Triumphs Over Tech

In last year's game the DeKalb boys were hitting the hoop from all angles and displayed too much offensive power to help Armour's cause along any. They finished with a 44-28 victory. Scherer showed the way for the Armour sharpshooters, garnering a total of 9 points.

Three days after the DeKalb tussle, the Techawks move down to the U. of C. where, on next Friday night, they battle a strong Maroon team. The '37-'38 edition of the Big Ten team came through with a win over the Engineers, 45-32.

Maroons Appear Strong

This year's cage quintet from Chicago looks stronger now than it has for several seasons. The Maroons have come through with victories in their opening games with North Central and DePaul, both experienced teams. Two lettermen, Lounsbury and Meyer, form the nucleus for the present team. Lounsbury, a rangy, 6 foot 4 inch center, matching the height of Co-captain Ed Swanson, center for Tech, the key man on the Chicago team, is playing in his junior year. He placed tenth in the Big Ten individual scoring last year when he was a sophomore. Meyer, who won his letter last year at center, has been converted into a forward for the 1938-39 season. Meyer, who played regular quarterback on the 1938 football team, is a shifty player who handles the ball well.

Other members who add strength to the team are Stampf, a 6 foot 4 inch sophomore who played on Calumet high school's championship squad two years ago; Allen, a forward on last year's squad; and Stanley, also a forward from last year. The Chicago squad averages 6 feet 2 inches in height, and this height advantage should give the Armour boys plenty of trouble.

Coach Stenger, who has been looking for some hefty and rangy men among the first two strings, will probably have lanky Ed Swanson in at center to match Lounsbury of the Maroons, Norkus or Hofmann and O'Connor, forwards, and a group of guards to chose from—Co-captain Paul Henriken, Joe Janieck, Bill Scherer, Herb Sher, and Hank Sliwa.

Gymnasium Resumes Usual Physical Education Course

Armour's gymnasium is again ready to accommodate the freshmen and sophomores, who are required to take a course in physical education. Each student has been examined by Dr. McNamara and his exercises arranged according to his physical condition. That is, if a student is found to have a physical defect, steps will be made to correct it.

The classes have been meeting since last week and instructions have been given by Grant N. Stenger, the physical training instructor, on what to wear during exercise for proper breathing. This week actual classes will begin.

Co-op Notes

By E. P. HANUSKA

The "B" group Co-ops are back at school again ready to plow into the courses their alternates, the "A" group, have just happily (?) completed. Incidentally, I'd like to inaugurate the following nomenclature to be used in identifying Co-op men. After each Co-op's name will appear an "A" or a "B," depending upon which group he is in, followed by a numeral indicating his year at school; for example, R. Smith B3 (in the "B" group, third year).

It has been reliably reported that Dr. Giddings has just completed a successful campaign against the juniors and sophomores (number of casualties not yet determined) using that terrible weapon **Differential Equations** as his scalping tool. This same source also reports that Prof. Giddings has fully supplied himself with new and tougher problems with which to bombard us, the "B" group! Ha! but we're not afraid; what's a little thing like finding the equation of a raindrop falling 25 feet per second at a distance of two miles above the earth, etc., etc. All we need is 10 hours of time at home each night and we'll work any problem, or will we? Time will tell!

P. Koenig B2 has lots of pictures of his recent vacation in Germany, but will say little about his trip. Anytime you're in trouble see Vic "Socrates" Milewski B2 for moral support. E. Ambrose A2 is probably up in Michigan visiting his "grandmother." Note to F. Krahulac B3: We hope you are planning some affair for the Co-op Club at the end of this term; C. T. Swanson B2: How about injecting some of your dancing pep in the other fellows to help conquer Diff. Eqs?

Armour Homecoming Ceremonies Features Talk by Dr. Scherger

Homecoming! Old grads, young grads, fat grads, skinny grads—about two hundred and forty of them—jammed into the Union dining room last Friday to celebrate their first annual Armour Tech homecoming dinner.

From 6 o'clock to 11 o'clock in the evening, Armour men, representing practically every class that has graduated, made the halls of the new Student Union re-echo with a joyous clamor as they greeted old friends, made new ones, reminisced about the "good old undergraduate days," and enthused over Armour's bright present and future.

Discusses Armour's Past

This outlook to the future, a keynote of the entire Homecoming, was well expressed in President Heald's words as he addressed the assemblage, "You have been hearing Dr. Scherger talk over the 'good old days.' Now let me tell you some of the things that we at Armour are now doing, and intend to continue doing."

Dr. George L. Scherger, a grey-haired stalwart of Armour's past, was the main speaker of the evening. He spoke eloquently of Armour in the days of Gunsaulus, Mann, P. D. Armour, and others. Although Dr. Scherger's talk was predicated on Armour's past, he urged the present to carry on in the spirit of Armour's past great leaders.

Relates Origin of Mission

Many interesting facts came to light during Dr. Scherger's speech. Among these was the story of the origin of the Armour Mission and Armour Institute—how Dr. Gunsaulus' "million dollar sermon" on training young men to use their hands so impressed P. D. Armour that he gave Doctor Gunsaulus a million dollars

with which to found a school embodying these principles.

President Heald then presented a short talk on the activities of the school at present. He told how the Union building so recently completed is already accomplishing one of its purposes: namely, to bring people outside of the school here to see what we are doing. The story of the renaissance of the Armour Mission was not retold, but President Heald did mention the work done by Prof. Moreton, Architects Loeb and Schlossman, and Prof. Seegrift.

President Heald then gave a brief report of the diverse fields of activity being engaged in by the school. Armour is no longer supported by the Armour family, but by the community. Its gifts from the alumni, the trustees, and industry which are maintaining the school. The student body is the largest in Armour's history—more men than ever are turned away because of a limited student capacity. The great advancement of the evening school and the graduate division was mentioned. These are now about three hundred men in the graduate school working for advanced degrees. President Heald's mention of the research foundation was supplemented later by a brief talk by Prof. Vagtberg.

Placement Facilities Enlarged

The enlargement of the placement facilities was discussed by the president, who urged all the alumni to get in touch with Prof. Schommer if they knew of jobs that needed filling, or needed a job themselves. An invitation was expressed by the president to make the Union available to the Alumni for meetings, or dinners, provided, of course, that it didn't conflict with an already scheduled event.

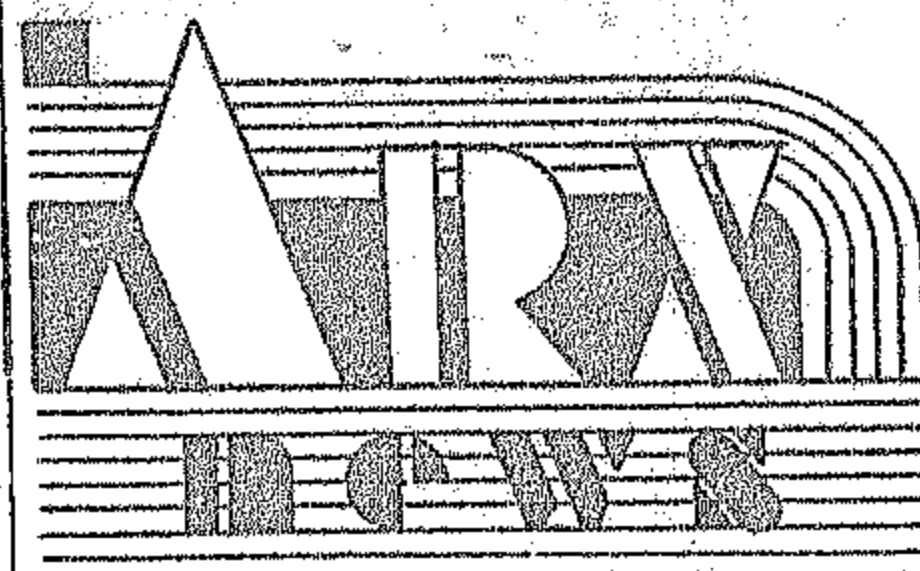
Kent Continues Experiments at U. of Michigan

The television apparatus which aroused so much comment when it was publicly demonstrated at the Institute last open house night has been shipped to the University of Michigan. Further experiments will be conducted with this set by Earle L. Kent, an instructor in electrical engineering at Armour. Mr. Kent, who is on leave at present, is working for his doctorate degree at the University. Together with other research workers at U. of M., he will try to improve the existing equipment and add other pieces that permit transmission and reception of the images on ultra short waves.

As it now stands the television outfit was built last year at Armour by Mr. Kent and several students in his television classes. Constructed after principles of the RCA system, the television "camera" contains a \$400 iconoscope tube and a special amplifier capable of responding to impulses ranging from below 20 to well over 1,000,000 cycles per second. Tiny acorn tubes, no larger than buttons, are used for this purpose.

In the receiving unit a ten inch cathode ray tube reproduces the image which has the high definition of 441 lines; this means a clearness of pictures comparable to that of home movies.

The showing of the experimental apparatus at Armour last semester was the first public demonstration of high definition television in Chicago. At the time pictures were sent by wire to the receiver rather than being transmitted by radio. While at the University, Mr. Kent hopes to improve the apparatus so that when he returns it will be completely operative.



Well, ARX, this is the last issue of the Arx News for this year, but we'll be back Jan. 9 . . . with Christmas doings.

Professor van der Rohe is really showing the seniors how to make their models. Just last week he started on his, and now he is almost done; the seniors are getting cross-eyed trying to keep up with him. . . . Oddity: Even Swede Erickson is working, that is news. . . . His system is also in effect when just one fellow is helping him, some crust! (He just finished a Class A project.) The poor gal has got it bad out in Omaha, poor pretty Kitty Kelly.

We had a visitor in graphics last Wednesday. Mirotznic Jr. came into the room, looked around, saw Danforth, and jumped for him.

At the Architect's Ball, Fox nearly fell into the water watching the fine detail of the statue in the center of the fountain. . . . Mandel appreciates art too; all last Friday he was doing the model, in litho. . . . Juniors are finding themselves in a real Charatte, from now until February.

Sophs are all heated up about their "life class." Quotes one: "Holy smokes, female next week" unquote. . . . Of Pehta's injuries last week, his leg and his brain, his leg has recovered.

Piper and Ostergren seemed to have gotten into a very embarrassing situation last week, according to Mour: very bad. . . . The Sweet Potato Band is on the downfall since Joe Q. U. Wagner has declared a sit-down strike on them. . . . Poor ole

Dr. H. Fisk, Refractories Expert, Added to Staff Of Research Foundation

Recently the Research Foundation added to its ever-growing staff Dr. Henry G. Fisk, a well-known authority on refractories, clay products and cements. He will spend all his time working on the Dolomite project, which has been underwritten by the Marblehead Lime Co.

Dr. Fisk received a bachelor of science degree in chemistry from the Occidental College in 1923, a master of science degree from the University of Illinois in 1924 and a doctorate in Mineralogy from Ohio State in 1927. He started work as chief chemist for the Vitrefrax company in 1924, developing uses of the electric furnace refractories. In 1927 he was employed by Gladding McBean and Company, for whom he equipped and started a research laboratory and then carried on development work in refractories and introduced new tests for clays and clay products.

Dr. Fisk was connected with the research department of the Universal Atlas Cement Co. from 1927 to 1936, working the analysis of the minerals in cement clinker by high temperature and microscopic methods and the correlation of microphysical characteristics of clinkers and cements. In 1936 he organized a research lab., for the Calveras Cement Company and developed and perfected a number of products.

and a lightweight building cement. Joe, just doesn't appreciate good music.

I leave with: No news of the judgments; boy, do we miss ye good ole judgments, without them there isn't half as much to talk about, as well as to write about.

Hoping Santa Claus won't see all your red marks (no X's anymore). BOZ-ART.

The Right Combination

Chesterfield

... the blend that can't be copied
... a HAPPY COMBINATION of the world's best cigarette tobaccos

All through the year
and all around the clock Chesterfield's
milder better taste gives millions
MORE PLEASURE

At Christmas time send these pleasure-giving cartons of Chesterfields—packaged in gay holiday colors—welcomed by smokers everywhere.

You'll find Chesterfields a better cigarette because of what they give you—more smoking pleasure than any cigarette you ever tried—the right combination of mild ripe home-grown and aromatic Turkish tobaccos rolled in pure cigarette paper.