



By Albert M. Lane

(Continued from last issue)

THE PLIGHT IN which we find ourselves — the young blood of a nation that must shape itself to endure the labor of rebirth—was not unforeseen for us. Frederick W. Taylor took up the battle some thirty odd years ago and, with saintly perseverance, forced upon engineers a consciousness of their concern with the human element in industry. It is to his glory that the implanted seed has blossomed forth into full flower, but it is not through any contorted vision which he may have held that engineers have shirked their responsibilities to favor the demands of industrialists that the new knowledge be exploited at the expense of human welfare and economic stability. The counsel was given, but its implications were disdained. At times the sun has not shined so brightly and fleeting glimpses of the haunting specter have been caught. It was at one such period several years ago that the American Engineering Council pointed to the inevitable while defining engineering as "... the science of controlling the forces and of utilizing the materials of nature for the benefit of man, and the art of organizing the human activities in connection therewith."

IT IS OUR obligation to recognize the fuller significance of our powers and to shape our course about an even broader concept of engineering influence. We have the responsibility to awaken ourselves to awareness that many of us are endowed with the faculties and all of us are equipped to further curtail the need for human effort in productive capacities. It is imperative that our foresight be keen enough to appreciate the consequences of our acts. It is no longer conjecture that increases in mechanized production methods breed disproportionate increases in unemployment. On the contrary, it is an established fact. Each such discard of some portion of the total available supply of human effort adds to the complexity of equalizing disbursement of benefits accruing from an advance. Engineering vision must be broad enough to anticipate the forces set up by progress in the field. There must be a full comprehension of all of the effects of such forces upon economic, social, and political tranquility.

FULL RECOGNITION must be taken of the end which the machine  
(Continued on page 4)

## Phi Lambda Upsilon Initiates Eight Men

Eight men were formally admitted to Phi Lambda Upsilon, honorary chemical engineering fraternity, at the initiation and banquet held at the Pi Kappa Phi house December 18. The new members are N. Balai, H. O. Bauermeister, N. Gerber, T. M. Gilkison, R. S. Kercher, L. W. Robbie, C. D. Rodriguez, and P. R. Schultz.

As a pledge duty these men prepared a plate glass fraternity sign in blue and red, the fraternity colors.

## Pledge Two Men to Scarab Membership

On the evening of January 3, 1936, the actives and alumni members of Edfou Temple of Scarab, architectural fraternity at Armour, met at the International House to pledge Albert H. Ramp, '37, and Raymond Kliphardt, '38. Dean Heald and Mr. Emery Stanford Hall were guests at the dinner. After the dinner which was given in honor of the occasion, Mr. Hall, Fellow of the American Institute of Architects, led a discussion on the topic "Architectural Education."

## L. J. Lease Appointed to Direct Co-op Plan

L. J. Lease, vocational director at Thornton Township High School, was recently appointed coordinator of the mechanical engineering cooperative plan. It is his duty to plan a program of studies with the student, and to make contacts between employers and students.

Mr. Lease graduated from the University of Illinois in 1904, and has worked for Western Electric Company, the Cutler Hammer Company, and has also been with Morton High School.

## Ensz Is Recipient of Harvard Award

### Will Leave Institute to Continue Studies

Professor Herbert Ensz, associate professor of civil engineering, recently received a semester's scholarship to Harvard University through the efforts of Dean Heald, and he will leave Armour Institute next semester to study courses under Professor Terzaghi, who is often called the "Father of modern soil mechanics." Professor Ensz will also stay at Cambridge to attend the International Conference on Soil Mechanics and Foundation Engineering from June 22 to June 26, 1936. Professor Terzaghi will preside at the conference which occurs in the year of the two hundredth anniversary of Harvard University.

### Introduced Course at A. I. T.

Professor Ensz has studied soil mechanics since he first came in contact with the subject through Terzaghi's book, published in 1925. Terzaghi is a Czechoslovakian who conducted studies in soil mechanics at Roberts College, Istanbul, and at Technische Hochschule, Vienna, Austria, and in 1925 established at Massachusetts Institute of Technology and Harvard University the first laboratories in this country for the study of the subject.

Professor Ensz is the only man in the Chicago area who has a professional knowledge of soil mechanics, and for the last five years has conducted graduate courses at Armour. Only this year, he introduced an undergraduate elective course, and he believes that it will, in time, be required in the civil engineering curriculum of every school in the country.

### Chairman of Committee

At a recent conference of the Society for the Promotion of Engineering Education, he was chairman of the committee on soil mechanics. On January 15, 1936, at 7 p. m., he will address the Western Society of Engineers, in their rooms in the Engineering Building on the subject of soil mechanics. He will include a short history of the subject besides explaining what it concerns and what it accomplishes.

## Three Are Awarded A.S.M. Membership

Honorary junior membership awards to the American Society for Metals were made to J. H. Johnson, E. W. Engstrom, and R. S. Kercher at the monthly meeting of the Chicago chapter last Thursday evening. These men were chosen for the positions by Professor Carpenter, who has charge of metallurgy at Armour.

The University of Illinois, the University of Chicago, Northwestern University, Valparaiso University, and Lewis Institute were also given the same recognition. Not all of these, however, received three appointments.

The meeting, which was held at the Medinah Athletic Club, began at 6:30 p. m. with dinner and entertainment. After that Mr. R. Archer, the national president, gave a talk on "Does Research Pay" in which he brought out all of the salient facts concerning modern industrial research.

## Universal Oil Products Company to Organize Research Lab at Armour

Universal Oil Products Company, a research organization engaged in developing processes of making gasoline and other oil by-products, is installing a research laboratory at the Institute. The metallurgy lab, "dark room," and Professor Carpenter's office have been moved to Machinery Hall at the expense of the company to make room for the laboratory.

### To Lecture Weekly

Dr. Vasili Komarewsky, lecturer and chemist, will conduct research work for the company on the catalytic reactions of paraffin hydrocarbons. The principal object of the work will be to discover catalytic agents which will aid reactions in cracking crude oil to make gasoline. He will also work with many gaseous products of little value with the hope of reforming them to gasoline. Along with this work, he will give one lecture a week next semester on "Catalysis of Chemical Reactions" which will be optional to senior chemicals and graduate students.

### Born in Moscow

Dr. Komarewsky was born in Moscow on February 17, 1895. He received the degree of Doctor of Chemistry in 1925 at Moscow University. For a time he lectured in the Moscow Academy of Mines and was chief chemist of the State Institute for Peat Industry. He was working in Germany and was brought to this country by the Universal Oil Products Company. He did research work at Northwestern University and now will work at Armour, preferring the college atmosphere to that of the company.

The doctor is a member of the German and American chemical societies. He is primarily interested in catalysis but has worked with peat and cellulose.

## Prizes Will Feature W9YW's Card Party

Prizes, entertainment and refreshments will be the order of the evening at the Armour Tech Radio Club card party to be held in Armour Mission at 8 p. m. on January 17, 1936. Bertram Heine and his new accordion will be a feature of the party. The winner at each table will receive a prize worth the price of admission, and numerous door prizes, made available by several manufacturers, will be given out. Ticket sales will be limited to 150, tickets being available from any member of the Armour Tech Radio Club.

## TECH NEWS TO CONDUCT POLL ON WAR VIEWS

Are more than 72 readers of the *Armour Tech News* sufficiently interested in world affairs to give their views on war? This question, among others, will be answered by the poll to be conducted by the News through the medium of the war ballot appearing elsewhere in this issue. Every one, student or other, is eligible to vote, but the ballots must be placed in the News box in the lobby of the main building before January 23.

A similar ballot has been submitted to the students of the University of Denver and Purdue University during the past few months. The results at the latter institution showed that, out of the 100 ballots returned, only 72 were valid, with the remainder obviously duplications. Voting in the poll at Purdue, including students, faculty, stenographers, and high school students, numbered 72, of whom eight were women.

The most decisive of the results of the balloting were obtained for the questions concerning dictatorships, in which no one approved of a Fascist dictatorship and only two were in favor of Communist rule.

## Fraternities to Hold Dance February 29

On Saturday, February 29, Armour fraternities are to hold a formal dinner-dance at the Chicago Beach Hotel. This has been the decision of a special social committee appointed by the Interfraternity Council.

George Savidis, president of Phi Pi Phi and chairman of the committee, stated that he has heard many a fine orchestra in the past few weeks and hopes to engage a real toe-persuasive band. The dinner-dance will be open only to Armour fraternity men and stray Greeks.

## ASSEMBLY SOON; REVISED A. T. A. A. TO BE DISCUSSED

### Juniors and Seniors to Meet Before Date is Set

Awaiting only meetings of the junior and senior classes, another general assembly will soon be held to consider a revised form for the



D. J. Neal sings.

constitution of the Armour Tech Athletic Association. According to D. J. Neal, president of the association, no attempt will be made to take a vote until ample opportunity has been given to discuss the constitution in class meetings.

### Article Not Observed

Although this article is now in force, it has not been observed in recent years. Some confusion was caused last fall when the freshmen scheduled a dance to take place a week before the annual senior informal.

The revision of the constitution was originally made by Neal, but further revisions have been made by a committee composed of R. R. Johnson, J. O. Larson, H. P. Millerville, S. M. Miner, D. J. Neal, R. M. Paulsen, R. A. Peterson, and F. X. Popper.

The complete revised text of the constitution is given on page 5 in this issue of the News.

## "Oil Fires" Is Topic at Next F.P.E.S. Meeting

At the next meeting of the F.P.E.S., to be held Friday, January 24, in B Mission at 10:30, Mr. Charles P. Holmes will present an illustrated lecture "Oil Fires and Their Extinguishing."

Plans are already being formulated for a smoker to be held at the Lawson Y.M.C.A., sometime early in March.

At the meeting of last Friday, Donald M. Wood, of the firm Childs and Wood, gave a talk illustrating the work of the insurance broker by giving an example of the procedure followed in investigating the insurance carried by the Kroger Consumers Company.

Mr. Wood stated that a man to be a successful insurance broker must be well informed in mathematics, mechanics, law, medicine, accounting, and also possess a knowledge of manufacturing.

## ARMOUR'S MUSICAL CLUBS TO PRESENT CONCERT AT GOODMAN THEATRE FEB. 28

This Concert is First to be Presented to General Public at Admission Charge; Proceeds to Help Finance Trips

SPONSORED BY FACULTY WOMEN'S CLUB

## Arx Dance To Be at Steuben Club

Final arrangements have been made for the annual Arx Dance to be known this year as the *Charette*. The dance will be held in the Grand Ballroom of the Steuben Club, on February 7. Music is to be furnished by Jimmie LeRoy and his orchestra, and the bids have been attractively priced at \$1.25.

A poster contest has been announced with everyone eligible. All posters must be delivered to the student supply store by noon, Friday. The awards will consist of one full bid and two half bids. Each poster is to contain the particulars outlined above.

Anyone wishing to earn a free bid may do so by selling five. Interested parties may contact any of the members of the social committee: R. W. Becker, H. F. Lohmiller, B. Nobler, A. H. Ramp, and E. F. Schmaltz.

## Welding Group to Meet at Armour

At the next monthly meeting of the Chicago chapter of the American Welding Society, Mr. Jules Muller, head of the metallurgical department of the Central Steel and Wire Co. of Chicago, will talk on "The Metallurgy of Welding." Through the courtesy of Armour Institute, the society has arranged to hold its meetings in the Assembly Hall of the Mission building, and has invited those students who are interested in the meetings to attend.

Meetings are held on the last Friday of each month at eight o'clock in the evening. Preceding each meeting Mr. Muller will conduct a one-hour class on the metallurgy of welding.

The first meeting of the society at the Institute was held on December 27 with 125 present in spite of slushy streets. Some special equipment was brought down for demonstrations in the forge shop on the first floor of Machinery Hall. The  
(Continued on page 4)

## A.S.M.E. and A.I.E.E. to Hear Woodworth

On Friday, January 24, the A. S. M. E. and A. I. E. E., in joint meeting, will hear a talk "Engineering Work and the Law Course" by Mr. P. B. Woodworth, a Chicago patent attorney. The meeting will be held in Science Hall.

Mr. P. B. Juhnke, chief load dispatcher of the Commonwealth Edison Company, was heard by the A. S. M. E. last Friday on the subject "Load Distribution of the Mid-West and of the Chicago Stations in Particular."

## Four Men Initiated Into Civil Honorary

J. E. Linden, S. T. Nylen, J. S. Styrs, seniors, and L. E. Zwissler, junior, were initiated into Chi Epsilon, honorary civil engineering fraternity, on Saturday, December 28, 1935. Dean Heald, Professor Ensz, Professor Stevens, active members, and a few alumni were present at the initiation banquet. Following the banquet, the party adjourned to the Grand Theater, where they enjoyed "Anything Goes," the popular current stage play.

After studying for three and one-half years under O. Gordon Erickson, the Armour Tech Musical Clubs have decided to expand their activities by presenting a public concert at the Goodman Theatre on Friday, February 28, 1936, at 8:30 p. m. The Women's Faculty Club will sponsor this concert, the tickets for which are fifty cents each and are now on sale in the lobby of the main building during the lunch period. All seats are reserved, since they are equally advantageous but it will be necessary for those desiring a group of tickets to purchase them immediately.

### To Present Other Programs

Before this concert takes place, the Musical Clubs will present several other programs, the first of them on January 17 at the McCormack Y. W. C. A. Two other concerts, sponsored by the Illinois Central Railroad and by the National College of Education, will be given in February.

The following statement on the public concert at the Goodman was issued by George W. Ormsby, president of the Musical Clubs:

"The most important note of the year to be struck by the Armour Tech Musical Clubs will be the concert in the Goodman Theatre Friday, February 28, at 8:30 p. m. This is an entirely new note, never before heard, it being the first time that Armour's Musical Clubs have appeared in any theatre concert in Chicago.

### Reasons for Concert

"The musical clubs have more than one purpose in giving this concert. First, they wish to show to a larger public than ever before, that Armour produces well-rounded men of diversified interests as well as thoroughly trained engineers. Through the glee club and orchestra organizations, both under the skillful baton  
(Continued on page 4)

## To Repeat Talk on Boulder Dam

Mr. R. A. Kirkpatrick, a special representative of the Union Pacific Railroad Company, who talked at Armour last February on the problems connected with the construction and location of Boulder Dam, is going to lecture again on the same subject next Friday at 10:30 in the assembly hall. Those who heard his talk last year will remember that concrete was being poured for the huge structure at that time. At present the dam is nearing completion.

In last year's lecture Mr. Kirkpatrick told of the terrible flood conditions which the Colorado River brought about annually in the Imperial Valley. When, in 1905, an especially disastrous flood occurred, Congress was aroused to investigate the condition. One man spent twelve years in finding the best possible site for the dam, and chose Boulder Canyon. A party of five congressmen visited the site, but saw a place which they liked better—Black Canyon, the sides of which were volcanic rock. Although Boulder Canyon was composed of granite, the dam was built in Black Canyon because these five congressmen recommended it as the dam site.

The lecture included the problems of surveying and preparing the walls of the canyon, the building of Boulder City, the problems of pouring concrete, transporting the gigantic conduits, turning the river from its course, and the other engineering details of the project.