



## Theorist Explains Basis of Physics

### Ten Fundamental Ideas Discussed by Dr. Haas

"Fundamental Ideas of Modern Physics," the first of a contemplated series of lectures sponsored by the Institute covering the field of modern science and engineering, was presented to an enthusiastic audience of faculty and students by the noted theoretical physicist, Dr. Arthur Haas, in Science Hall last Friday. Dr. Haas, formerly professor at the University of Vienna and now professor of theoretical physics at Notre Dame, is a world known authority on the quantum theory, relativity, and the philosophy of physics, his many books on these subjects being standard references.

### Adjourn to Faculty Club

After his lecture, Dr. Haas offered to answer any questions, and a part of the group adjourned to the Faculty Club where a vigorous discussion ensued of causality, microns, quanta, and related subjects.

Dr. Haas, a short, rotund, grey-haired man, completely won over his audience with his concise summary of the philosophical basis behind physics. He took up ten ideas which he considered the most fundamental—three from the ancient philosophers, three from the seventeenth, eighteenth, and nineteenth centuries, and four from the modern physics developed in this twentieth century.

### Mathematical Idea First

The first of the ancient ideas was Pythagoras' conception that the world of physical phenomena can be expressed in mathematical terms. Democritus was responsible for the second and third ideas, namely, the conception of a micron world and the atomistic principle. The idea that nature is essentially simple came from this school of philosophy.

The seventeenth century brought the concept that physics may be organized in the form of geometry starting with basic classical axioms. It was Descartes who developed this idea, and it was Newton's monumental work on mechanics

(Continued on page four)

## Faculty Expects Victory in Junior Week Ball Game

In order to insure an outstandingly successful program for the thirty-second annual Junior Week, a number of new and novel features have been added to the schedule.

A greased pole with prizes at the top for successful climbers is the most outstanding addition to Junior Week activities. The marshals do not intend this event as a new type of rush, but rather hope to have one man at a time attempt to scale the pole. Several hours will be left open on Friday morning for repeated attempts. Only juniors and seniors will be eligible. It is rumored that bids to the junior dance may be among the prizes offered.

### Pep Up Interclass Baseball

Interclass baseball is another of the events being pepped up this year. In order to make the games more interesting to both players and spectators, the use of a sixteen inch ball will be discontinued. A fourteen inch ball with fast pitching is the logical substitute. The same rules will apply to the faculty-senior game. This year's contest will not be a farce as it has been for years. The faculty believe that they can put a team on the field capable of giving serious opposition to the over-confident seniors.

### Pie Eating Contest

Two other novel contests will require election of men from each department of the junior and senior classes. A unique pie-eating contest with one man from each department competing, and a strong man contest of unknown nature will be run off.

Junior Week will open on Monday, May 10, with entrance to a beaver contest and a hobo parade.

## Senn Student Chosen Recipient of Armour Civic Assembly Award

Recipients of the Civic Assembly university scholarships were announced at a luncheon held last Friday at the Executives' Club, in the grand ballroom of the Hotel Sherman. Mark Keane, representing Senn High School, was chosen as the winner of the one-year scholarship at Armour, and Chester Belinski of Foreman High School was picked as alternate.

### Highest in Scholarship

Keane is vice-president of the senior class at Senn and is the highest boy in scholarship of his class. He is also commanding officer of the R.O.T.C. band which is a first ranking band in the entire country. Civil engineering is his chosen department. Belinski ranks first at Foreman High School where he served as captain of the gymnastics team.

### Forty-nine in Competition

Of the 49 boys representing 36 high schools, the three city junior colleges, and the Normal College, 11 applied for the Armour award, the majority of which were interviewed. All of the participants received medals. Each school was represented by one member of the January 1937 class and one member of the June 1937 class. His or her scholastic standing must place the student in the upper half of his class and his character rating shall be excellent on the basis of honesty, dependability, industry, personal neatness, good manners, and obedience to law. The student must also have displayed real qualities of leadership. The Civic Assembly is one of the highlights of Youth Week.

## Juniors Select Keith Beecher's Orchestra

Only eighteen days remain until the Junior Informal of May 15, the last open dance of the year. Keith Beecher and his orchestra have been selected to play for this affair. This organization is characterized by a smooth melodious type of music, and with the choosing of the band, the social committee hopes to attract that part of the student body which prefers slow danceable rhythms.

The Junior Formal of last February featured swing music at its best. However, judging by comments following that dance, it was evident to the social committee that Techawks prefer the slower dance arrangements rather than the ultimate in swing.

Presenting this dance at the Medinah Country Club which features a large outdoor dancing veranda in addition to the beautiful indoor ballroom, the junior class feels that it will be a huge success. Coming at the end of Junior Week on Saturday evening, everything favors this dance. "Let yourself go, Techawks. Buy your bid early. Get your date early and assure yourself of a really great evening," is the byword of the junior social committee.

## Plans Completed for Senior Dinner Dance

The senior class decided to have the graduation exercises in the afternoon after a vigorous discussion at its meeting last Wednesday morning. At the same time it was announced that bids to the closed senior dinner dance on June 11 would be priced at \$3.30.

Art Dreis, social chairman, is making arrangements for the affair. Emil Flindt and his orchestra, the popular band of O Henry Park, will furnish the music for the dance. The site will be the beautiful grand ballroom of the Medinah Michigan Avenue Club.

Frank Hackman, intra-mural manager, was elected to lead the senior softball team in the interclass competition of Junior Week. Sam Taradash will manage the team.

## Chicago Beach Site For Honorary Dance

The interhonorary dance will be held on May 7 in the Beach Ballroom of the Chicago Beach Hotel. Although the orchestra has not been decided upon definitely Jack Chapman's orchestra will probably furnish the music.

The Chicago Beach Hotel was chosen for several reasons. The room itself is beautiful, furnishing sufficient floor space for the expected 125 couples to dance comfortably. Adjoining the ballroom are several spacious lounges, and the hotel itself is on the lakefront affording an unobstructed view of the lake. The dance will be held from 9 until 1 in the morning.

All members of the honoraries are invited to attend. These societies are Tau Beta Pi, Pi Tau Sigma, Eta Kappa Nu, Chi Epsilon, Phi Lambda Upsilon, Salamander, Pi Nu Epsilon, Sphinx, and the Honor "A." Arrangements for the dance are being made by W. A. Chapin, R. G. Liebmann, and P. R. Schultz.

## A.T.S.A. Conducts Sticker Contest to Arouse More Student Interest

### First Prize Ten Dollars, No Entry Limit

"Stick up for Armour! Publicize your school!" To accomplish this aim a sticker contest is being conducted by the A.T.S.A.; first prize is to be ten dollars, and second prize five dollars. It is intended that the new poster be striking, outstandingly noticeable, and original in design to establish the idea of "Armour Tech" immediately every time it is seen.

The following rules will govern the contest: 1. Actual size of finished sticker will not exceed 4x4 inches; 2. Drawings submitted must be double size; 3. Colors must be black, yellow, and red; 4. An entry

## Players Feature Emotional Drama

Final rehearsals are now in progress by the Armour Players for their planned production of "Winterset" to be presented at the Chicago Woman's Club theater on Wednesday night, May 5. Tickets have been placed on sale and may be obtained in the main lobby at noon or from members of the Armour Players. Al N. Schrieber, business manager of the production said, "We have been pleasantly surprised at the rapid sale of tickets. Thirty-six hours after sales began over three hundred seats were taken."

### Scenery Nears Completion

All the parts have been cast for some time and according to Prof. W. Fulghum, director of the show, this will be the outstanding play of those presented by the Players. A large technical staff headed by Joe Kubert is rapidly completing the unusual scenery designed by Richard Lischer, and the various production departments are correlating their work.

Several changes in the previously listed cast have been made. Sid Miner has been chosen to portray Esdras and N. Natichick will act as the policeman. The cast includes four girls in the feminine roles in addition to the sixteen masculine roles. Leads in the show are taken by Monte MacConnell as Mio and Katherine Urso as Miriamne.

### Taken from Original Edition

The Armour Players are presenting "Winterset" in the original unexpurgated edition as written by the author, Maxwell Anderson. The script was considerably revised for the motion pictures and thus lost most of its effect. The author did not attempt to amuse, but rather to emotionally move the audience with a contemporary theme. The complete original play will be seen by the attending audience.

## Electrical Grads Win Edison Co. Contest

Three Armour graduates were recently announced to have been among the twenty winners in a field of one hundred and forty-seven contestants who competed in a contest sponsored by the Commonwealth Edison Company of Chicago. The men are R. J. Grant, '21; E. L. Michaelson, '29 and A. B. Bronwell, '33. All three men were graduated as Electrical Engineers and have been in the employ of the Edison Company for some time.

The contest was one requiring the contestants to submit a paper on one of the many phases of the company's affairs. It has been the custom of the company to sponsor similar contests in order that their employees may show interest in the company's policies and affairs.

Mr. Michaelson was the winner of the first prize in a group of subjects under Engineering and Operation. The other two men won prizes in other divisions of the contest.

## Pastor To Speak At Commencement

Dr. Ernest Fremont Tittle, D.D., LL.D., pastor of the First Methodist Episcopal Church of Evanston, Illinois will deliver the 1937 Commencement address according to a release from the President's office. Dr. Tittle is the author of numerous publications, in which the following titles are significant: "A Way to Life," 1935; "A World That Cannot Be Shaken," 1933; "Jesus After Nineteen Centuries," 1932; "The Foolishness of Preaching," 1930.

Dr. Tittle came to Evanston in December, 1918, from successive pastorates, including Delaware, Dayton, and Columbus, Ohio. During the World War, he was with the Army Y.M.C.A. in France, and participated in the St. Mihiel offensive. In 1932 he was a lecturer at Yale University on the Lyman Beecher Foundation. Since coming to Illinois, he has won high recognition as an eloquent and thoughtful speaker on both religious and secular subjects. He has been for several years a trustee of Northwestern University, is a member of the Federal Council of Churches of Christ in America, and of the Phi Kappa Psi and Phi Beta Kappa fraternities.

The subject of his address has not been definitely formulated, but will doubtless have to do with some of the social and ethical implications of scientific and engineering progress.

## Outlook Good for Senior Placement

Following an unprecedented demand for engineering graduates, Mr. W. N. Setterberg announced that the outlook for the present graduating class was better than any in the history of Armour. Already, offers of employment have been reasonably assured to about 40 per cent of the class. The majority of these prospective jobs have been offered by companies who have come to the personnel advisor.

### Firms Offer Training Courses

About twenty-five corporations have already inquired regarding prospective employees. Many of these companies have interviewed the seniors in an attempt to obtain the best while there is a choice from which to select.

In addition to regular positions a number of large companies have offered selected seniors an opportunity to enroll in a training course teaching the principles of the company, its organization and operation. These training courses include a salary of between \$100 and \$200 per month during the period of the course and have been part of the larger corporations' general plan for filling their needs for new trained men in industry.

### Demand for Engineers Increases

An unusual demand for engineers engaged in the sales promotion departments of the various industries has been reported.

To aid the students in gaining interviews, the personnel supervisor has offered the seniors a number of pamphlets. "Do's and Don'ts for Job Seekers" and "Finding Work" are two of the titles available, and those interested are invited to secure copies from Mr. Setterberg.

## Officers Elected To Lead Freshman Co-ops for Year

Dudley W. Hayes was elected president of Group B of the freshman co-ops at an election held last week. Aiding him will be Alex Zuk, vice-president and John J. Kelly, secretary-treasurer.

Prof. L. J. Lease, co-ordinator of the cooperative course conducted the election. The officers elected will assume their duties at once and will hold office for one year.

## Chapin Hall Remodelling To Continue

### Lawn, Trees, Shrubs, Will Replace Old Rear Driveway

Chapin Hall will take on a new front—literally—if plans of the Institute are carried through; the new front will be what is now the back of the old building. According to the plans for improvement of the buildings and grounds, the old wooden porches are to be removed and a new system of stairways pleasing in appearance will be provided, the brick of the east wall will be cut-pointed and painted, and the grounds east of the building are to be—being, in fact, landscaped. Last week a concrete breaker crumbled the driveway which runs along the tennis courts.

### To Add "Physics Hall"

With a view toward simplification, Chapin Hall's six entrances will be reduced to four as that part of the building at the first and second entrances will be renamed "Physics Hall." The physics laboratories will be expanded so that they will extend over to the third entrance, and the third floor classrooms will be remodeled.

Seven new classrooms will be contained on the remodeled second floor of Chapin Hall along with offices of the civil engineering department, the science department, and the fire protection engineering department. Space is being set aside for student activity rooms on the third floor and part of the fourth floor, which are both to be remodeled.

An additional 4,000 square feet of the Research Foundation Building (the original Armour Flats on 33rd Street) are being remodeled to serve as an addition to the Research Foundation laboratories. Eventually the research department will occupy the entire building.

### Plan Improving Student Union

Plans are being made for improving the Student Union and making more space available for the lunch room. The entire first floor of Mission is to be remodeled. As soon as possible the assembly hall will be decorated and its appearance and acoustics improved.

Prof. H. A. Vagtborg, assistant to the president and director of the work of improvements of the school buildings and campus, stated last week, "These improvements are being made according to the program outlined by President Hotchkiss last year to improve living conditions here without prejudice to a new location and plan for Armour Institute of Technology."

## McCormack To Talk On Manganese Ores

Professor H. McCormack, head of the Chemical Engineering Department of Armour, will speak before the student branch of the A. I. Ch. E., at 10:30 next Friday. "The Benefaction of Manganese Ores" will be the topic of his talk.

The value of manganese ores in steel and new methods of increasing the efficiency of domestic ores will be high points of the talk. The domestic manganese ores, which are of a very low grade, contain from 8 to 10 percent manganese, while imported ores range well over 50 percent. For the past twenty years investigators have been trying to devise a method of increasing the percent of manganese in domestic ores. During the past decade there have been developed new methods of working these ores at the Bureau of Mines and at the Research Foundation at Armour.

There will be an important meeting of all Tech News reporters today at 12:20 in the news office. All reporters must be present.

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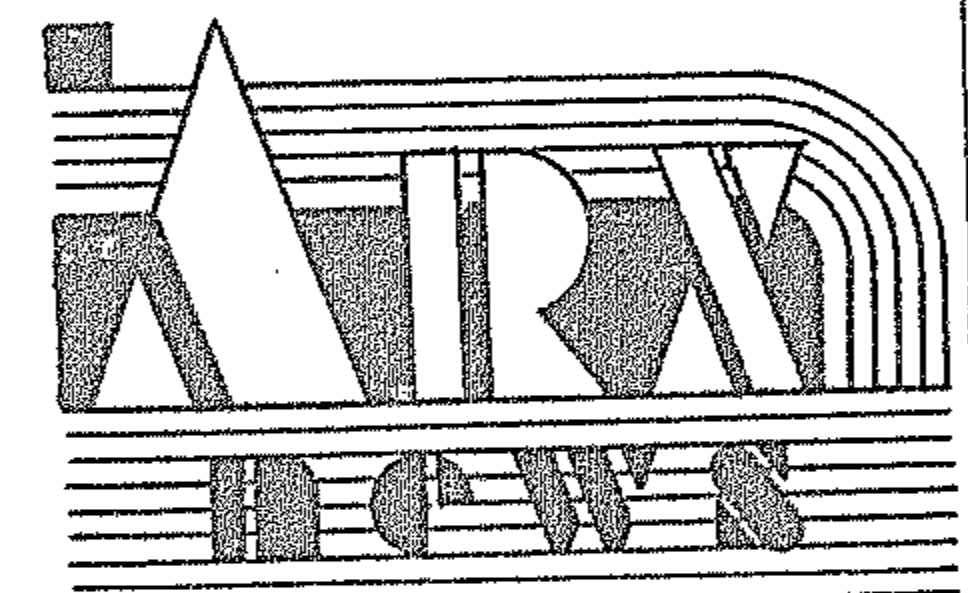
Wanted—A New Emblem

In search for an emblem or a sticker that will immediately signify Armour Tech whenever seen, the A.T.S.A. is sponsoring a sticker design contest.

Almost every college and university has an emblem which immediately identifies the school when it is seen.

Show your ingenuity, Techawks, and enter the contest now. The time is short—May 18 is the deadline for submission of designs.

Begin thinking about your design and submit your entry soon.



This week's column is the individual opinion on anything of every fellow who is now conscious of the fact that he is behind the eight ball and well, a charette is a charette . . .

1. HUBOIS, "I have started my project two weeks earlier than usual. I will also pass English."

2. Bradt, "The Depanters Protective Association, Bradt President, still challenges all comers, even Mr. Loebel."

3. Four vacant boards (Spring and the girls).

4. Mike, "I had it first, Litwin."

5. Osterman, "Get the h—I out of here."

6. Lake, "Architects must unionize, me as President. Get the black-jack."

7. KUBICKA, "I have dropsey—just dropped trig. Love to Professor Krathwohl."

8. ART GUM, "I'll git this thing done yet."

9. Goldsmith, (Sorry, not quotable.)

10. Bouland, "I want free beer and wider sidewalks."

11. WAGNER, "I'll tell ya later, I gotta think."

12. Street, "I'm up a blind alley."

13. DAVIS, "Yes Mr. Mell."

14. Wilkinson, "Today I have a plan."

Over the bridge to the junior room.

1. SCHEEL, "Charette is h—I."

2. Pelz, "My mind is full of esoteric vagaries."

3. Lader, "Joe Wagner's grouch gets me too."

4. Parks, "I'll have a raw egg in mine."

5. Woolsey, "It 'Hearst' me to say this, but down with the press."

Bits about 'ems FISCHER and HRACHOVSKY are now stone-carving and find it rather strenuous . . . LAKE can be taken down . . . SCHEEL is an expert pianist and gave SKUBIC lessons in harmony

The Class of '37 is home in bed. Hence this vacant silence ( . . . ). Same with the freshmen. And now the same for—

ART GUM.

Judging Ability—Via Personnel Route

A tremendous demand for qualified college men by industry is on its way. At least, this is the report made in a current executives' periodical by Mr. Edmond F. Wright.

Mr. Wright's pointers are: "1, Eliminate any prejudice you may have against the 'collegiate' attitude; 2, Don't give him the 'school of hard knocks' gag; 3, Don't be too critical of the prospective employee's dress; 4, Test the candidate for effective thinking; 5, Having arrived at a rough estimate of the candidate's I. Q., test him for 'G. Q.' his gumption quotient; 6, Test for contributions to extra-curricular interests; 7, Find out, if you can, what his immediate group thinks of him; 8, Test for personality; 9, Test for self-discipline; 10, Place at least one responsibility on the candidate in whom you are interested."

Since employers are being advised to consider these factors in prospective employees, they are excellent points for the student to keep in mind.

Quotable Quotes

"No great civilization ever has developed leisure and lived. There are few, if any indications, that America will be an exception. Given leisure, man will go to sleep—that is, he will let down, get soft, become an onlooker, cease to be vigorous and thus lose initiative."

"There are two broad avenues to follow—the avenue of escape and the avenue of fulfillment. The man who follows the avenue of escape does not come to terms with life at all. He either loses himself in activities feverish but unsubstantial, or falls into lethargy. Those choosing this path are not real adults."

There will be a radio dance at the house Tuesday of Junior Week with every one welcome.

We take pleasure in announcing the pledging of: George Frost, Ch.E. '39.

RHO DELTA RHO Congratulations to Brother Sorkin on his winning of third prize in the Upsilon, honorary chemical engineering fraternity, and to Brother Miner on his winning of third prize in the A.S.M.E. student competition at the recent Middle West convention.

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

Good morning Gentle Reader, g. m. 2 u. For the past few weeks we have exposed you to the ravings of the now defunct Pythagoras—we have injected Morfeen into your systems and to salt your wounds we also gave you Eejay. Today we nail your coffin. I am proud in presenting—ME. (ZAZU)

Heard at the Freshman Dance: "I love you. But in an impersonal way."

"Bore me, snap. Why, how could you? I wasn't astening!"

"What, again, Daisy, Aw Gee, this is the third time tonight—"

"Dat's my English Prof. Ain't he smart looking. I like him the most on account of he learns me more than all the rest do."

Reporter—I've got a perfect news story. Editor—How come? Man bit dog? Slave—No, a bull threw a Professor.

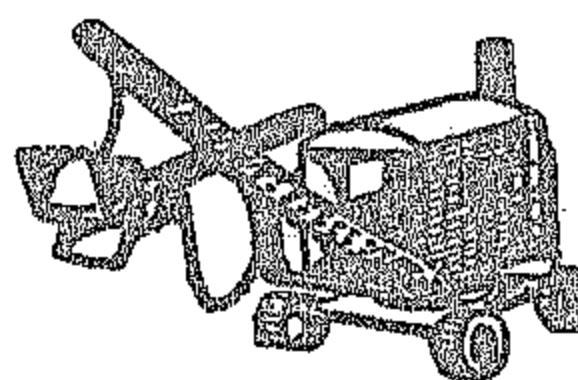
Once there was a Scotchman who was so close—that he got his face slapped.

Nurse—I think he's regaining consciousness, doctor, he just tried to blow the foam off his medicine.

Before closing let me add that the present bunch of frosh have yet to show any sign of possessing a sense of humor . . . O Yeah!! Well, if you wanna show me why doncha drop some contribs in the News Box. THIS IS A CHALLENGE!!

The call of Spring is lurking Beneath yon skies of blue: I do not feel like working, In fact, I never do, And that's

ZAZU.



Warren Schreiber, looking up at the goose swaying above him at Phil Smidt's, "Boy, I hope that bird isn't alive."

Carmen Basile had his first date last week and according to "Swede" Carlson he had beginner's luck.

After failing to screw up enough courage in a half hour wait to enter the Art Institute, Francis X. Popper (male) went home, only to return for a similar vigil in front of the Rialto—but his nerve failed again.

QUOTE SOBOLIK ON MONDAY MORNING: "AH, WHAT A NIGHT" (WHILE GAZING AT THE CEILING.)

Around Washington

By Marvin Cox (A.C.P. Correspondent)

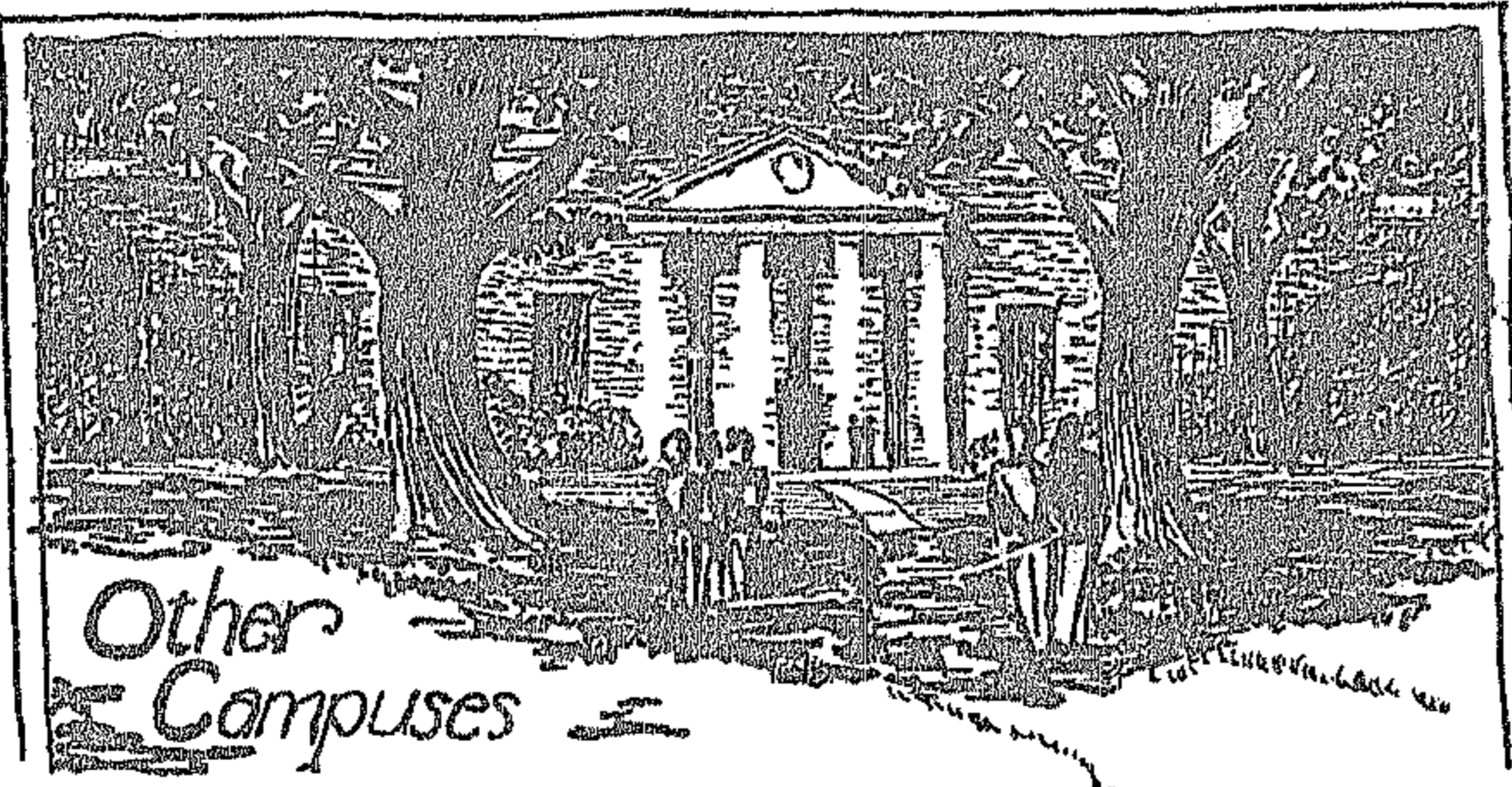
Washington, D. C.—Getting a bill introduced in Congress is one of the easiest things in the world to accomplish. Draft your bill, persuade some Congressman to drop it in the hopper, and there you are.

Securing action on a bill after it is introduced is something else again. Around 20,000 individual bills were introduced in the last Congress, but only a small fraction of them were acted upon.

So, while the American Youth Congress experienced little difficulty in having the American Youth Act introduced in the House and Senate, they are having some trouble in having hearings before a committee. And, naturally a bill appropriating \$500,000,000 for the advancement of youth will require a number of hearings before it is favorably reported to the Congress for passage.

The Youth Congress in order to speed action on the bill is, therefore, adopting a course long since found effective by later unions, utilities, and other groups seeking legislation which is favorable to them. Local and regional Youth Congress groups and each of the 3,000 individuals who made the Youth Pilgrimage to Washington in February have received sample letters and telegrams with which to bombard their Senators and Representatives.

This legislative game of having the folks "back home" write to the Congressmen is an old trick, and sometimes highly effective. And the



How many things a woman can carry in her purse has long been a subject of conversation among college men. Now the males at the University of Wisconsin have a Ripley addition to this type of bull-sessioning.

It seems that a coed lost her handbag at one of these night-clubs outside of Madison. She didn't notice the loss until returning to her sorority house after the date.

Instead of fussing around and driving out to the club the next day, she decided to wait until the following Saturday, when she had a date to go there again.

At the check-room, she asked if anyone had found her bag. Several were brought out. Could she identify hers by the contents?

"Why, yes," answered the coed, "mine has a pair of pajamas in it!"

By cutting the shells of hens' eggs and gluing a small glass pane over the hole with petroleum jelly, experimenters, under the direction of Dr. Howard Kernkamp, of the University of Minnesota's farm, can watch the actual growth of baby chicks while in the shell.

The atomic theory is not new. It was advocated two thousand years ago by Epicurus, the Greek philosopher, and Lucretius, the Latin poet, say two professors at the University of Michigan.

Having a girl during spring quarter, calculates a math wizard at the University of Minnesota, is equivalent to carrying 10 extra hours, for which you get some credit but no honor points.

American Youth Congress is adopting this time honored practice to get its legislation across.

However, your Washington agent predicts that the Youth Act will not pass at this Session of Congress. 'Less you take this too seriously let me hasten to add that I picked the New York Giants to win the World Series.

Growth rings on baby teeth have been discovered by Dr. Isaac Schoor, of the college of dentistry at the University of Illinois. These rings, he states, show a relationship to the child's age.

London, Eng.—(ACP)—There is no mystery about the Indian ascetics who walk through fire; they simply have tough feet. So said Prof. J. C. Flugel, of the University of London, in regard to experiments recently conducted by that institution's Council for Psychological Investigation.

Glowing red embers were thrown into a trench 25 feet long and 5 feet wide. The temperature of the smoking lane was about seven times and one-half as hot as boiling water, or 740 degrees Centigrade.

Even Ahmed Hussain, a 23-year-old Moslem fire-walker suffered burned feet. The amateurs who walked through the ashes were burned in varying degrees.

"My feet seemed to sink into the flowing ashes," said A. J. Bould, a university student, "and some red-hot cinders stuck painfully to the sides of my feet. It was not too bad."

"I didn't feel much heat," said R. Adcock, the son of an asbestos manufacturer. "My father is an asbestos manufacturer. Perhaps asbestos runs in the blood."

A TEN-FOOT HIND LIMB OF THE GIANT DINOSAUR DIPLODOCUS CAN BE SEEN AT THE UNIVERSITY OF MICHIGAN'S MUSEUM. IT MUST HAVE BEEN TOUGH ON THE CAVE MAN, TO HAVE TO CARRY AROUND THE HIND LEG OF A DIPLODOCUS FOR GOOD LUCK!

A poor man's fraternity, Pi Alpha Sigma, has been organized at Syracuse University. Their Initiation fee is typical of their desire to keep expenses down to an absolute minimum; only \$2.75 is charged. In this, its first year, it has the highest fraternity scholarship record ever made on the campus.



PRINCE ALBERT MONEY-BACK GUARANTEE OUR OFFER. 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.

# Techawks Pound Elmhurst to Win First Home Game

## Kruse Strikes Out 14; Takes Second Win In Row

### 11-5 VICTORY

Pounding three Elmhurst pitchers for fourteen hits, the Techawks cinched their second straight victory in the 11-5 battle played at Ogden field last Friday afternoon. Pacocha and Dunne led the Tech hitting with three hits each, matched by Bloesch and Steffan of Elmhurst. Kruse scored high with three runs.

Despite Elmhurst's hitting spree in the first three innings, Kruse's pitching was remarkable. Of the 27 put-outs by Armour he credited catcher Seidenberg with 14, averaging over one and one-half strikeouts an inning. Kruse clamped down in a tight spot at the end of the third, nobody down, two runs in and two on base. He fanned two and made Luehmann hit into a forceout.

### Elmhurst Scores in First

Elmhurst scored in the first inning when Gruenewald reached base and Bloesch realized the depth of the right field fence to drive him in. Armour, however, came back in the second half and piled up four runs with the aid of a few Elmhurst errors.

Repeating their first inning act, Steffen hit against the fence, stole second, and came home when Krueger placed a fly over Federal street. Elmhurst grabbed its third score when Krueger crossed the plate on Luehmann's hit.

### Kruse Finds Pitching Arm

In the third inning Bloesch's hit over the fence and two errors filled the bases. A hit against the wall by Steffan drove in two runs, and after that, Kruse found his pitching arm. With a 5-4 score against them, Armour faced the last half of the third to begin its rally. Seidenberg sent a long fly over the center field fence for a single, and Kruse drove him to third with a double. Then with bases full, Pacocha hit one on the third base line and drove in two runs. On the second out Shewchuk came in to score.

With two down and Dunne on base, Kruse lined one short of left to drive in the run. Shewchuk singled over the fence, and Pacocha hit in right field to give Kruse his third tally.

### Wallops Ball to Left

Seidenberg connected with the longest of the game when he made the Elmhurst left fielder reach high against the far fence in the sixth inning. Logullo scored in the seventh when Dunne hit to right field, and when Wagner banged another over the fence, Dunne made the final score of the game.

Armour (11)	Elmhurst (5)
Logullo, cf. 4 2 0	Gruenewald, c. 5 1 0
Dunne, 2b. 4 2 3	Stoerker, 1f. 5 0 0
Wagner, 3b. 5 1 2	Bloesch, 3b. 5 1 3
Seidenberg, c. 5 2 1	Verovec, rf. 4 1 1
Kruse, p. 5 3 2	Dalhaus, cf. 3 0 0
Shewchuk, rf. 4 1 2	Steffan, 2b. 4 1 3
Pacocha, lf. 5 0 3	Krueger, 2b. 4 1 1
Green, lb. 4 0 1	Lockman, lb. 4 0 1
Roche, 3b. 3 0 0	Luehmann, p. 2 0 1
Gehel, 3b. 0 0 0	Jans, p. 1 0 0
	Kaizer, lf. 1 0 0
	Happel, c. 1 0 0

Elmhurst 39 11 14  
Armour 122 000 000—5 19  
303 208 020—11 14

# Trackmen Shiveringly Drop Meet to Beloit; Two Events Are Called

Battling a stiff north wind and a game Beloit track team, the Armour cindermen lost a closely contested meet 62% to 54%, Saturday at Beloit. Because of the preceding downpour, Ripon College withdrew, changing the original plans of a triangular meet. The aforementioned rains accounted for a slow track and a muddy field.

### Faust Wins Mile

Faust ran a good mile, but the strong wind and flooded track gave him the slow time of 5:09. Later he and Dannis tied for second and third in the two mile run against Ross of Beloit, whose pace and endurance brought him home in 11:09. Vandekieft took firsts in the shot and discus, while Meyer threw himself into first place in the javelin event with a nice heave of 137 feet 2 inches. Simeon's victory in the high jump gave Tech its sixth first, to tie Beloit for blue ribbons.

### Beloit Takes Hurdles

In their usually strong events, the dashes, the Techawks failed to make a good showing, netting only a first and a second by Dunbar, the former in the century. Both events saw the Armour men get off to bad starts, due to the starter's fast gun. Phillips of Beloit gave his team a nice win in the 440, being closely followed by Ryan and Finnegan of the Tech team. Both hurdle events were taken by the home team, in the person of Volger. A good second place was lost by the Techawks when Dunbar tripped and fell in the lows.

Another severe setback was received by the Armour men when Finnegan was forced to drop out of the half mile event, after starting his second and final lap.

### No Pole Vault or Relay

For reasons not disclosed, both the pole vault and the final relay were not staged. Both of these events would have brought out strong Tech teams, and had they been held the final score might have been a different story. However, they weren't run off and the final score goes down in the records as a 62% to 54% loss for the Armour squad.

- ### SUMMARIES
- 120 YARD HIGH HURDLES—Won by Volger (B); Rothenberg (A), second; Powers (B), third. Time—16.8.
  - MILE RUN—Won by Faust (A); Crowe (B), second; Bailey (B), third. Time—5:09.0.
  - 440 YARD RUN—Won by Phillips (B); Ryan (A), second; Finnegan (A), third. Time—0:55.3.
  - 100 YARD DASH—Won by Dunbar (A); Gates (B), second; Fleming (B), third. Time—10.1.
  - 880 YARD RUN—Won by Klock (B); Deuter (A), second; Brown (B), third. Time—2:11.0.
  - 220 YARD LOW HURDLES—Won by Volger (B); Powers (B), second; Rothenberg (A), third. Time—0:26.7.
  - 220 YARD DASH—Won by Gates (B); Dunbar (A), second; Phillips (B), third. Time—0:22.0.
  - TWO MILE RUN—Won by Ross (B); Faust (A) and Dannis (A) tied for second. Time—11:09.0.
  - SHOT PUT—Won by Vandekieft (A); Wells (B), second; Tamulis (B), third. Distance—39 feet, 9 inches.
  - JAVELIN THROW—Won by Meyer (A); Hangman (B), second; Stehman (A), third. Distance—137 feet, 2 inches.
  - BROAD JUMP—Won by Tamulis (B); Deuter (A), second; Bingham (A), third. Distance—18 feet, 1 1/2 inches.
  - HIGH JUMP—Won by Simeon (A); Tamulis (B), Gertz (B), and Vandekieft (A) tied for second. Height—5 feet 6 1/4 inches.
  - DISCUS THROW—Won by Vandekieft (A); Tamulis (B), second; Backmeter (B), third. Distance—112 feet, 1 1/2 inches.

## Sports of Week

### BASEBALL—

Today against DeKalb, here.  
Friday against North Central, here.

### TENNIS—

Season opener against Loyola on Friday, there.

### GOLF—

Season opener against Wabash at Southmoor, Saturday.

## Golfers Drowned by Alumni by 14 1/2 to 3 1/2

Battling rain soaked fairways and soggy greens, the Armour Tech alumni gave the golf team a lesson to the tune of 14 1/2 to 3 1/2. Larry Davidson, Miller, Johansen, and Zingham made up the alumni squad, while Shanahan, "Twiek" Davidson, Mackey, Sundi and Skuza played for the Tech team.

The Tech team's scoring was done by Mackey and Skuza in the singles, and the former and Don Sundi in the doubles.

- ### 1937 GOLF SCHEDULE
- May 1—Wabash, \*here.
  - May 7—Eastern Teachers, here.
  - May 10—Western Teachers, there.
  - May 11—Detroit, there.
  - May 12—Wayne, there.
  - May 13—Toledo, there.
  - May 15—Loyola, here.
  - May 19—Wright, here.
  - May 22—Wayne, here.
  - May 28—Western Teachers, here.
- \*All home meets are to be played at the Southmoor Country Club.

## Senior Schmiere Win Opener From Sophs

By plastering their sophomore opponents of the same department with sixteen runs, the senior Schmiere opened their baseball program triumphantly. The heavy hitting and somewhat loose fielding left the score 16-8 after seven innings.

With one on and two down, Heike opened with a liner to right field and drove in Skuza for the initial score. In the second inning the seniors warmed up and hit a series of easy singles which netted them four runs.

Not to be outdone, Keane hit one for the sophomore chemicals to drive in Spengler for the first, and later came in on Ryan's double.

In the fourth, the seniors filled the bases, and cinched two on a pop up and a third run on Forberg's double. Heike's homer drained the bases for all they were worth and the score was set at 12-2 till the sixth.

In this inning, the sophomores staged a nice little comeback rally and pounded Forberg for six big hits and five little tallies. Three more runs in the seventh against one for the sophs, however, put the game on ice for the senior Schmiere.

### Soph Juicers Win, 1-0

In one of the tightest softball games played last week, the sopho-

more electricals turned in a one to nothing win over the frosh meteors last Friday. The one run was scored in the last half of the fourth inning, when with one out Bush drove a hit over second for a single. The next man popped out, but then Henderson banged a ball to the left field fence to bring his teammate in.

The frosh filled the bags once, but a dribbler to the pitcher ended their chances. As far as hits went the freshmen had the better of the situation, batting out a total of ten to their opponent's six, getting some in every inning, but unfortunately they were too scattered.

(Continued on page four, col. four)

### A CONTEST . . .

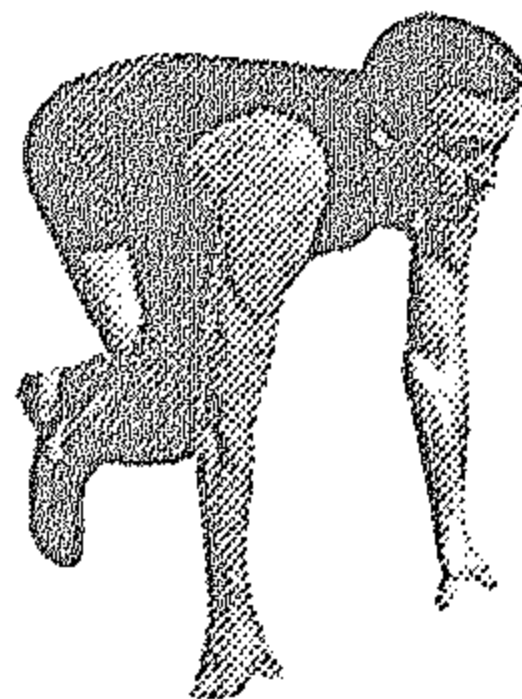
Four cash prizes, ranging from \$100 to \$25 and totaling \$250, will be awarded student readers of our advertisements in colleges and universities throughout the Middle West and South for typewritten essays of from 300 to 500 words on "What I Like Best in Modern Railroading—and Why." The closing date will be May 10, awards by June 1. Address me at Chicago for reference material and to submit your essays.

President  
**ILLINOIS CENTRAL SYSTEM**

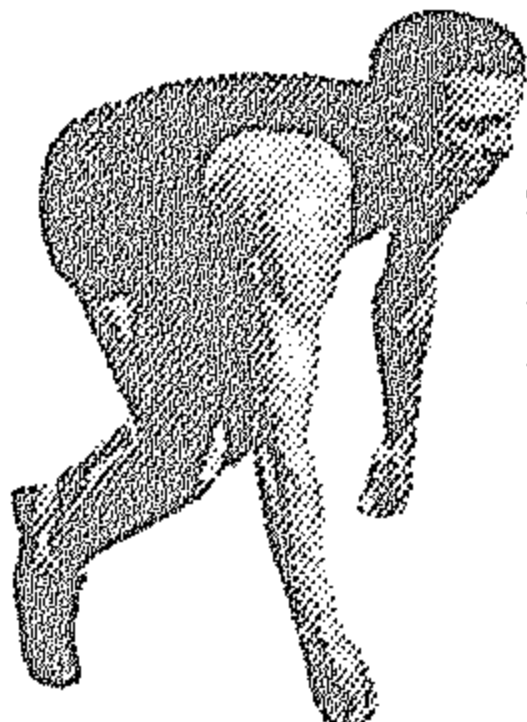
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After 8:00 P. M., Luncheon: 20c

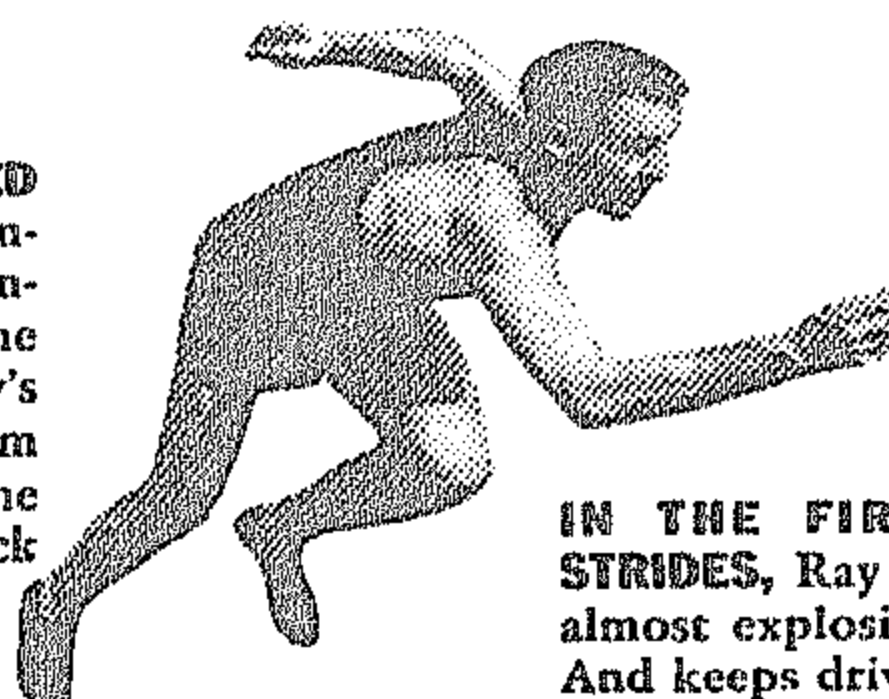
# Ran 2 Record-Smashing 440 Yd. Dashes in One Day!



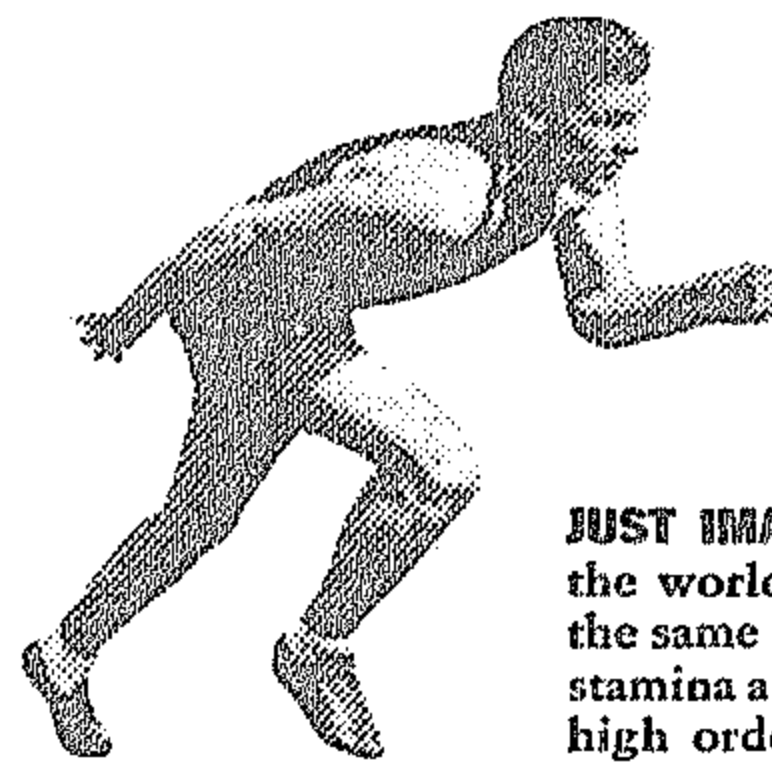
RAY ELLINWOOD, sensational track star of the University of Chicago, clipped .3 second off the world's indoor 440-yard dash record in his first college meet.



HE DUPLICATED the feat 20 minutes later as anchor man on the relay team. Ray's start enables him to jump into the lead at the crack of the gun.



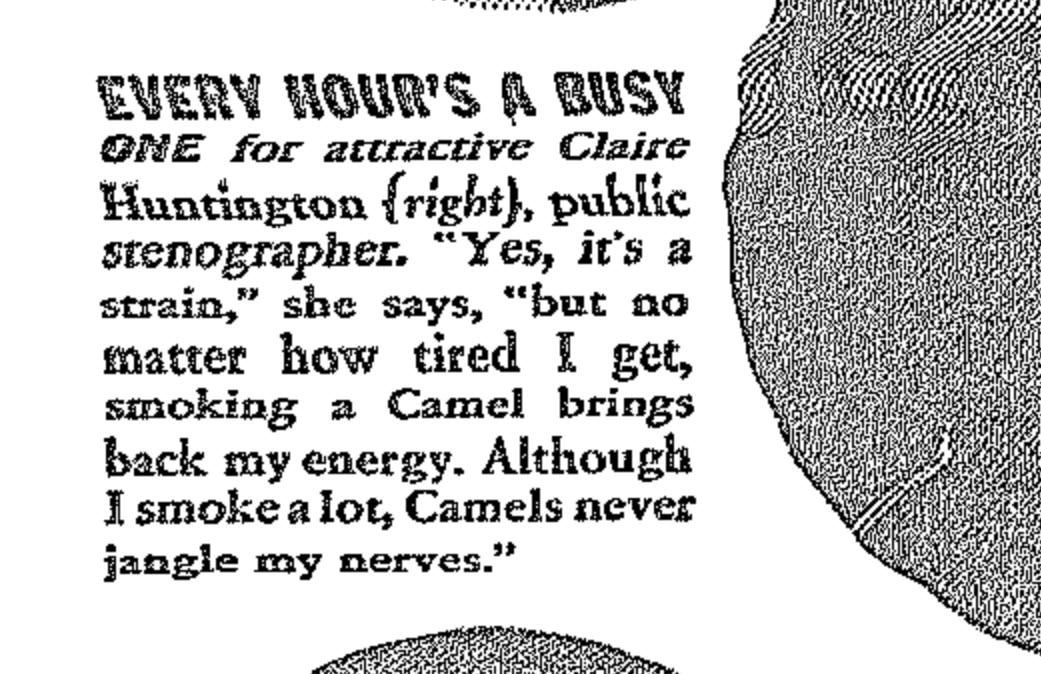
IN THE FIRST FEW STRIDES, Ray unleashes almost explosive power. And keeps driving!



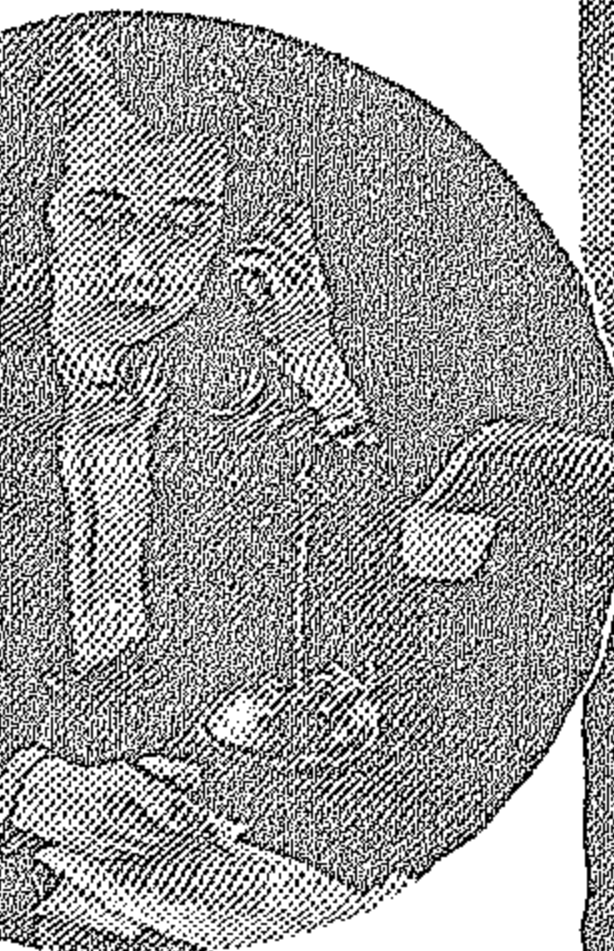
JUST IMAGINE breaking the world's record twice the same day! That takes stamina and endurance of high order.



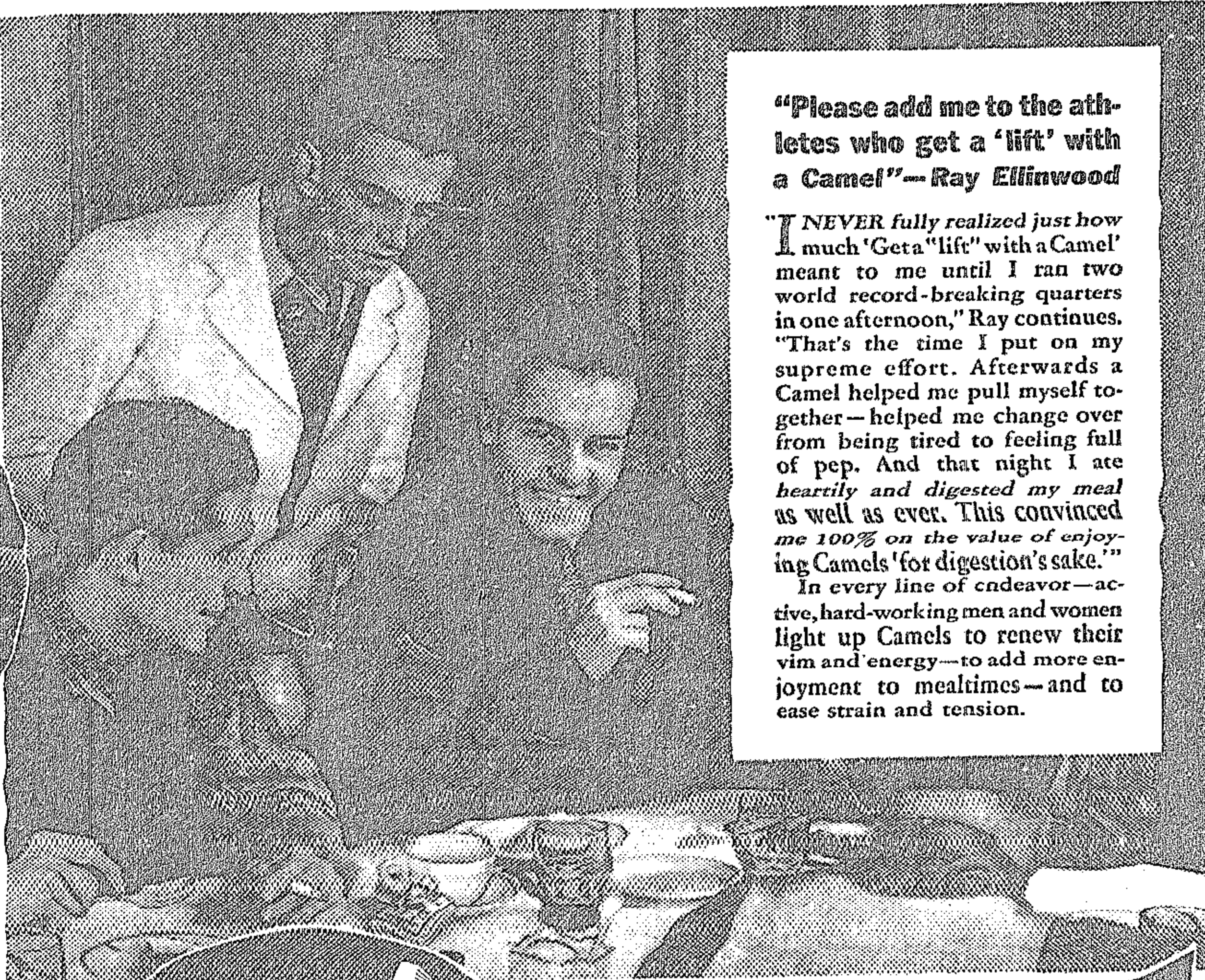
"IT'S EASY to get fatigued at exam-time," says Bob Sommerville (left), college senior. "When I'm tired, a Camel gives me a 'lift' in energy, bucks up my spirits, and helps me sail along with pep to spare."



EVERY HOUR'S A BUSY ONE for attractive Claire Huntington (right), public stenographer. "Yes, it's a strain," she says, "but no matter how tired I get, smoking a Camel brings back my energy. Although I smoke a lot, Camels never jangle my nerves."



SURVEYOR William Barrett (left) speaking: "I get in a lot of Camel smoking during the day. When I begin to feel below par, it's me for a Camel and that invigorating 'lift' in energy."



"Please add me to the athletes who get a 'lift' with a Camel"—Ray Ellinwood

"I NEVER fully realized just how much 'Geta 'lift' with a Camel' meant to me until I ran two world record-breaking quarters in one afternoon," Ray continues. "That's the time I put on my supreme effort. Afterwards a Camel helped me pull myself together—helped me change over from being tired to feeling full of pep. And that night I ate heartily and digested my meal as well as ever. This convinced me 100% on the value of enjoying Camels 'for digestion's sake.'"

In every line of endeavor—active, hard-working men and women light up Camels to renew their vim and energy—to add more enjoyment to mealtimes—and to ease strain and tension.

## Golf Team Meets Wabash Saturday

Armour's golf team will open the 1937 schedule when they compete against Wabash College. The meet will be held Saturday morning at the Southmoor Country Club.

Through regular and diligent practice, Coach Sammy Bibb, will present a well-conditioned team. This year's squad is well balanced, with seasoned veterans and promising new material. The nucleus of the team will consist of Captain Shanahan, Davidson and Skuza, all of them experienced players. The rest of the team will be selected from a large group of ardent golf bugs who have been practicing regularly.

In spite of the large supply of material, all new men who are interested are invited to compete for a position on the squad and see Coach Bibb or Manager Brissman at the earliest possible date.



### "JACK OAKIE'S COLLEGE"

A gala show with Jack Oakie running the "college"! Hollywood comedians and singing stars! Join Jack Oakie's College. Tuesdays—8:30pm E.S.T. (9:30 pm E.D.S.T.), 7:30 pm C.S.T., 6:30 pm M.S.T., 5:30 pm P.S.T., over WABC-CBS.

MRS. JOHN W. ROCKEFELLER, JR., prominent in New York society, says: "It's wonderful, when you're tired, to get a cheering 'lift' with a Camel."



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# SIDELINES

**A. M. Zarem**  
**KEEP CHICAGO AHEAD.**  
 A more hypocritical slogan could not have been adopted by our city fathers if they had actually set out to do so. At our last gubernatorial election the Democratic machine in Chicago set out to "beat Governor Horner." During the ensuing fight, Chicagoans were given a chance to observe what politics gone bad can do.

**ACTS OF VIOLENCE**, such as slugging, bombing, and the like were committed openly. Ballot boxes were stuffed without reservation. Innocent voters were threatened in various ways and the casualty list was long in spite of the fact that Governor Horner ordered the state police into the city to insure a fair vote. All of the tactics of the underworld were brought into play while public interest mounted to a feverish pitch.

Here it seems was the acme of present outrages. Motivated by an interplay of political forces plus the desire to damn such tactics, the people of Chicago voiced their disapproval. Within a month after Governor Horner's reelection, the whole matter quieted down. Slowly but surely the newspapers "turned their guns" and before long the whole thing had died. How easy it is to forget!

**YES, CHICAGO FORGOT**, but today, even as before, Kelly Nash pushes a button, Mr. Patrick snaps a whip, and the marionettes (representatives of the people, if you will) in the state capitol do as they are instructed. The efficiency of this little combination has been dramatically depicted for us many times. Their latest playlette started some three weeks ago and is still running.

Despite the will of the people of Chicago, as represented by the presence of various civic groups, the house committee on municipalities has been delaying hearing on five city manager plans. Sessions of this committee have been postponed time and again—for the most trivial reasons. Excuses are made by the dozen, yet nothing is done to alleviate the conditions which exist.

**JUST HOW LONG** is Chicago going to let itself be robbed of its prestige from within? How long will politics, flourishing under a system that is rotten all the way to the core, be allowed to dominate and regulate the lives of some three and a half million people? Who is responsible for these conditions? You get no answers under our present form of city government. There is too much "passing of the buck."

With a city manager there could be no such "passing the buck." Responsibility is definitely fixed. If something goes wrong with, for instance, the garbage disposal (as it did recently) the public will know where to go for an answer to the question: Why? Under Mr. Kelly, the public is told where to go for an answer.

**NO POLITICAL MESS** is so ensnared that a city manager system cannot straighten it out. We have only to look at the city of Cincinnati, which is the most notable example, to see the obvious advantages of a city manager plan.

## Campus Club to Have Advisory Committee

Professors Fulghum, Harris, and Oldenburger will soon become honorary members of the Campus Club and act as an advisory committee with Professor Mangold as chairman.

The Campus Club is an organization whose principle aim is promotion of interest in extra-curricular activities. W. Waite is the president of the organization. The only membership requisite is good all around congeniality. The Club does not compete for members against the fraternities, as is a general impression; fraternity men are actually included in its membership. A standing invitation is always extended to all students to come up to the club in Chapin Hall and get acquainted at any time.

## Physics Talk—

(Continued from page one)

which was the glorification of it. Thus the fourth basic idea was the axiomatic principal.

In the nineteenth century further application of this axiomatic system brought about the developments of heat, light, and electricity. The fifth basis of physics was therefore a unification of physics through axiomatic principals.

The statistical conception of physics worked out by Willard Gibbs showed the manner in which phenomena may be investigated on a statistical basis and constituted the sixth of Dr. Haas' ten ideas and the last contributed before the twentieth century.

The modern philosophical ideas were worked out by Einstein, Planck, Haas, Heisenberg, Bohr, Rutherford, and others. Max Planck originated the quantum theory, which explains that energy occurs in positive integral multiples of a fundamental unit. Einstein on the other hand originated the theory of relativity (all statements of time and space are only of relative significance.)

It was at this time that Newton's discarded corpuscular theory of light was revived and given fresh impetus from work on the photon-electron effect. However, the undulatory or wave theory of light was so well established that it couldn't be completely disowned. This led to a correlation of both in wave mechanics.

One of Dr. Haas' most important works came from the working out of a structure of atoms from quanta.

## N. U. Hears Potter on 'Contact Potentials'

A system for measuring the contact potential between metallic surfaces was described by Mr. J. G. Potter of the Armour faculty in a talk before a teacher's group at Northwestern University last Thursday evening. The text of the discussion was based on experiments made by Mr. Potter and by Mr. A. T. Waterman of Yale University.

### Use High Vacuum Tube

The method devised by the authors was for measuring the spontaneously arising voltages between unlike metals. The size of the voltage developed depends entirely on the conditions between the surfaces and is always the same with the same conditions. The measurements are made while the surfaces are in a large pyrex glass tube evacuated to almost complete vacuum.

### Essentially Kelvin's Plan

The plan of measurement is essentially the same as that used by Lord Kelvin in 1898, but the metals used in the present undertaking are in the form of fine wires which are heated electrically almost to their melting points in order to clean them. In the present work Kelvin's electrometer is replaced by a radio set amplifier, while the small electrical capacity between the wires under investigation is made to vary rapidly by setting one of the wires into vibration. This is accomplished by passing a small alternating current through it in the presence of a magnet supported outside the glass tube.

## Senior Civils Trounce Soph Firemen, 26-3

The senior civils trounced the sophomore fire protects Thursday last by the terrific score of 26 to 3. The sun was shining brightly and it was a lovely day for a ball game, but what a ball game was played. The sophomores kicked, fumbled and tossed the ball all over both the infield and outfield, with no discrimination. On the other hand the seniors played heads-up ball.

Ikenn led off with a double for the civils, followed by a walk, while an error at third loaded the bags. Machulis stepped up to the plate and laced one to right, cleaning the bags with a homer. By a series of startling coincidents the next three men were retired. The fire protects took their first bats in outs, one, two, three. The civils loaded the bases again in the second only to unload them when a pop fly was dropped out in the garden. This satisfied their run-gathering appetite for this inning.

The payoff came in the ninth. Clean hits with bases on errors and a dash of luck was mixed by the civils into a lovely cake of eleven runs, while the sophomores were held scoreless.

### Junior Mechs Trim Sophomores

Slugging fiercely the junior mex emerged victoriously 11 to 5 in their first softball encounter of the season against the soph M. E.'s. Bill O'Brien using his wide, sweeping, underhand, slow ball was the winning pitcher with superb assistance by his mates. The sophs played a wild game featuring a multitude of errors in the way of wild throws,

fumbled flies, and careless infielding. Abe Hoffman was the losing pitcher.

The highlight of the contest was Simeon's long homer over the left field fence. The juniors pulled themselves out of several tight spots. At one time the bases were loaded with no outs, but they pulled themselves out of the hole without admitting any runs. The upper-classment scored six of their runs in the first inning.

### Junior Firemen Hold Civils, 3-2

Taking a one run lead in the fourth inning, the junior fire protects marched to a 3-2 victory over the sophomore civils last Tuesday afternoon, in a nine inning opening game.

Although playing with only eight men, the Civils held their opponents for the first two innings and then opened the scoring themselves. A soph got on base and Tullgren lined one to drive in the first score of the game.

The fire protects, however, immediately retaliated when Parker sent a long one out to center and Beardsley lined one through short to drive him in. In the fourth, Downing took the only homer of the game with a long liner against the fence. Dunbar drove one out to get on base, and Lange connected, driving Dunbar in for their third score.

## Oldenburger to Show Pictures of Norway

Addressing students and faculty at Notre Dame University, Professor Rufus Oldenburger will lecture next Friday evening on the subject, "The International Mathematical Congress Last Summer." He will remain as a guest of the University for the weekend.

Dr. Oldenburger was a delegate to the International Mathematic Congress held at Oslo, Norway, during July, 1936, representing Armour Institute. He will show slides of the palace where the mathematicians were guests of King Haakon of Norway, the University buildings where the Congress convened, sessions of the delegates, and famous mathematicians who attended the Congress.

These slides will also be shown by Dr. Oldenburger at the meetings of the American Mathematical Association which is to be held at De Kalb, Illinois, on May 14, and later at the Men's Mathematical Club of Chicago.

On Saturday, April 31, he will lecture at Notre Dame on "Higher Dimensional Determinants." Dr. Oldenburger is a world-wide authority on this phase of mathematics and is likewise noted for his research in algebra in general.

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