

Armour Tech News

Student Publication of the
ARMOUR INSTITUTE OF TECHNOLOGY
CHICAGO, ILLINOIS
Published Weekly During the College Year



SUBSCRIPTION RATES
\$2.00 Per Year Single Copies, 10 Cents Each

MANAGING BOARD
Editor-in-Chief.....Wilbur H. Rudolf, '32
Managing Editor.....Max J. Schinke, '32
News Editor.....Edward W. Carlton, '32
Business Manager.....James J. Casey, '32
Faculty Adviser.....Professor Walter Hendricks

ADVISORY BOARD
Advisory Editor.....Fred B. Attwood, '31
Advisory Associates.....
{ Alvin B. Auerbach, '31
{ Arthur H. Jens, '31
{ Frank W. Spalding, '31

EDITORIAL DEPARTMENT
Feature Editor.....J. R. Jackson, Jr., '32
Fraternity Assistant.....Harold Bodinson, '33
Architectural Assistant.....W. W. Davies, '33
Art Assistant.....Dave Chapman, '32
Reviews.....Morton Fagen, '32
Columnist.....George Bonvallet, '32
Assistant News Editor.....Orville T. Barnett, '33
Copy Editor.....L. G. Wilkie, '32
Assistants.....
{ J. B. Dirkers, '32
{ J. W. Juvinail, '33

SPORTS DEPARTMENT
Sports Editor.....H. P. Richter, '32
Associate Editor.....C. Stempkowski, '33

Reporters
C. H. Fox, '32 H. W. Davidson, '34
F. A. Ustryski, '32 H. L. Gibson, '34
H. F. Becker, '33 W. Krol, '34
S. T. Leavitt, '33 D. F. Landwer, '34
R. J. Mulrone, '33 J. P. McGuan, '34
R. F. Rychlik, '33 V. Rimsha, '34
E. G. Avery, '34 J. A. Scheyer, '34
N. E. Colburn, '34

BUSINESS DEPARTMENT
Advertising Managers M. A. Collick, '32—H. Monger, '33
Assistants
R. E. Nelson, '33 W. L. Bengston, '32
Circulation Manager.....J. S. McCall, '32
Assistants
E. H. Chun, '32 J. F. Bonnell, '34
R. Dufour, '33 L. Marcus, '34
F. W. Paine, '33 T. C. Peavey, '34
C. B. Sommers, '33
J. A. Bacci, '34 C. T. Seaberg, '24

Vol. VII APRIL 28, 1931 No. 11

"Private sincerity is a public welfare."

—Byrus A. Bartol,
Born April 30, 1813.

Keeping Pace With the Times

Engineering practice is constantly changing to keep pace with mutable physical laws. This change, however, is always in a forward direction; always originating, either directly or indirectly, from an effort to better living conditions.

If scientific methods change, then instruction in physical science must also change. Courses, therefore, given in engineering today differ greatly in some respects from the same courses given twenty, thirty, or fifty years ago, illustrating that technical colleges try to keep in accord with the best commercial engineering practice.

The modern trend has had its effect at Armour in changing and improving the course and laboratories in electrical engineering. With these improvements the Institute may be expected to have one of the finest and most extensive electrical courses in the country. These changes are worthy of praise.

E. W. C.

A Careless Habit

Students who go to the school lunchroom everyday and walk down the running track on the way probably do not realize that they are doing harm to anyone. For that reason they should not be criticized too severely even though their thoughtless habit may cause considerable annoyance and even injury.

The difficulty is this: the cinder track is soft and easily roughened when any considerable number of men walk on it. When the track is thus reduced to a poor condition, running on it becomes really hazardous. A turned or sprained ankle, a strained tendon, or even a broken bone may result if a runner steps in a small hole such as is made by the passage of people wearing heeled shoes.

Such an occurrence would not only be painful to the victim but would be injurious to the track team's chances for success. All such danger can be avoided easily if the students would use the sidewalk and leave the track for trackmen.

W. H. R.

We were born, let us remember, for the common good, society is just like an arch which is supported simply by the reciprocal pressure of the several stones, without which the structure must fall.

Seneca.

"The Slipstick"

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

FATIGUE

Left home in the morning,
Dodged a trolley car,
Got wet by a sprinkling cart
Before I'd traveled far,
Nearly got run over
By a passing train.
Had to step from beneath
A capsized aeroplane.
Motor came awhopping
As it turned around a curve;
Managed to get past it but
It surely took my nerve.
I love my work sincerely,
There isn't any doubt:
But getting down to do it is
What wears a fellow out.

OUR OWN HALF MINUTE DRAMA

Actor: "Where did you get the pink tie?"
Actor: "How did you know it is a pink tie?"
Now we ask you, gentle readers, how did the actor know that the actor had a pink tie; who told him that it was a pink tie or where did he develop the power of deduction. Ah-h-h, the shadow,—yes, the shadow,—he alone knows.

"Dat guy soitinly is nuts."
"Yes, I t'ought he was a wine maker."
"Sure, he's grape nuts."

Skiff.

Here lies the body of
Amos Joe Mosher,
Got out of his airplane
To fix up a puncture.

"Is this the hosiery department?"
"Yes," replied the weary saleslady.
"Have you any flesh colored stockings?"
"Yes," was the reply, "whadde ya want, pink, yellow, or black?"

—Boom R. Wrang.
We're not sure, but we think that Boom R. Wrang expected his composition to come flying back. Better luck next time, old man.

Time was when a man "axed" a
woman to be his wife.

Landlady: "It looks like rain."
Boarder: "Yes, but it has a faint smell of coffee."
—Rad.

And if you don't like the architecture of the '33
World's Fair buildings, try an inspection trip of oil
stations.

Teacher: "If a number of sheep is called a flock, and
a number of cattle is called a herd, what would a number
of camels be called?"
Little Johnny: "A carton."

The King Comes to Town

Being as we were on the reception committee when
King Prajradhipok came to town last week, we were out
in our best duds and ready to present the keys of the
city.

As soon as he steps off the train we sez, "Well, well,
Prajy old kid, how are yuh?" Praj was a real guy and
answered back; "Just fine, old man, and how's
yourself?" Well I gives him the key, which he puts
in his key case (in which there wuz keys to all the im-
portant cities in U. S.) and puts it back in his pocket.
Well, I grabs him an' we takes a cab out to our home
where me an' the king an' queen has dinner.

We gets to talkin' about Alphonso and deposed kings
'n' such things, after the eats, and then ask Praj (he's
a real guy), what he thinks about the Spaniards. Well
he's kinda touchy on the subject 'n' sez, confidential
like, that he expects to be driven out of Siam in about
three years and has already started time payments on a
cozy little chalet up in the Siberian Rockies.

Soon Prajy sez that he has to go. So I calls a cab
and we get to the station in short order. Then he an'
the wie gets on the train or N. Y., thanking us for
the hospitality 'n' such. But we sez that it was a pleas-
ure and that he should drop in any time he wants to,
'n' he sez he would.

O' course it was a private visit. None of the press
knew anything about it, but, say, Praj is a real guy.

Our watchmaker hasn't started his spring cleaning;
he's been doing it day in and day out every day in the
year for the last twenty years.

THERE'S A REASON

As the soprano began to sing, little Johnnie became
excited over the gesticulations of the conductor of the
orchestra.

"What's the man shaking his stick at her for?"
"Sh-sh! He's not shaking his stick at her."
But Johnnie could not be convinced.
"Well then what in the deuce is the hollerin' for?"
—Bloney.

"A good time was had by all" was the unanimous
verdict of all who went to the Frosh Informal. And
we hope that they do just as well in the future.

—The Bongineer.

Frosh Inspect Crane Co. Plant

Due to the influence of Mr. C. L. Larsen of the founding department, all freshmen taking founding this semester were given the privilege of visiting one of three of the largest foundries in the city.

Twenty-four diligent frosh inspected the principal departments of the Crane Co. last Thursday, April 23. After being relieved of their coats and hats, the class was led to a room where dozens of girls were making cores for the various valves and fittings in which the Crane Company specializes. After watching the girls make perfect cores in lightning-like time, some of the frosh felt sick at the thought of the hours of labor put in on about one dozen cores in the founding shop.

The group was also shown the founding room proper, where the pouring is done. This department is divided into a brass and an iron section. The students showed much interest in the way the molds were rammed up, the cores fitted, and in the endless conveyer on which the molds were poured and shaken out.

The machine shops in which the castings are machined to correct size and threaded was the next point of interest. At one machine there were seven different operations done consecutively to a brass casting, after which it came out a finished stem for a valve. There were also machines which would thread nearly a dozen fittings in the time it would take the operator to place twelve more in the machine.

The drop forge proved interesting, but very strenuous on the ear drums. Beside each forge was a double gas-heated furnace in which the stock was heated and kept hot until needed. The operator would reach into the furnace with a long handled shovel and bring out a red hot piece of stock and place it on the forge. Then with ten or twelve deafening impacts of the die the piece was forged, and the edges were trimmed off in another machine while it was still hot.

The class also went through the galvanizing room and the power plant. But due to the short time allowed for the trip everything had to be rushed, and the Armourites were forced to see in two and one half hours what would easily take a week.

Mechanicals Inspect Inland Tire Company

As one of the series of inspection trips conducted by Professor Roesch, the Senior Mechanicals visited the Inland Tire Company, which is located at 27th and La Salle Sts., on Tuesday, April 17.

The process of manufacturing casings from fabric and rubber was clearly shown by Mr. Le John, who extended every courtesy to make the trip a success.

After the crude rubber is received, it is dried, compounded, and kneaded into massive rolls until the mass is homogeneous. These rolls are steam heated in the morning and the kneading continued. Intense heat is developed as the work progresses and it is necessary to water-cool it.

Our modern tires are of cylindrical type. The casings are built up from hollow cylinders, shaped in the mold, and vulcanized. In this process, the casings with their steel or cast iron molds are placed in a steam heated chamber.

During the vulcanization, a pressure as high as 200 lbs per sq. in. is necessary to force the rubber into every interior of the mold, which is handled by an ingenious conveyor system, designed to simplify operations.

In addition to the various inspection trips there are interesting experiments being performed in the Automotive Laboratory by the senior students. Fox, Borrowdale, Davidson and Johnson are making an electric dynamometer study of the new "Chrysler 8". Measurements are being made of the air, torque, gasoline consumption, exhaust temperatures and horsepower of this engine.

Messrs Kuehn and Trae of the Laboratory have recently put the finishing touches on a five foot "meter-prover", the steel work of which was fashioned in Forge Shop. This instrument is of the hydraulic displacement type, and is used to calibrate orifices.

Many Schools Offer Graduate Fellowships

Fellowships ranging in value from \$2500.00 to \$110.00 per year are offered annually by leading American universities and colleges to those who are qualified for post-graduate research work. The fellowships are offered in practically every field of educational endeavor. Some are restricted to graduates of that particular institution though the majority of the awards are open to graduates of all schools of recognized standing.

Massachusetts Institute of Technology lists a traveling fellowship in architecture with a stipend of \$1500.00, and fellowships in chemical, electrical, civil and mechanical engineering with stipends ranging from \$1250.00 to \$110.00. Many of the scholarships specify that the work be carried on at the Institute, while others do not restrict the choice of the school.

The University of Illinois offers Research Graduate Assistantships at the Engineering Experiment Station at Urbana, Illinois. The appointments are for a term of two years of ten months each. One-half of the time of the assistant for this period is to be devoted to assigned duties in the Engineering Experiment Station and the other half to graduate study.

Some of the institutions excuse the recipients of fellowships from tuition fees but require the payment of the registration and all incidental fees.

Among those offering scholarships to graduate students are:

- Yale University Graduate School.
- Iowa State College.
- The University of Wisconsin.
- University of Oklahoma.
- The American and Scandinavian Foundations.
- Columbia University.
- New York University.
- Rutgers University.
- California Institute of Technology.
- Kansas State Agricultural College.
- University of Cincinnati.
- University of Alabama.
- University of Washington.
- The Ohio State University.
- Carnegie Institute of Technology.
- Charles A. Coffin Foundation.
- The Boeing School of Aeronautics.
- The Harvard Club of Chicago.
- Michigan College of Mining and Technology.

Applicants are required to submit an official transcript of academic records, letters of recommendation, a recent photograph and a statement of the nature of the proposed investigation.

These fellowships and scholarships should particularly interest this year's graduates because of the scarcity of jobs now available.

Mechanicals Attend Lecture on Stokers

"Stokers on Boilers Less Than 200 Horsepower" was the topic of a lecture delivered to the members of the Armour Chapter of the A. S. M. E. last Friday morning, by Mr. C. T. Marsh of the Peabody Coal Company.

Mr. Marsh, who was formerly an engineer for the Combustion Engineering Corporation, illustrated the practicability of coal stokers on apartment sized heating plants. For the past thirty years, a great deal of research has been accomplished on the design of stokers for large and high-powered boilers. As a result one finds that the majority of plants are equipped with stokers.

But where the research proved successful in one respect, it failed in another. Only in post-war years has an attempt been made to design stokers for small heating plants, especially those under 200 horsepower. Recent experiments with this type have been conducted with very favorable results.

Continuing, Mr. Marsh said that the majority of these boilers use coal costing from \$7.50 to \$9.00 per ton. The stoker will enable the use of cheaper coal costing about \$5.00 per ton. Moreover, through increased efficiency the stoker would pay for itself in a short time; dirt and hand labor will be eliminated.

Mr. Marsh's lecture was illustrated.

DIRKERS EXPRESSES THANKS

Jerome Dirkers, F.P.E., '32 wishes to express his sincere thanks for the kindness and sympathy received from his fellow students during his recent bereavement.

ARX NEWS

Extra! Extra! The prisoners are out! Warden Beersman is having an awful time quelling this riot, but he is gradually pressing in with his posse. The lofty seniors are indulging in a Beaux-Art problem which has for the subject, "An Island Prison." As is the customary thing, an architect is supposed to get into the spirit of the problem which he is taking. Consequently, all the senior archs are "convicts," having numbers assigned to them and going under assumed names. As yet they have not gone so far as to wear black and white stripes, but I wouldn't be surprised to find them in that condition, any day now. (Don't take this literally). With the aid of Warden Beersman and Joe Wagner, the guard, I'm sure this prison will prove to be a success.

The sophomores played the seniors in a baseball game the other day, but did not get a chance to finish it. Ray Nelson, a senior, playing left field ran for a high fly and collided with Henry Sevenhouse. At first it did not seem serious, but closer examination revealed that Ray had broken a collar bone. (We will not attempt to spell nor even pronounce the medical definition).

Nelson was taken immediately to the hospital by Roy Phlac where the bone was set and braced. Ray is back in school now. Incidentally, don't ask for the baseball score from any sophomore.

Lumber Talk Heard By W. S. E. Members

An illustrated talk on lumber and its various uses was given before the Armour branch of the W. S. E. last Wednesday at 10:30 by Mr. C. H. Brewster. Mr. Brewster spoke as a representative of the National Lumber Dealers Association which is a composite of all the local lumber dealers organizations.

A list of eight worthwhile text books on the uses of lumber for construction and decorative purposes was recommended by the speaker. Many interesting facts and figures were also disclosed during the course of the lecture, some of them not generally known.

That there are two hundred and sixteen varieties of lumber in this country was probably news to many of the listeners. Some varieties are used more than others and a chart showing this relation illustrated that soft woods, pine in particular placed first from the consumption standpoint.

Not only lumber but buildings were also classified by the association, for the information of finance and mortgage loan companies.

Mr. Brewster strongly recommended the use of stamped and graded woods explaining that the quality of such material is more dependable and the final cost is less.

At the end of the lecture those present were asked to choose from a list of fourteen pamphlets which are to be sent to them by the association at an early date.

Chemicals Plans For Open House Exhibit

A short business meeting of the Armour Branch of the American Institute of Chemical Engineers, was held 10:30, Friday morning, April 24 in Room C, Main building.

A discussion was in order concerning the operation of the laboratories on "Open House" night. H. J. Latham, '31 and G. J. Stockman '32, were the members of the Senior and Junior Classes, respectively, elected to cooperate with Professor McCormack in supervising the exhibitions.

Plans for a smoker were formulated. At the present time, the smoker is scheduled to take place at the Sigma Kappa Delta Fraternity House on the evening of May 18th. The speaker of the evening will be Mr. C. D. Lowry, of the Universal Oil Products Corporation.

Mr. Lowry will present a talk on "Alchemy," which is a very interesting subject and has been presented several times to various renowned organizations.