





### Swimmers Face Crane In Opening Meet Of Schedule Wednesday

#### Expect Four Lettermen To Be Backbone of Team

The opening meet on the schedule of the swimming team will be with Crane Junior College next Wednesday, January 16. Walter Trognitz, '30, who is captain of the mermen, and three other letter men of last year, Strauch, McLane, Dittmer, are expected to keep the Crane men worried, while the new members of the team, Vander Velde, Filmer, McInerney, Brown, and Stempel, are expected to add to Armour's possibilities.

The meet is due to start at 3:30 P. M. Zolad is manager of the organization.

### Faculty Biographies Soon To Be Featured

Starting next issue, a series of short, informal biographies of members of the faculty and other men connected with the Institute will be run, a new one appearing every week. The first article will be on Dr. H. M. Raymond, and is being prepared by T. J. Leardi, '29, C. E. A picture of the man will appear with each article.

The purpose of the articles is to provide the student with a more thorough acquaintance of the faculty members, many of whom are nationally prominent in their respective fields.

The issues next semester will appear as usual each Thursday morning. No issue will be brought out during examination week, but an issue will be published on the Monday of the first week of the new semester, which day falls on February 4. Second semester subscriptions will be received on that day, which is also Registration day.

### Student Jobs In 1922 Different Than Today

The recent questionnaire filled out by the students as to the amount of tuition and expenses earned brings to mind a similar questionnaire filled out by the student body in 1922. A total of 626 men answered the first questionnaire. The information was printed in the May, 1922, number of the Engineer, and appeared in the "College Notes" section.

Nineteen students recorded themselves as not being citizens of the United States. About one half of the students worked during the summer, the number of men performing work for which they received pay being 326. One stated that he paid an income tax. (Prohibition had been in effect some two years then.)

Among the various jobs held by students were dairy helpers, farmers, magicians, barbers, musicians, painters, oiler on lake boats, social workers, boiler maker, firemen, engineering, waiters, chauffeurs, bricklayers, radio operators, and various other jobs. One man was employed as a fire insurance inspector; today there are probably 120 students employed in the summer in this work. There were more men listed as working as farmers during the summer than engineers. The leading profession was salesmanship, with 54; next came drafting with 41.

#### NOTICE

The last laboratory period in Physics for the semester will be Jan. 22, 1929, according to Prof. Doubt, head of the Physics laboratory department. All reports to be credited on this semester's work must be handed in on or before Thursday noon, January 24, 1929.

### Stebbins, Zwart, Frost, New Campus Club Heads

Herbert H. Stebbins, '30, M. E., was elected president of the Campus Club at an election held last Friday. Maurice Zwart, '29, M. E., was made vice-president, while Alexander J. Frost, '30, M. E., became Secretary. These men will be officially installed next week.

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### Cable Manufacture On Screen For A.I.E.E.

A time-reel film showing the manufacture and installation of cables, furnished by the Okonite Cable Company will be featured at the A. I. E. E. meeting in Science Hall Monday at 11:30 A. M.

Two student papers will also be presented. These are "Electric Drives for Automobiles," by Edward Gross, '29, E. E., and "Electrical Industrial Trucks," by Ernest Michelson, '29, E. E.

As this is the last meeting of the semester all members are expected to be present to hear several important reports.

### Improved Airplane Tested At Newark

An interesting test of an original airplane design took place last Saturday at the Newark, N. J., municipal airport. The plane tested was a twenty passenger monoplane powered with two 650 H. P. Curtis engines. The two motors were paired under one cowling; and the cabin, 11 feet by 20 feet, is placed directly behind them, the entire fuselage being built as a typical wing section of extreme chord, so as to minimize its drag. The lift of this type of body is considerable, as much as four pounds per square foot, so that the landing speed is reduced 12 percent. Two advantages were thus obtained, ample cabin space and low landing speed. The designer is Vincent Bunnell, who was financed by Paul Chapman of this city.

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#### FRATERNITY NEWS

**Delta Tau Delta**  
J. M. McAlear, '31, M. E., has just returned from a two weeks' confinement in the Mercy Hospital, where he has been ill with the flu. J. R. McLane, '31, Arch., is on the convalescent list after being ill with the flu.

In recent elections: Harry Nissen, '29, C. E., was elected to the office of Recording Secretary, this office was vacated by J. E. Ransel, '30. Frank Aste, '30, F. P. E., was elected to the office of Corresponding Secretary, this office was vacated by C. F. Somerville, '30.

**Phi Pi Phi**  
Phi Pi Phi wishes to announce the initiation of Edward Erland, '30, F. P. E., on January 11, 1929.

**Theta Xi**  
Theta Xi will have an Alumni Smoker at the Chapter House Thursday night, January 24, 1929.

**Rho Delta Rho**  
Rho Delta Rho inaugurated the new year with a dance at the Chapter House January 4, 1929. The house was decorated by the architects in a modernistic manner, flashes of color supplying the predominating effects.

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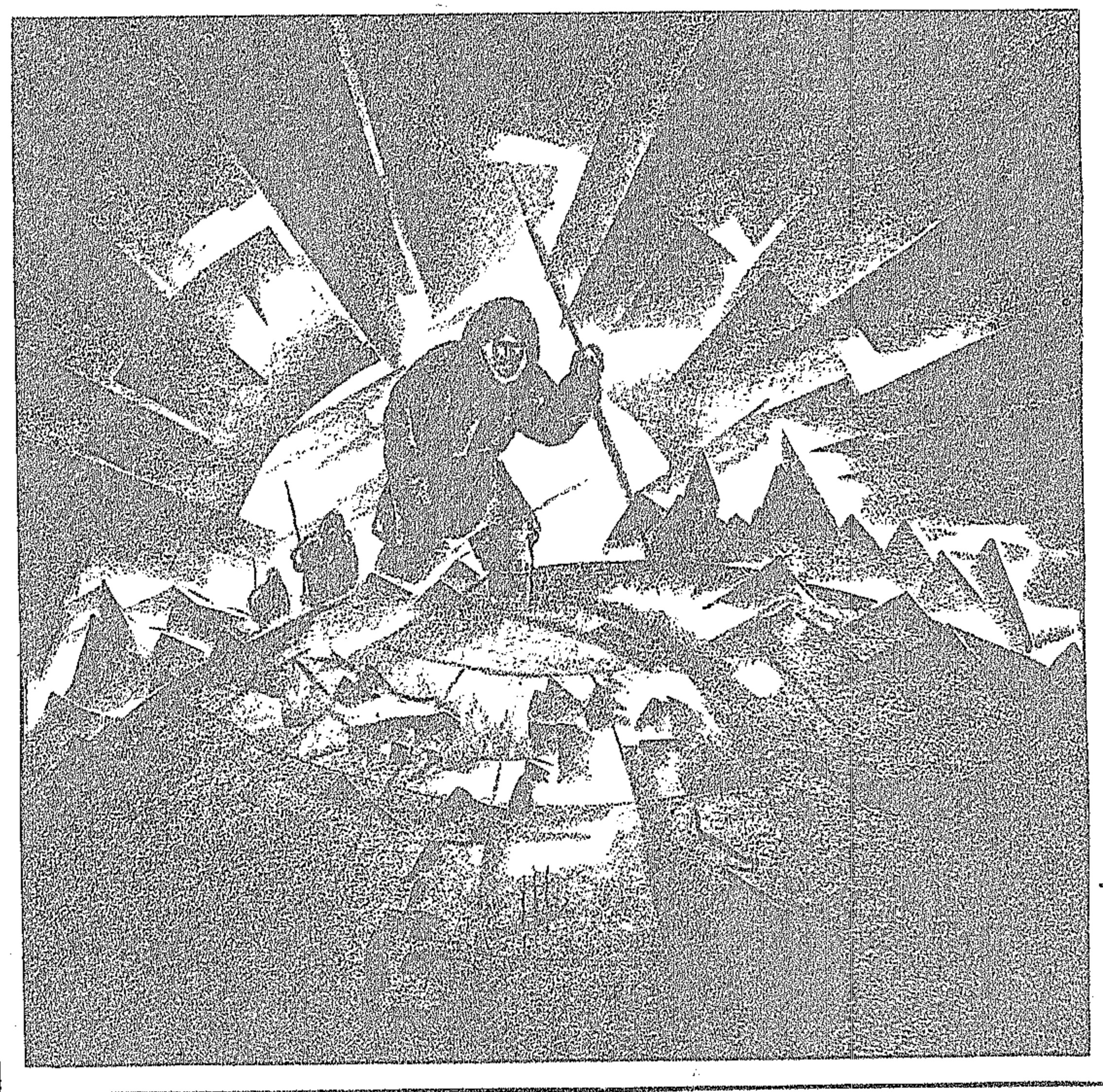
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### Taxing the Railroads

The railroads of the United States at present pay approximately a million dollars a day in taxes. In many parts of the country railway taxes form the principal support of local governments and make possible good schools, hard roads and many other public improvements which might otherwise be practically unobtainable.

Although railway taxes have increased nearly 300 per cent since 1911 and at present are approximately equal to railway dividends, the railroads have not taken the lead in complaining about tax burdens, because they realize that taxes have increased largely in other lines of business also. The railroads do claim, however, that it is inconsistent to expect reductions in railway rates while taxes and other expenses continue high. They point out further that if reductions in rates are enforced without accompanying reductions in taxes and other expenses, the only alternatives are bankruptcy for many railroads or a deterioration in the quality of railway service.

The railroads, in common with other businesses, must pay their taxes out of their current receipts. This means that every patron who buys a ticket or pays a freight bill is helping to pay railway taxes. Since taxes represent the expense of government, therefore, one of the sound ways to reduce railway rates is to reduce governmental expenses and, as a result, railway taxes.

Not all railway taxes are strictly comparable with taxes in other lines of business. Railroads which received grants of land from the government in pioneer days sometimes had to enter into unusual tax arrangements in return. Besides providing transportation required by the government at reduced rates, the Illinois Central System, for example, has to pay into the treasury of Illinois in perpetuity, in lieu of other taxes, 7 per cent of the gross earnings of its 705½ miles of charter lines. This charter tax is now in excess of what ordinary taxes would be, and the railroad is, in effect, paying for the original land grant at high prices, with interest besides.

Constructive criticism and suggestions are invited.

L. A. DOWNS,  
President, Illinois Central System.

CHICAGO, January 15, 1929.

(An essay contest for college and university students in Illinois Central System territory is now in progress. It will close February 28. For details write L. A. Downs, President, Illinois Central System, Chicago.)

### TECH OUTPLAYS M'KINLOCK BY 27 TO 18 SCORE

#### Engineers Vanquish Foes, Game Shows Good Teamwork

The Tech cagemen defeated Northwestern University at the McKinlock Campus at 122nd Field Artillery Saturday afternoon by a score of 27-18 in a game that saw the score always close but without any doubt of Armour's superiority.

From the middle of the first half when Augustine dribbled through for a basket, until Robin sank a short shot just before the final gun, the Tech five held the advantage. At half time the Engineers held the long end of a 10-8 score. A counter attack during the second half by Manz, Simpson and Augustine again increased the Tech advantage, which never again was threatened.

#### Many Personals Made

Individual stars were lacking and many personals were made by the basketeers. Boyer and Kuehnert of N. U. and Rutkowski and Goodheart were forced to leave the game for undue roughness. The leave of the two Purple basketeers forced N. U. to play with four men in the final minutes of the game.

#### First Half Close

Armour started the scoring when Rutkowski sank a long shot which was followed by an under-the-basket shot by Cook tying the score. With the score 5-5 Boyer sank a beauty from the side lines putting N. U. in the lead whereupon Armour peppered the back-board with shots but with no success, Simpson put Armour one point behind with a field goal. Here the Tech's lost the services of Rutkowski who went out on four personals—Goodheart going in. During the closing minutes of the first half Augustine contributed a field goal and a free throw which put Armour in the lead 10-8.

At the opening of the second half Goodheart made good on two free throws. Moffic scored a two pointer for N. U. and Simpson and Augustine followed with a field goal and a free throw respectively.

Later Armour acquired a lead of 22-14 on some pretty passwork involving Rossing and Simpson with Manz scoring a field goal and Augustine dribbling the length of the

#### Gunmen Arrange Fray With Crane Tech, 3 P.M.

The Armour Rifle Team will attempt to uphold their marksmanship honors at 3 o'clock this afternoon at the 124th Regiment Armory in a match against Crane Tech. Since the opposing team rated very highly last year in the Hearst Trophy shoot, a victory from Crane would be very encouraging to the Rifle Club in bringing their share of the glory to Armour.

The Club has also been fortunate in securing a postal rifle match with a team composed of marksmanship enthusiasts who are members of the New York Stock Exchange. This match will be held some time next week.

On Saturday, Feb. 16, the team will shoot a shoulder-to-shoulder match with Culver Military Academy cadets. The team will be guests of the Academy for the day.

### Overtime Periods Feature Fraternity Game

(Continued from page 1)

cidently, Hendricks was high point man for the winners with ten units to his credit.

Ernie Michelson of the Rho Delta Rho team finished with nine points chalked on his board. It was his basket in the last minute of the first overtime period that threw the game into a second extension of time.

Larkin, Wilson, Smith, Hurley, Hendricks, Winkler, and Williams made up the winning team, while Michelson, Bosches, Ackerman, Klein, Coopermann, and Cannell comprised the scrappy losers. The contest was one of the most exciting basketball games ever waged on the gymnasium floor.

#### THETA XI BEATS DELTA TAU DELTA

The second game, while not as hair-raising as the first, offered plenty of excitement with not a single moment in it that could really be called dull. Theta Xi won the game from the Delta Tau Delta aggregation, the score being 21-13.

Rowley of the T. X.'s scored four baskets against three shots through the hoop by Barber of the Deltas.

Fee, Pillatte, Serson, Shimer, and Rowley comprised the winning five, their enemies consisting of these Deltas: Stempel, Barber, Malm, Brennan, Holin, and Baldwin.

The S. K. D.'s will offer the next encounter for the Phi Kaps, and the far-famed Phi Pi athletes will meet the Theta Xi five. Both these games are scheduled for Monday, Jan. 21.

floor for a short shot.

Tech Superior in All Angles of Game  
Kuehnert reduced the Tech lead by scoring 3 points for N. U. but went out on 4 personals. In the closing minutes of the game Armour gained a more sizeable margin when Simpson and Robin broke through for short shots.

Armour proved superior in all angles of the game—especially being effective from the free throw line while N. U. missed one throw after another. Moffic proved to be the best performer for N. U. playing guard and scoring 6 points. Box score:

Armour—	B.	F.	P.
Manz, rf.	2	3	3
Carlson, rf.	0	0	0
Robin, rf.	1	0	1
Simpson, lf.	3	1	2
Ott, lf.	0	0	0
Rossing, c.	0	1	1
Augustine, rg.	2	2	3
Rutkowski, lg.	1	0	4
Goodheart, lg.	0	2	4
<b>Total,</b>	<b>9</b>	<b>9</b>	<b>18</b>

N. U.—	B.	F.	P.
Boyer, rf.	1	0	4
Kuehnert, lf.	1	2	4
Cook, c.	2	1	1
Moffic, rg.	2	2	2
Richert, lg.	0	1	1
Engel, rg.	0	0	0
<b>Total,</b>	<b>6</b>	<b>6</b>	<b>12</b>

Final score: Armour 27, Northwestern (McKinlock Campus), 18.

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### North Central Hands Tech Bad End; 36-29

A closely contested basketball game with North Central College, ending in a 36-29 loss for Armour Tech, opened the team's 1929 athletic program. The game was played on the opponents' floor, which partly accounts for the final unfavorable result for the local basketeers.

#### North Central Band Plays

The gayly uniformed 20-piece band of N. C. College led a large crowd of rooters in lending moral aid to the enemy five. The crowd hilariously welcomed the victory with a wild display of yells.

#### Armour Late in Scoring

The score after the first quarter stood 15-2 in favor of N. C., since it took all that time for the Armour quintet to become accustomed to the narrow floor and dark backgrounds. Late in the half, A. I. T., started to crawl up by virtue of neat shots from Manz and Augustine, and two from King Simpson. The half ended 19-10, favor North Central.

#### Second Half More Exciting

The second half indicated that Armour had found itself. Simpson continued to star with four more ringers while Rossing and Carlson showed some neat playing. Manz at the forward position proved himself a capable captain by his expert direction of the game. Robin shared the spotlight with a few flashy plays. Goodheart, playing his first varsity game, was in excellent form, and should

### Phi Kappas Trounce Campus Club, 30 to 4

Phi Kappa Sigma basketball team gave the Campus Club their second defeat of the season last Thursday. The affair was very one-sided, the Phi Kaps leading by a score of 15 to 0 at the end of the half and 30 to 4 at the close of the game. Hurley and Hendricks led the assault while Kovarick and Juergensen did their best to stem the attack.

### Stagg Makes First Call As Indoor Season Opens

The indoor track season has opened at the University of Chicago Bartlett gym with Coach A. A. Stagg, Jr., making the first call for candidates this week. There will be practice every afternoon. Veterans back on the team this season are Captain Kara, Sturm, Smith, Paul, Timmermans, Iverson, and Fox.

The tentative schedule for the indoor track meets this season is as follows:

February 20, Triangular Meet; Crane, Chicago Normal, and Armour, at Chicago Normal.

March 2, Crane at Armour (Bartlett gym).

March 12, Chicago Normal at Armour (Bartlett gym).

Tentative; Sears Roebuck at Armour.

have no trouble in hanging onto his berth.

Danier of North Central was high-point man for his team with seven baskets to his credit; the same number that Simpson of Armour made. Miller, N. C.'s captain, starred on the defense, and contributed two baskets from the sideline.

Final score: Armour 29, North Central 36.

#### Lineup:

ARMOUR	N. CENTRAL
Manz, rf.	Danier, rf.
Ott, rf.	Evans, rf.
Carlson, lf.	Cook, lf.
Simpson, lf.	Manning, lf.
Rossing, c.	Rosenah, c.
Robin, c.	Williams, rg.
Augustine, rg.	Miller, lg.
Goodheart, lg.	
Rutkowski, lg.	

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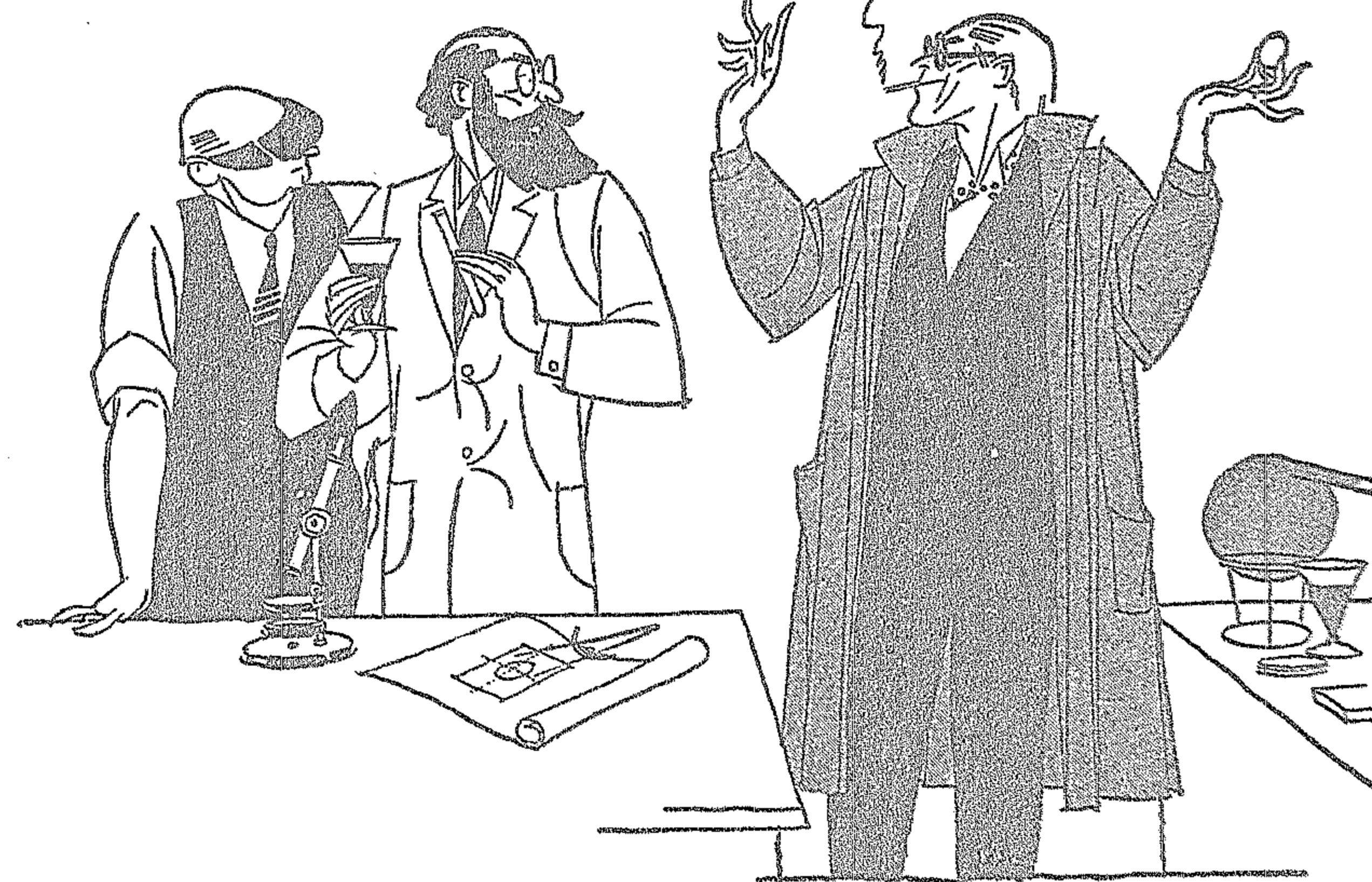
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After long and profound research, the senior scientist announced, "Gentlemen, we might as well conclude this inquiry. I have just discovered that this is a duck's egg!"

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