



Armour Tech News



Vol. XXIV. No. 4.

Armour Institute of Technology, Chicago, Illinois, Tuesday, October 17, 1939

Z—140

Electrical Wonders Shown Friday At General Assembly

Dr. Phillips Thomas Gives Baffling Demonstration

With the coming of Dr. Phillips Thomas of the Westinghouse research laboratories to Armour Institute next Friday, the first miracles of a startling new scientific era will flash briefly before the eyes of the Armour students. And "flash" is no exaggeration, for among other wonders this scientific expert will bring from behind the scenes of a great research laboratory into the Armour auditorium at ten o'clock, a tiny two-inch lamp which casts a brilliance equal to one-fifth the sun's surface brilliance.

Formerly at Princeton

The Institute's distinguished visitor, has had a wealth of experience both in educational and practical scientific circles. He is a former instructor at Princeton University from which he received his doctor's degree, and has been associated with Westinghouse Electric & Manufacturing Company since 1912. Five years of his career have been engaged in numerous engineering developments in the initial design of capacitors and various insulation problems. Dr. Thomas is the inventor of the ultra-audible microphone and glow discharge microphone used by KDKA and KYW in 1923-24, an important step in the development of studio broadcasting. Of late he has participated in the research and development of electronic and light sensitive devices of all kinds including many applications of what is popularly called the "Electric Eye." In addition, Dr. Thomas has made numerous contributions to scientific literature and is a member of the A. I. E. and of the American Physical Society.

Illustrating his lecture with demonstrations only of devices that are already finding practical application in the world of today, Dr. Thomas will talk on "New Horizons of Science."

Black Light Display
Invisible black light will be harnessed

(Continued on page four)

Eye Men Hear About Lithography Process

Members of the Armour Eye learned of some new phases of commercial photography last Friday evening in the Student Union when Joe Meyer of Rightmire Berg Co. spoke on Photo-Lithography. His talk was accompanied by a display of samples, and demonstration of some processes used. Following the talk, Alfred Wong showed some of the natural color shots he made last summer of the New York World's Fair.

Salon in November

As part of the Armour Eye program for this semester a salon is planned which will take place about the first of November. Every member is expected to enter at least two prints for the judging which will be done by several well-known photographers. Best prints will be exchanged with those other members of the Associated Camera Clubs of the Chicago Area, and will be exhibited in their salons.

Polaroid Talk at 11 Tomorrow

"Polaroid", fascinating new light polarizing material, will be the subject of a lecture, sponsored by the Armour branch of the American Society of Mechanical Engineers, before the student body tomorrow, at 11 o'clock, in the auditorium. Dr. Martin Grabau, Manager of the Technical Division of the Polaroid Corporation will present an illustrated lecture covering applications of the recently developed product. Dr. Grabau, a graduate of Harvard, was an instructor of Physics at Harvard and became associated with the Polaroid Corporation in 1935.

Classes Excused

Due to the large attendance at last year's lecture, given by Dr. Wheelwright, one of the pioneers of the Polaroid Corporation, it was deemed necessary to hold the lecture in the auditorium. The wide-spread interest of the subject to students of all options, has prompted the Dean's office to excuse all classes that hour so that all students can attend the lecture.

Show Applications

The lecture will start with a brief review of the nature of light polarization and a description of the new synthetic material known as "Polaroid". The remainder of the lecture will be devoted to a survey of the applications of polarized light. As examples of the uses to which Polaroid has been put, applications are found in automobile headlight intensity control, sun glasses, photography, industrial inspection lighting, advertising displays, stress analysis and the unusual three-dimensional motion pictures.

Orcutt Gives Eye Examination Free

A series of eye tests, instituted last year by Mrs. A. C. Orcutt, will be offered again this semester to Armour students. The purpose of these tests is to help students discover any defects in their sight, which might be corrected by proper care.

These tests are not intended to be a complete visual check, but are designed to find the general defects in eyesight. If serious discrepancies are discovered, the student will be advised to consult his own oculist.

Use Telescopic

Examinations are to be made with the telescopic, a modern development of the stereoscope. Different cards, designed to fathom the discontinuities in the individual's eyesight are shown to him through this instrument. After completion of the examination, Mrs. Orcutt will summarize the results and make definite suggestions to the student for further treatment.

Although the tests will be required only for entering students, the service is extended to all other students. Appointments must be arranged with Mrs. Orcutt, who has offices in Chapin Hall.

A Message from the Personnel Department

To the Students of the Undergraduate College

"No, I don't hire graduates from that school," said an employment manager recently.

"Why is that?" asked the company president. "I thought you were a graduate of that school yourself."

"I am, and I'm not proud of it. In my day many of us cheated our way through. I did some of it. It left an unclean feeling in me—some sort of stain that I can't forget. We thought we were smart at that time—putting something over on the pros. Now I know we were just covering up our weak spots. I have tried to make up for it ever since. I understand that cheating is still done at that school. We don't want those weak spots in our plant."

This is the report of a real conversation, but not about Armour.

Another industrialist said, "Cheating in school is a kind of scholastic racket. One who runs away from work in that way will not be an honest employee or employer. Business doesn't need him."

Recently an Armour faculty member sent the following question to employment managers in twenty large plants: "What four personal characteristics, ranked in order of importance, do you consider necessary for department foremen and supervisors?" In 90 per cent of the replies "honesty" was ranked first. "Cooperation, or ability to get along with people" received second place. No one actually possess the second without the first. They are inseparable.

In any sizeable group of people are some dishonest members. In any large group of students some cheaters will be found. However, in some colleges, (Princeton and Washington and Lee are examples) student opinion has practically wiped out cheating. A student seen by other students to cheat is so ostracized by his confreres, is left so utterly alone, is so shunned, that he can't stand the pressure of social opinion against him and disappears from the campus over night. A similar condition obtains in the College of Engineering at the University of Michigan.

Armour is pleased to feel that student cheating is not extensive in her classes; yet thoughtful and strong members of the student body express the opinion that there is too much of it, and that students who don't want to cheat are penalized in the matter of grades (which are usually comparative), by the weaker student who, by dishonest methods, hands in a better paper.

In order to protect the honest efforts of students, to cooperate with their request for help, and to promote fairness, the faculty, last year, appointed a committee to study the matter. The experiences and methods of other colleges were investigated, and the opinions as to the extent of cheating at Armour, its causes and cures, were obtained from many students and alumni. A brief summary of the findings is:

There is more cheating at Armour than the student body as a whole wants. In a very few courses it is pretty general, either because the demands of the course are in excess of average ability or because a few weaklings take advantage of being "put on their honor" and so everyone must cheat to obtain eventual fairness. This situation is rare. Most cheating is incidental and comes from the weaklings who don't know the work and can't take their medicine. Such cheating in sports would brand a participant as "yellow."

It is recognized that remedies must come from the administration, the faculty, and, with equal vigor, from members of the student body who do not condone dishonest practices. The administration and faculty are ready to instigate at once various changes which will tend to eliminate cause and opportunity for cheating. Quizzes and examinations will be more carefully proctored, not as a device to "catch 'em at it," but as a means of protection to the honest student, who forms the vast majority. A plea is made to the entire student body to cooperate in establishing social sentiment for scholastic honesty. Students themselves should be the first to personally reproach a colleague who transgresses and to talk with instructors about better methods in various classes for upholding honorable school standards.

Because students behave like any other group of high type human beings, a minimum number, the weaker few, will respond only to coercion. To meet that contingency, a faculty committee has been appointed. Cases of dishonest practices will be brought before this committee by students or faculty members. The alleged offender and the complainant will appear before the committee, definite charges with proofs will be made before the defendant who may plead guilty or defend himself. If found guilty, in cases of freshmen, the first offense will result in a vigorous warning and a zero grade on the work in question. The second offense will mean expulsion from the course with failing grade. The third offense will mean suspension or expulsion from the Institute, as one "whose presence is detrimental to its progress." With sophomores, juniors and seniors, why by this time should know how to prepare their work adequately, the warning as above will be omitted.

Any honest and clear thinking person will grant that only a weakling cheats; average or good students shouldn't have to. If they do have to, to obtain normal success, requirements must be changed. Student racketeering is not smart; it is merely evidence of mental or spiritual weakness. The skillful, consistent cheater sometimes can "get away with it," but not without character damage.

Signed: C. A. Tibbals.

Registrar Lists Students and Fraternity Scholastic Averages

Correy Lynn Plays

For Arx Dance at Shawnee Nov. 3rd

Less than three weeks remain for Armour students to purchase their bids for this year's Arx Dance which is to be held at the beautiful Shawnee Country Club on Friday, November 3. The bids are easily distinguished by their unusual appearance and are being sold by fraternity representatives and members of the Armour Architectural Society, which is sponsoring the affair.

Feature Correy Lynn

Correy Lynn and his orchestra will hold the musical spotlight on the evening of the dance and those present are sure to enjoy his rhythmic style of playing. In the few years of its existence Correy Lynn's band has become very well known in Chicago land, and its reputation is rapidly spreading throughout the country.

The music will have added appeal because of the elaborate surroundings of the Shawnee Club. All of the facilities of the club will be at the disposal of the dancers. Two large lounges, an open air terrace, balcony, and spacious ballroom are among the accommodations offered to Armour men at the dance.

Bids \$1.50

The committee in charge, which includes E. C. Pointek, D. A. Dodge, L. H. Reinke, and H. T. Stowell, has promised a good time to all who attend the affair. The bids are printed on gold metallic paper, mounted on a light wooden plaque. The bids are obtainable for \$1.50 and only a limited number will be sold to avoid overcrowding.

Located in Winnetka, the Shawnee Country Club is within easy reach of all sections of Chicago. All in all, with a good orchestra, location, and fine bids the Arx Dance should be a gala occasion for Armour Tech.

Human Engineering Laboratory Gives Mental Ability Quiz

Each person's ability can be broken down into a number of separate mental elements. To measure, isolate, compound and study these elements which enter into everyday human activity, and to guide a person so that he may be able to exercise to the full the powers with which he is endowed, is the sole aim of the Human Engineering Laboratory. To accomplish this a series of tests have been compiled.

Open to All

Although Glassner House is an integral part of the Research Foundation of Armour Institute, the tests are by no means limited to Armour students. No recommendations or references are required and anybody from nine to ninety can take these tests. Of course the application of the results depends a great deal upon the age and educational background of the examinee.

Within three weeks of the date of testing, reports are mailed. The brochure discusses in detail the outstanding characteristics and their significance. Results of these tests are not divulged to anyone without the permission of the examinee.

Give Characteristics

To any man, satisfied, discontented, or phlegmatic, the laboratory is able to present an inventory of his outstanding characteristics. These characteristics may disclose some hitherto neglected aptitudes and may lead to a fuller realization of one's potentialities.

The Human Engineering Laboratory is not a money making institution. The home itself was donated by the Architect's Club and any source of profit is used to further psychological research.

Camras Leads Seniors Naum Pace's '41

Scholastic averages for the school semester, February to June, 1939, have been released by the registrar's office. Marvin Camras, E.E. leads the Senior Class with an average of 2.97, and the top man of the Junior Class is Lionel Naum E.E., who holds an average of 2.77. Two Sophomores, Aaron Kolom and Alfred Norwood, start this year with perfect 3.00 averages.

Classes Are Same

The relative standings for the various departments, classes, and fraternities are substantially what they were last September. The senior class, as usual, leads the other classes. This is due largely to the fact that in the first two years the men in the lower portion of the class drop out to a greater extent than the men with the better records. For the same reason the Junior class leads the Sophomore class.

In past years, the fire protects and science students usually lead the other departments in scholastic standing. This year is no exception except in that the electricals beat the science department to second place. The high standing of the fire protects is largely due to the large proportion of scholarship men in the department.

Tau Beta Leads

The honorary fraternities, lead by Tau Beta Pi the all-engineering honorary, all have averages in excess of two. Pi Tau Sigma, the mechanical honorary, is in second place. Among the social fraternities, Sigma Alpha Mu is again in first place with 2.08. Triangles, in second place, leads the social fraternities which own houses. Alpha Chi Sigma leads the professional fraternities.

The first ten men in the Senior class of this year are:

Marvin Camras, E.E.	.....	2.97
Henry Newman, Ch.E.	.....	2.85
John Catlin, M.E.	.....	2.83
Francis Opila, C.E.	.....	2.83
Alvin Winkler, M.E.	.....	2.82
Sidney Heenan, Ch.E.	.....	2.78
Ralph Wagner, M.E.	.....	2.76
John Gerhardt, Sci.	.....	2.74
Thomas Hunter, F.P.E.	.....	2.74
Donald Sunde, F.P.E.	.....	2.72

In the Junior class the high men are:

(Continued on page four)

Sound Laboratory Makes Noise Test

Sound, vibration, and their application to industry and public service, is the theme carried on by the Sound Laboratory of the Research Foundation. Under the leadership of Dr. Leedy, the laboratory at present is finishing a survey of the noise level values of the flush valves contained in the various water tanks found in the Institute. This study is the preliminary details for the redesigning of flush valves, which are the cause of the noises emitting from water tanks.

Vibration Measured

The projects undertaken recently are well diversified and are representative of the manner in which this particular phase of physics can be put to practical use. Probably the most important was that of measuring the vibration amplitudes for the Chicago subway, now under construction. Using an instrument that can accurately determine amplitudes varying from 0.0000006 inches to 2 inches, determinations were made under theatres, the elevated, street car tracks, freight subways and other vibration producing centers. In connection with this a noise level survey was made in the loop which recorded the various noise intensities in decibels. This work was made possible through the use of seismographic equipment similar to that used by Dr. Poulter in the previous Antarctic expedition and which is used in extenso in modern oil field prospecting.

Another application was made in a study of the properties of various iron forgings using the vibration measurements as the basis of the tests.

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The A.T.S.A. Constitution

With a month of the school year gone, thoughts are turning to the annual class elections. Freshmen have already selected their temporary officers, the sophomores have held their first meeting, and the upper classmen will swing into action before many more days have passed.

While attention is being given to subjects of this sort, let us drag the problem of the A.T.S.A. constitution from the shelf.

For the benefit of those who have forgotten what the proposed changes are, and what the reasons are for their proposal, let us bring them back to mind.

Perhaps the most important revision which is needed is to place some mention in the constitution of the existence of the Student Union, and to provide some means for regulation for it. The first union board was selected by the administration to expedite matters, rather than to go through the rigamarole of an election. Now that we have the time, the union can be included in the regular election at no additional inconvenience, and make the union entirely a student function.

Article V, Sec. 2 calls for the presence of two members of the faculty on the A.T.S.A. board. The new rule provides for only one such member, with the intent to give the students a greater majority of voting power on the questions which come up.

Article VI, Sec. 2, is one of the most important paragraphs in the entire constitution, since it sets up the procedure for the election of officers. As it is now set up, the electing is done by a closed committee in the manner of the old party caucuses. Students vote on men who have been picked for them, there being no true democratic method in use at present. The proposed amendment will put a really democratic system in operation, by allowing any man who so desires to place his name on the ballot.

Another revision in this paragraph is the close ballot rule, requiring that at least three per cent of the entire vote cast must exist as a plurality between two successive candidates before any man may be said to be eliminated from the running. Reasons for this are obvious.

Article VI Sec. 3 is a small change, providing that the entire board shall conduct the election, rather than the smaller election committee which does the job at present. This is primarily a technicality.

Article VII provides that meetings shall be held on a regular calendar basis. Up to now the practice has been to make the meetings fit the business, calling one whenever it is deemed advisable. It is thought that this is a not too good practice, and that the meetings should be held on a definite schedule so that the business can be made to fit the meetings. Another advantage of this will be that the members will know when the meetings are to be held and can then provide the time for attendance, rather than be tied up with some other meeting that had been planned several days in advance.

All of these items require your careful consideration. When the elections come up in the near future, think the changes over, and vote as your conscience directs. The structure of the A.T.S.A. is in the hands of the students. Let us hope and pray that we do right by it.

"The Slipstick"

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

We feel proud to know that Armour has now acquired all of the virtues (and vices) of a large institution of learning . . . a student Union . . . a research foundation . . . new trustees . . . more faculty members . . . a crusading newspaper . . . a crusading editor . . . a crusading columnist . . . Hi Yo Silver . . . a crusading column to fight for all that is clean and upstanding . . . THE SLIPSTICK . . . (thoroughly censored before being printed) . . . COED . . . COED . . .

Mary had a little lamb
Its fleece was white as snow,
And everywhere that Mary went
That lamb was sure to go.
Mary met a black sheep
Whose thoughts were black as sin,
Now every time the white lamb calls
Mary's never in.

He: Well, Babe, you lost your bet, and now I want the forfeit.

She: I don't know what you mean, and besides someone might see us.

Having a few slight difficulties of our own with the men in blue we thought you might need some help as we did. And here are some of the hints you'd like to have handy on your windshield when an officer of the law stops you for speeding and says, "Where's your license, buddy?"

1. My name's not buddy, you stinker; it's Richard Quat erdeck Harrison, the third.
2. I haven't got the slightest idea; where's yours?
3. Which do you want, hunting or fishing?
4. License—license! What is a license?
5. I haven't got a license, and what's more the car is stolen.
6. How dare you officer! You'll just have to take my word that we're married.

A fraternity is a group of fellows, living in one house, with a single purpose—to get more fellows, to live in one house, with a single purpose.

The manager was showing a friend through the factory. They came to the boiler.
"What is that over there?" asked the friend.
"That's the locomotive boiler."
"What do you boil the locomotives for?"
"To make the locomotives tender."

Eleanor: Do you know what good clean fun is?
Hi Yo: No, what good is it?

The members of an exclusive hunt club decided to hold a fox hunt, and instructed the members to bring only male dogs. However, one influential member owned only a female, and she was allowed to run with the pack.

The morning of the hunt they followed the dogs for an hour and then lost them completely. One of the hunters saw a farmer working in a field and questioned him.

"Have you seen anything of a pack of dogs and a fox?"
"Sure. Just a minute ago. They were going that way."
"What were they doing?"
"Wal," said the farmer, "the last I saw of them the fox was running fifth."

She Forgot Her Lamb
Two men and a woman were marooned on a desert isle. The first man said: "My name is John, but I am not a Baptist."
The second man said: "My name is Peter, but I am not a saint."
The woman said: "My name is Mary."

Co-eds are absolutely agreed that yes-men are a great deal better than no men.

And then there is the modern infant who said that if he had his way he'd be a bottle baby, because he was getting tired of getting cigarette ashes in his eyes.

I hear you've been to a school for stuttering. Did it cure you?"

Peter Piper picked a peck of pickled peppers."

"Why that's wonderful!"

"Yes, but it's d-d-darned hard to work into an ordinary c-c-conversation."

Hi Yo: I never call on Alice anymore.

Silver: Why, man, there are lots worse girls than Alice.

Hi Yo: Sure, and that's the kind I want.

"Stumpy" Sternfeld says: We've had so many messes in our family that we have a mop on our coat of arms.

Johny asked—Mary refused.

John begged—Mary blushed.

Johny pleaded—Mary pouted.

Johny insisted—Mary gave in.

So little Johny carried Mary's books for her.

"Do you care for dancing, Peggy?"

"No."

"Why not?"

"It's merely hugging set to music."

"Well, what is there about it you don't like?"

"The music."

This will hardly do with those cigarette ads looking over here from the next page, but in case nobody ever told you—Some girls are like cigarettes, they have to be lit up before you can tell if they're good or bad.

HI YO SILVER.

SHADES OF



YES

By Frank Hull

Do all of you new freshmen, and even some of you upperclassmen, know the significance of the beautiful window on the first landing of main building? Mr. Philip D. Armour, Jr., who was associated with the institute around 1899 or 1900 before his death. It is to his memory that the "Memorial Window" was drawn and executed by Edwin P. Sperry.

Remember that the next time you go upstairs!

A poem which was written in 1903 is called the "Ballad of the Lonesome Lobsters." It sounds as though it might have been used here last year. Here's part of it:

Coeds, return! Your duty calls;

Life is as dull as dull can be.

Lighten the gloom that around us falls!

There's nothing doing at A. I. T.

Evidently 1903 was the year which terminated the attendance of girls to this school. That's the significance of the above poem. The fellows had a drop in the social calendar and the coeds leaving was the reason. The boys didn't realize what a lucky year 1903 was! (Pardon the slang, girls.)

The boys must have had a hell of a year in 1903. In the "Integral," 1903, there are poems about the lost girls all the way through. A stanza of a poem called, "Where Is the Academy of Yesterday?"

I wonder in what Isle of Bliss
Our "coed" friends now charm the air;
(By what display of tactfulness
For Armour boys they spread the snare),
What hearts they harvest and they raid—
Ah! Time has lured them all away—
We sigh for the fair Academy maid,
Where is the "coed" of yesterday?
There was once a professor named Perry,
Whose footsteps were light as a fairy,
His assignment of text
Was, "Please take the next."
Which is neither warm nor hot-air-y.

Integral 1903.

"Around the turn of the century Armour's baseball team was so good the University of Chicago refused to play us because we used to beat them all hollow," quotes Prof. Libby, '02.

At the last Inter-fraternity Council meeting, held Oct. 11 at the Alpha Sigma Phi House, the council voted on a modification of the present rushing rules. Under the present ruling, the freshman not pledged during Rush Week may be pledged after Nov. 1, instead of having to wait till Thanksgiving. The Council also announced the interfraternity touchball schedule, so that all the teams are now settling down to serious practice. The Deltas, winners of the cup for the past two seasons, face serious opposition this year from strong Rho Delt, Pi Kappa, and Phi Kap teams.

Initiations were held during the past week by three fraternities. Triangles on October 8, initiated; William Logue, James Lawrence, and Kenneth Yardley. Professor Minark was the guest speaker at the banquet that followed the initiation. Rho Delta Rho held the initiation ceremonies at their house on Oct. 11 in honor of Edwin Franks, Phillip Rosenberg and Aaron Holom. At the "Legion" Beta Omega Nu initiated, George Miles, Ed. Wideman, Glenn Bachman, Hobart Bunce, and Jack Shannley.

Pi Kappa Phi has announced the pledging of the following men: E. H. Collender, Edward Farrell, Stuart Olson, and R. F. Smith. Delta Tau Delta has announced the pledging of Wally Jordan. Ed Moore and Earl Huxhold were pledged to Beta Omega Nu last Wednesday night.

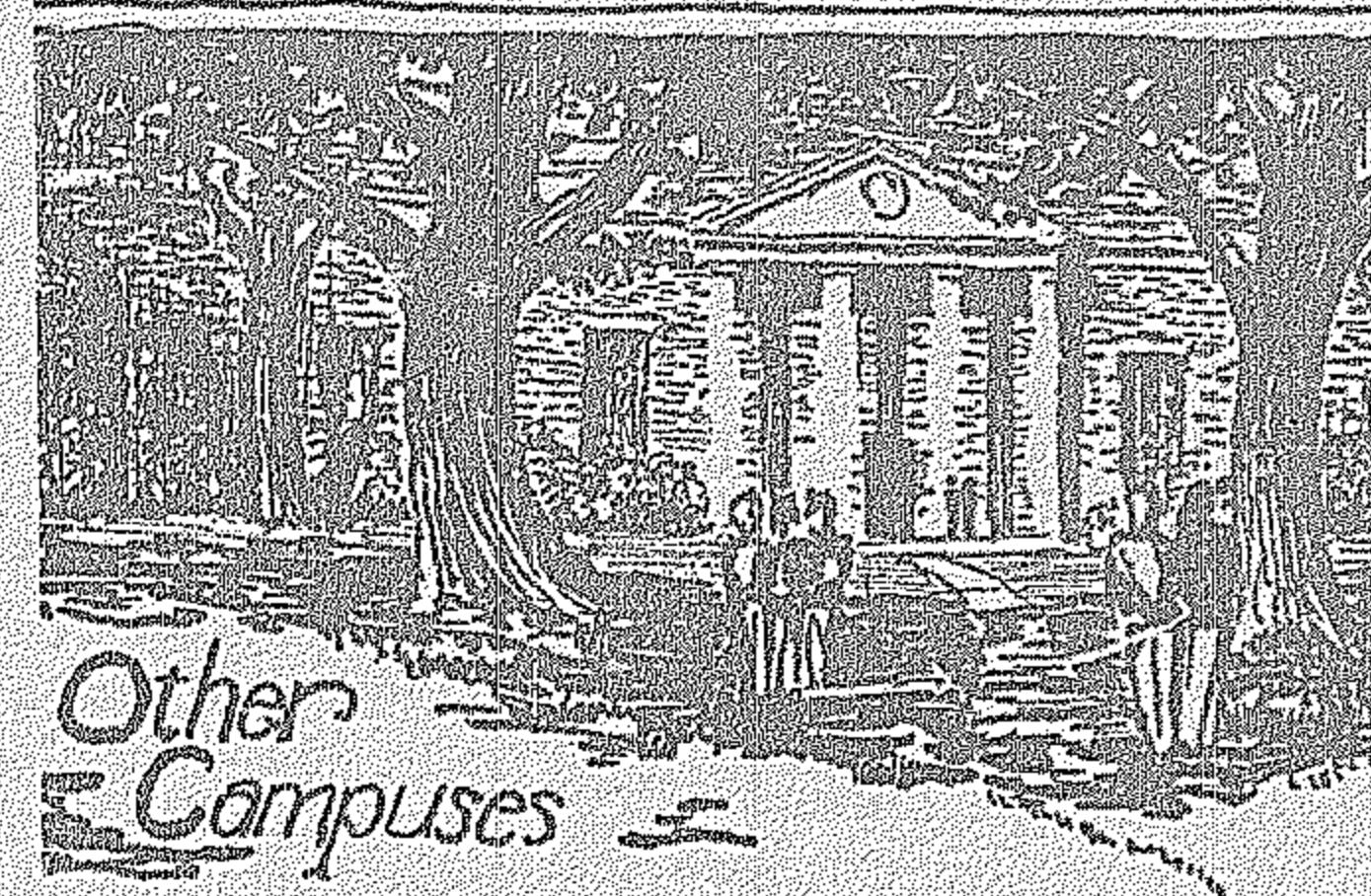
Dances were the order of the day last Saturday as Phi Kappa Sigma, Delta Tau Delta, and Triangle held informal dances. The pledges of Rho Delta Rho held the annual pledge formal at their Hall last Saturday night.

CO-OP NEWS

By E. P. Hanuska

Last Tuesday Prof. Roesch and the 4B class of Co-ops spent an enjoyable afternoon at the branch sales and service department of the International Harvester Co. at 611 W. Roosevelt Road. The class saw a cut-away section of an International truck engine of latest design in addition to many important details of truck construction. . . . In the service shop they saw in actual use special repair equipment for major overhauling jobs and apparatus for testing finished clutch assemblies, for replacement of bushings in connecting rods, and for the reborning of brake drums.

The trip was under the guidance of Mr. Mongeon, sales representative, and Mr. McCarty, branch manager. The class is very grateful to these men and Prof. Roesch for arranging the trip.



Other Campuses

To prevent any more "goldie" forays, Los Angeles City College members of Matrix Table have organized a Society for the Protection of Goldfish from College Boys.

Connecticut State College has recently been graduated to the University of Connecticut by order of Governor R. E. Baldwin.

New York City's four municipal colleges enroll more than 52,000 students yearly.

During 1938-1939, 200 colleges created about 300 scholarships for foreign refugees.

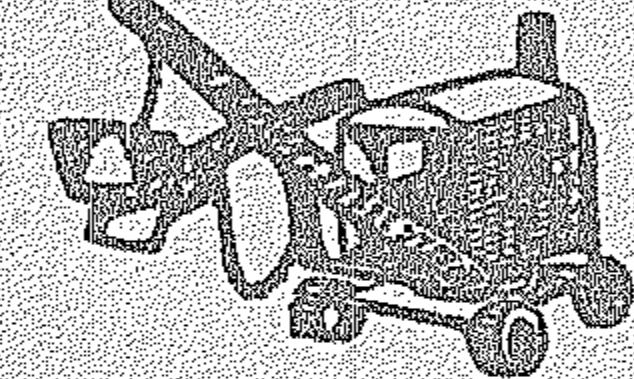
University of Wyoming students spent \$23,373.75 last year for the national dues, pins, and initiation fees encountered in student organizations.

Of the 1,500 different types of positions for which the U. S. civil service commission offers examinations, only approximately 200 require a college degree or its equivalent.

The top hats worn by the boys at Eton have been discarded in preference for peaked skull caps. They simplify the wearing of gas-masks in spite of being veddy, veddy irregular.

Henry Skull, Northwestern University junior, works his way through college by winning prize contests. His "take" for the last five years has been \$3,500.

Wilson College just received 800 pounds of dead cats for use in the vertebrate anatomy course at Teacher's College.



STEAM SHOVEL

By Charles Schulte

Greeting my children, and you shall hear,
All of the dirt that is close and dear,
And here we bring our umpteenth columy
Another to add to our worthy volume.
But now, to our victim's great consternation
For we are attacking with greatest elation.
Yes, foes are we, but it's all in fun,
For after all, what is done has been done.

Touchball Tourney Under Way As Juniors Pile Up Early Victories

Civils Whip Sophs; Mechs, Frosh

The junior civils succeeded in winning their first game of the 1939 Touchball Tournament last Friday afternoon, defeating the sophomore fire-protection 6-0. Winning the toss, the sophs decided to receive and the civils elected to defend the goal against the wind. The sophs seemed to be the superior of the two teams, as they completed several passes to Umbright and Hoffman, but the civils stopped their drive. The civil's offense was broken several times as long passes, held up by the wind, were intercepted by the sophs. The first half ended with no score as each team stopped the other's advance. In the second half the juniors threatened to score several times. Bauch and Donoghue blocked a soph punt as the sophs punted from behind the goal line, but they recovered the ball.

Civils Miss Again

Again, the civils missed a chance to score as Olson was tagged about a yard from the goal on an end-around play. Finally with only a few minutes to play Jacobsen set off the fireworks by catching a long pass from Olson, and two plays later on a fake end-

TOUCHBALL SCHEDULE

Tuesday 10:00 A.M.

Sr. C.E. vs. Soph. F.P.E.

Wednesday—12:00 Noon

Sr. E.E. vs. Sr. M.E.

Thursday—2:00 P.M.

Jr. E.E. vs. Soph. F.P.E.

Friday—2:00 P.M.

Jr. C.E. vs. Jr. F.P.E.

around play, Olson threw a pass to Hauswald over the goal for the only touchdown of the game. The civils failed to score on the extra point, and in the closing minutes of play, they managed to stem the fire protect's drive as pass after pass was attempted.

Mechs Down Frosh

A freshman team stuck its neck out last Friday morning, and it was promptly sat on by the Junior Mechs. The Comets, the frosh aggregation, were licked by the mechs 19-7.

All of the upperclassmen's scores were in the first half. Two of the touchdowns were on passes from Krause to Knorring. The last six points were garnered when fleet footed Erickson dashed over the line on an end run. The blocking for the mechs proved to be very effective, for time and again the rushing forwards were spilled on the ground.

During the second half the Comets showed more of their talent and made a good stab at living up to their name. About in the middle of the half, the mech's pass defense weakened, and the frosh grabbed a pass which accounted for their sole touchdown. With the Comets trying desperately to push over another six points, the game ended.

Swimmers Date First Meet with G. Williams

What will be the outlook of the swimming team for the coming season? The answer to this question was readily given at the swimming team meeting held yesterday. "The out look is very bright," chorused a bunch of frosh swimmers, still vigorous from last week's practice in Bartlett pool on the U. of Chicago campus.

At this meeting, the second of the year for the mermen, manager F. DeMoney bared several plans that will be effective before long. The most important plan was relative to the schedule. According to information now on hand, the Techowl squad will open the '39-'40 season against George Williams in the early part of January. This will give the boys about three months to get in condition. After this date, meets will come in thick and fast, and several long trips are to be taken.

Time trials, a necessary matter because of the large number of men showing up for practice, will be held before each series of meets, it was announced at the meeting. The first time trial, one of minor significance, will be conducted on the Friday before Thanksgiving, November 17. These trials will merely indicate the general condition of the team, and the relative abilities of its members.

Senior Mechs Meet Senior Juicers

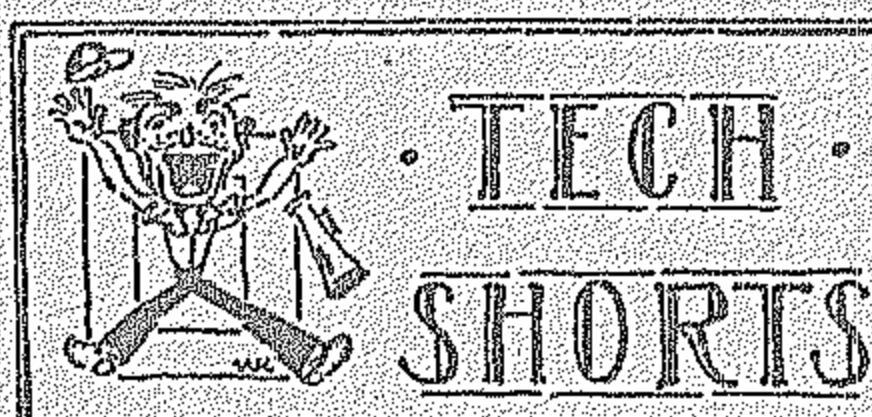
By scoring on the first play in which they had the ball, the Junior Fire Protects went on to protect their slim lead and won a highly contested game with the Junior Electricals, 6-0. The game was played in the Ogden dust bowl last Friday noon.

With the wind at their backs, the firemen kicked off to the juicers to open the ball game. It was not long before the defensive team found that the gale was an able ally. With the dust drilling into his eyes, Matthews attempted to run from midfield on last down. However, he was promptly snagged when his blockers disappeared in the wind. At this point, Finnegan's boys took over command of the ball game. The touch-down play was a lateral-forward combination, with Larson flipping the ball to DeMoney, who spiraled one from midfield into the waiting arms of Zoelner, who was free in the end zone.

Firemen Pay Defense

For the rest of the half the firemen were content with just coming close. Twice passes were dropped by receivers standing in the cinders. The half ended with the electricals trying to get out of their territory. With the goals changed at the half, the juicers had the benefit of the wind. However, good pass defense on the part of Larsen and Mahn staved off a desperate electrical attack, and the ball game ended with the firemen running the ball past midfield.

This week will see the two teams expected to battle for the championship squaring off, namely the Senior Mechs and Juniors. This game should be the best of the tournament from past experiences. In other games, the Senior Civils will face the Soph. F.P.E. with expectations of an easy victory. On Thursday the Junior Juicers will face possible elimination when they face the Soph F.P.E., who if they lose Tuesday will also face elimination.



Last week, on this page as well as other parts of the NEWS, there appeared news items, editorials, and stories which drew considerable comment, pro and con, from the faculty and the student body. Since nearly all of the student comment was favorable, we should like to take this opportunity to discuss the faculty criticism, our editorial policy, and the reasons for issues such as last week's.

Main point of faculty criticism was that all of our comments were purely personal and individual gripes, not a true picture of student opinion. Let us refute that opinion with the fact that last week's two editorials drew more favorable student reaction than any others yet printed by the present staff, including the pieces on the lunchroom and the A.T.S.A.

We were also criticised on the fact that we were destroying the carefully guarded reputation being built up by the school. This point baffled us for a moment, not for its veracity, but for its connotation. It simply states that the administration is selling to the outsiders an Armour that doesn't exist.

The facts which we brought to light apparently are in the taboo class, for fear someone might get the impression that its own students do not think Armour is the best engineering school in the country. Frankly, we don't think it is perfect, and we are therefore trying to make it approach perfection by pointing out the items which the students do not like, in the hope that something will be done to improve conditions. In this we had hoped for faculty cooperation. It seems to us that the school is being polished up on the outside and allowed to corrode on the inside.

We know that the financial situation of the school is rather tight. For that reason, aside from the complaint against the profit turned in by the lunchroom, our gripes have been non-pecuniary in nature, striving only for efficiency in administration. Our use of strong terms has been in hope that we could stir up some action.

To pass on to the other criticism received, we are confronted with a denial of facts concerning the basketball story. May we state that every comment in that story can be confirmed by witnesses and our witnesses read the story before it was printed and agreed to it.

We are sorry if people's toes have been stepped on, but in our opinion, for the betterment of the school as well as its progress, it was necessary. Please remember that we are trying to attain, on the inside, the reputation Armour has on the outside.

(Signed) The Editorial Board, Armour Tech News.

Junior Mechs Selected To Win Touchball Tournament by Scribe

Little Progress in Tennis Tournament

Senior Mechs, Juicers Given Chance to Share Title

Surprise! All but four of the first round matches in the Fall Tennis Tournament have been played, and one match has been completed in the second round.

Behrens gained the second round on default from Baum. Bennett defeated Berman 3-6, 6-1, 6-4 after an uneasy first set. Enzer, Haig, and Herrick reached the second round on default from Fisher, Groh, and Herrick, respectively. Hauswald had an easy time over Hameister 6-0, 6-0, as did Kapranos over Long 6-2, 6-0. Murray finally beat McAleer 6-4, 3-6, 6-2 after a difficult second set. Noonan succumbed to Obergfell 6-3, 6-3, and Obergfell proceeded to be the only one thus far to reach the third round as he defeated Murray 6-2, 6-3. Phillips beat Rose 6-4, 6-2, and Sherman took Sliwa 6-3, 6-4. Smith had a hard time with Strauss, but won 4-3, 6-2, 6-4, while Umbright took it easy as he defeated Sullivan 6-1, 6-1.

Tennis manager John Balsewick has suggested that those who have not played their first matches yet, and who have tried, but failed to get in contact with their opponents, should see him. He also suggests that the matches be completed as soon as possible, for the weather will soon be unfavorable for tennis.

The progress of the meet thus far is recorded in two places, Sonny Weissman's office and the Student Union bulletin board. Participants should watch these programs and thus be aware of when their opponent has been selected by the process of elimination. As only the third round has been reached, it is apparent, meets will have to be played more frequently or no awards will be given.

Last week we were going to list our predictions but withheld until we could see a couple of games. Now we are ready but just as we're about to start we look at the schedule and, lo and behold, what do we see but that the two teams we pick to enter the finals are playing each other. If the intramural manager intends to make us look silly by eliminating one of our favorites, we'll fool him. We won't pick either one of them. After all, why should we handicap a couple of good teams with our support.

For a spell, we were really hot when it came to forecasting the winner. Didn't we pick five winners in a row before running into the freshman basketball team last year, and then the Junior Mechs in softball?

Well, anyway, this year we're picking the Junior Mechs as a surprise with either the Senior Mechs or Juicers trailing. Watched the Juniors play last week and despite some bad timing, they still looked pretty good.

We're not picking the Mechs because they're the best team individually, but because they shape up as a good team collectively. This we can't see in either of our second choices, the Juicers or Mechs.

The Juicers boast powerful blocking, a good passer, two good receivers, but aside from Shaver, they're slow and this will beat them. The Mechs are the opposite, having speed but lacking the down-to-earth attitude of the Juicers. However, either team could win but we say, "Watch those Juniors."

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They satisfy

for your pleasure...

The Right Combination

of the world's best cigarette tobaccos

PERC WESTMORE

ANN SHERIDAN

PERC WESTMORE, make-up expert for Warner Bros., says it takes the right combination of color, line and contour to bring out the best features of all stars. Here you see him with glamorous ANN SHERIDAN who is currently starring in "THE ANGELS WASH THEIR FACES" a Warner Bros. picture.

Chesterfield

AUSTRALIAN CIGARETTES

LICETT & MYERS TOBACCO CO.

Hillbilly Pitches Woo and Gets Struck Out Nearly Knocked Cold by 'Pruney' Wackey

By Art Hansen

Deer Sally,
Bridge may bee a universal game, but it takes a cannibal to throw up a good hand, unquote and hope you never get in a stew like that, my fare mountian flour.

Wel, hear it iz the forth weak of skool, can yew beet that, and things, inkluding homework, iz rapidly piling up. Things our kuming up sun, inkluding the Co-op danze, the Ox danze, and a social which O. G. of the glea club promitez tew bee colouszy. If hea pulls any mowr of thoze pewtred afares such az at the pestology skool for delinquent girls, and the like, I wil draw the line—Gee, I can hardly wait tew get their.

"The fare sex" refers tew girls who love tew go riding, I have decided. Hence, from now on I am going tew sit in parlors and hold hands—I am getting tired of her holding mine. I borrowed a car laste weak and took Prunella Wackey for a ride. We paused at a deserted spot along the lake front, wear only a few hundred other cars were parked with the awl lites owt. Not noing wat they were doing, but figuring that I might az wel dew in Rome wat the Romans dew, I turned owt mine. "My, sweet won, I sed, az my arm krept aroud her shoulder az I put my other hand on the gear shift knob (it waz an olde car with the levers in that most convenient place), "howe glamoruss yew look tonite." "Yes, shea sez, it iz that Mystic Nites of Paris perfume." Gosh, I sez, I thot the wind had shifted frum over by the stockyards. Then I gazed intew the olde drag in and drag owt, yew might say. Up at six, air Horatio, my skunk at 7. Skool at ate. Holler, holler awl day bye the profs . . . "and then blah-blah-blah, and the entropy comes in here, and yew integrate between this curve and that, and the stress cumz owt here, squaring the density, and dividing by hydrodynamic acid, shake well and circulate in air-stream characteristics now take these 30 problems fore tomorrow . . .", wearly homeward we drag owr bodies, eat supper and burn the midnite oil tew won a.m., then reed "Spicy adventure Stories from the Oil Fields" til five a.m., then tew get sum sleep. Wat a life . . .

Wel, I must be going befor this letter becums an epistle. Az the profeser sed recently tew his klass, quote, There iz sum co-operation among the wild creatures. The stork and the wolf usually work the same neighborhood, unquote,

Yures,
Stoopbrain Bliss.

Physics Staff Enlarges Their Research Labs

The staff of the physics department has made many improvements in their graduate courses. This change has been possible because more space is now available for laboratories.

Dr. Copeland has developed the Electronics Lab for research and graduate work. He has been active in secondary electron emission research and has published a number of papers in that field. The Institute of Radio Engineering has invited Dr. Copeland to discuss *High Gain Secondary Emitters* at their conference in Hoboken, N. J. (Stevens Tech) Oct. 20-21. J. G. Potter, who was awarded a Ph.D. degree at Yale University last June, has moved his high vacuum and other equipment from the U. of C. to Armour so that he may continue his research at our school. Dr. Cleveland, a new member of the faculty, has established a Spectroscopic Lab where he is using a special instrument for his work in Raman Spectra. He is now developing a graduate course in spectroscopy and atomic structure. J. S. Thompson, the head of our physics department, is continuing his work on the production of Vitamin D in electrical discharges. High frequency powerg of six meter wavelength has been found most effective. S. D. Black and Dr. Reissner have worked out a proposal for an electrical "wind tunnel." This is now in the hands of the National Advisory Committee on Aeronautics.

Altogether several thousand dollars worth of equipment have been added to Armour's Physics Laboratories during the past year. These additions also include apparatus for the sophomore lab and for demonstration lectures.

A new section has been added to the general labs on the first floor of the Physics Bldg. This helps relieve con-gested conditions. Formerly this space was occupied by the library.

1141 Students 286 Co-op Men In Day School

Enrollment figures for this semester show a total of some 1141 students in the regular day school and an additional 286 in the two co-op sections making a total of 1427 students. This figure includes 57 part-time students in various departments and 81 architects who spend the majority of their time at the Art Institute. As in the last few years, the mechanical and chemical departments lead with respective enrollment of 364 and 313.

The total enrollment of 1427 students is lower by 2.94% than last year's figure of 1469. The losses in the co-op class is 3.85% of last year's enrollment while the day school student enrollment has dropped by 2.72%.

Seniors, Sophs Gain

The number of students in all classes (viz., Senior, Junior, etc.) has decreased since last year except the senior and sophomore classes. The fire protection department has had a remarkable increase in its upper class enrollment. Besides an enrollment of 30 freshman F.P.E.'s (almost half of the class) there are 48 upper classmen as compared with last year's enrollment of 41 F.P.E.'s. Gains were also indicated in the enrollment of the mechanical, chemical, and electrical departments, while the civil, architectural and science departments sustained losses. These losses and gains are in the upper classes only.

Sophs Debate Green Hat, Tie

Holding its first meeting last Friday, the class of '42 held a discussion of the present freshman situation. The sophomores, as a whole, protested against the rigid rules set forth by Dean Tibbals governing freshman-sophomore conduct.

Up to this time, each first-year man was required to wear a green cap, the alternative being the loss of his pants. This proved quite distasteful due to the mad scrambles that ensued. Since the sophomores were unwilling to sacrifice their hereditary rights to enforcement of green caps, Dean Tibbals decided to ban all freshman-sophomore activity.

See the Dean

At their Friday meeting, the second-year men, confronted with the problem of enforcement of the rules, sent a delegate to see the Dean. Dean Tibbals suggested that they improvise something green for the freshman to wear—such as green caps or ties—but that they refrain from enforcing the wearing of these items.

From this it seems very likely that a green piece of apparel, of one kind or another, will be adorning the respective figures of our freshmen with in the next few weeks. Any sort of hazing, however, will be strictly prohibited.

THOMAS LECTURE

(Continued from page one)

Speaking to stimulate interest and increase the activities of mechanical engineering students in the A.S.M.E. Professor Peebles, Roesch, and Winston pointed out the numerous advantages and personal benefits available to all who participate.

Professor Peebles, recently appointed head of the mechanical engineering department was called upon first. Having had a great deal of experience in placing Armour graduates in industry, Professor Peebles stressed the fact that successful men, those who now hold responsible positions, have certain traits of character, personality, and executive ability that others lack. Active participation in the engineering society can do much to aid in developing the qualities that mark successful professional men.

Also at this meeting, held last Friday in Science Hall, a resolution providing for representation of co-operative student members on the executive board of the society was read by John Catlin. As a result of conflicting opinion among the members, action has been deferred until the next meeting.

Expect 100% Membership

Ted Gromak, in charge of membership, announced that he expects 100% of the men in the senior class to be signed up within a few days. Don Crego and J. E. Sauvage are in charge of Junior Class membership enrollment and Herbert Hansen of the sophomore class.

Membership in the A.S.M.E. has been increasing steadily during the past several years, and last year Armour's branch lacked twelve men from being the second largest in the United States. Since Armour Institute will be host to the annual Mid-Western convention of A.S.M.E. student branches. Next semester, all upper classmen are particularly urged to join.

'Smoky Joe' Tells F.P.E. Boys About Losses From Fire

Smoky Joe the Fire Clown addressed the F.P.E.S. at its regular meeting Friday. Smoky in real life is Harry K. Rogers, chief engineer of the Bureau of Fire Prevention of Western Actuarial Bureau, also an honorary member of the F.P.E.S. Mr. Rogers makes his appeal primarily from the emotional angle. First he compared the lives lost as a direct result of fire in United States with those of China. Actually there are fewer lives lost in China each year. In this country between 10,000 and 15,000 lives are lost annually. This means that within 24 hours after reading this article, total of 40 lives will be lost as a direct result of fire, 32 of these will be women and children. In addition to this, between 17,000 and 20,000 people are injured yearly to become public charges, and more than a billion dollars in money is lost as a direct result of fire.

Fireman Training

Today many of our firemen are college trained men. The first course for firemen was given 15 years ago at the University of Illinois. This was followed closely by Ames College, Iowa. There were 500 enrolled at that time compared to the 76,000 enrolled last year.

Fireman training is now given as part of an engineering course at such schools as Oklahoma A. and M., U. of W. Virginia, and U. of Maryland. This training course is very thorough and is divided into five general divisions. These are hydraulics, chemistry, practical evolution, life saving, and salvage. Practical evolution involves the handling of equipment and coordinating of efforts. In the salvage division, firemen are trained in methods of avoiding unnecessary damage, especially with water. Last and among the most important is public speaking. The modern fireman must be able to meet the public and participate in local civic events.

In closing Mr. Rogers stated that the only solution to our fire prevention program is individual responsibility. He feels that by impersonating a clown he has found the most effective way of reaching the children. Knowing that children love clowns, he keeps them laughing until exhausted. Then going ahead with his lecture before a really attentive audience.

Hammond Describes Tunnel Work to C.E.'s

A proposed Philadelphia-Camden vehicular tunnel was the subject of a talk by Mr. Alonzo J. Hammond given before A.S.C.E. on Friday, Oct. 13. The tunnel proposed is quite different in the method of construction from the Chicago tunnel or the Holland tunnel in New York. Only one other tunnel of note has been constructed by the method, that being the Michigan Central Railroad tunnel under the Detroit river.

Gives Tunnel Method

The procedure consists of building 240 foot sections in a drydock, a relatively simple operation. The sections are then floated to the site which has been previously prepared by combined operations of bucket and suction dredging. After weighting, the sections are sunk into place in the prepared channel. Divers then connect the sections into a integral unit. The tube is pumped dry and the work on the interior can then be finished.

The proposed tunnel is to be built by using two parallel tubes, each of two lane capacity. It will be situated near the foot of Hog Island which is the location of the U. S. Navy ship yards. The tunnel was suggested because the clearance required by river traffic would make the cost of a bridge excessive. The builders, a private corporation, will turn the tube over to the states of Pennsylvania and New Jersey after the building cost plus 15 percent have been collected by tolls.

Dr. Thomas will conclude his talk by letting the audience listen to the true, clear tones from a small bell heated to a cherry red which has been sharply rapped with a hammer. This accomplishment, impossible with bells of ordinary steel construction, is achieved with a revolutionary new metal alloy stronger than any known steel.

AVERAGES

(Continued from page one)

Lionel Naun, E.E.	2.77
James Brown, E.E.	2.76
Leo Stooiman, M.E.	2.75
Robert Harmon, F.P.E.	2.71
Robert Mead, Ch.E.	2.70
Henry Dryer, E.E.	2.69
Roy Jacobsen, C.E.	2.67
Leonard Holmboe, E.E.	2.63
Le Roy Goetz, C.E.	2.60
James Waber, Ch.E.	2.58

The average of the undergraduate student body, a total of 858 students, (part time, special, and cooperative not included) is 1.45. The average for all the other students is 1.44.

The fraternity and departmental averages listed include the averages of the graduates of last year. The averages used were those for the whole period at Armour Institute for each man and are not those for last semester alone. In the case of the fraternity averages, active members alone were considered and the averages of the pledges disregarded in calculating the standings.

In calculating the averages, numerical values are assigned to the grades received. The grade of A carries three grade points, B two points, C one grade point, and D and E carry no grade points. These numbers, multiplied by the number of credit hours assigned to the course, give the number of grade points earned in the course.

The value of the average is the ratio of the total number of grade points earned to the number of credit hours taken. The grade of I is not considered at all.

In the case of students who have credit from institutions other than Armour the grade points assigned to the work depends on the record at Armour. If the average of all subjects taken at Armour is 2, or less, one grade point is assigned to each credit hour giving an equivalent grade of C. If the record at Armour is between 2 and 2.5, each credit hour is given 1.5 grade points. Two grade points are assigned to each credit hour for the men who have averages at Armour above 2.5.

Grades in physical education, orchestra, and glee club are not considered in calculating the averages.



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