

HOTCHKISS SPEAKS AT AUSTIN HIGH ON MODERN PROBLEMS

Engineering Progress in Last Fifty Years Outlined

COURSES CHANGED

"You who have had the advantage of so-called technical or vocational courses: I urge you not to think of yourself as having studied something that will merely help earn your living. Think of yourselves rather as having had a valuable opportunity to cultivate your brains and your muscles to act in unison, and as having participated in something which is an outstanding phase of our civilization."

"And you who have pursued literary and scientific courses, should for your own enlightenment, carry your interest beyond the switch and the dial of your radio, and the accelerator of your car, and give some thought about how these things came to be, and what it means to you, both in opportunity and responsibility, to live in such an age as ours."

These were the closing words of a Commencement Address presented at the Austin High School graduation exercises by Dr. Willard E. Hotchkiss, President of Armour Institute of Technology, on February 1 of this year.

Reviews Developments

In the address, Dr. Hotchkiss reviewed the engineering and scientific developments from the time of the Columbian Exposition in 1893 until now, and how these developments took the country out of a business depression second in extent only to the one we have now been passing through. He looked toward the possibility of science and engineering removing us completely out of this depression.

It was stressed throughout the speech that formerly the engineer considered it sufficient to develop and manufacture his inventions. As a result, the external lives of people have been changed rapidly as they accepted and used these inventions. This rapid change of comforts and conveniences was not accompanied by a similar change in human relations, in employment, education, and recreation. In the future the duty of the engineer is to take cognizance of this fact and develop his social activity as carefully as he does his machinery. It will be necessary to educate humanity in the proper use of any new contrivances before they can be successfully marketed.

Illustrations From Modern Life

It is necessary to educate the engineer in government, business administration, and the fundamentals of social activity. Steps are now being taken in that direction by our colleges.

The high school or college graduate faces discouragement at every corner, but upon him rests the security of the future. It is his duty to prepare to assume responsible duties as a citizen.

In his talk Dr. Hotchkiss gave illustrations from modern life. He spoke in particular of the significance of having an outstanding engineer like Arthur Morgan direct the Tennessee Valley Development regardless of what the outcome might be. He cited the government's employment of engineers in solving the present and future housing problem.

Engineering plays a large part in the simplest kind of community, and a technical education is one of the best forms of preparation for a future citizen. The engineers of tomorrow will need all of the ingenuity and skill that engineers of the past have had. In addition to practical shop training, the engineer will need a keen sense of the place engineering occupies in modern living, and, "he cannot be a good citizen unless he recognizes that his special knowledge and skill carry a peculiar responsibility for service to his community and his country."

Alumnus Named Best Citizen of Memphis

Ben B. Coffey, Jr., an Armour graduate of the class of 1926 in the F. P. E. department, was nominated as the outstanding citizen of Memphis, Tennessee, for the year 1934 by the Lions Club in the annual contest sponsored by the Memphis Junior Chamber of Commerce.

Math Club to Elect Officers at Meeting

With the start of the new semester the Math Club plans to elect its officers and prepare for a busy season. This will take place at the next meeting, to be held at 10:30 Friday in Science Hall.

Besides the election a paper on "The Origin of Calculus" will be given by Roy Kercher. The material will be presented so that it will be intelligible to the entire student body. It will show those who haven't taken the subject what it is about, and those who have taken the subject, how it came to be.

To give the program committee which is to be elected a start, two papers have already been planned. One is on "Harmonic Motion Analysis" by Arthur Bronwell, and the other is on "Nomographs."

New Professor Is Widely Experienced

Armour's new social science instructor, Arthur S. Hansen, is also a consulting actuary in Chicago. Mr. Hansen worked several years before taking up electrical engineering at Armour Institute and while he attended school.

Realizing the importance of a knowledge of engineering and business principles in his work, Mr. Hansen studied economics at Chicago and Northwestern universities after graduating from Armour in 1926. Since Mr. Hansen has an engineering background, he is able to present economics to the students from an engineer's point of view.

IN CONCERT



ALEXANDER KULPAK, who will take part in a recital next Sunday at the Lyon and Healy Concert Hall.

Armour Student Will Give Concert in Loop

Alexander Kulpak, an Armour student well known for his work in the musical clubs, will participate with Miss Marie Winarski in a recital of operatic, classical, and folk songs to be given in the Lyon and Healy concert hall next Sunday, February 24 at 3:00 p. m. The selections to be presented are many and varied, including a few to be presented in Ukrainian costume.

Tickets for the concert may be obtained at Armour from J. DeBoo. However, the total number available is only 350, and they are selling fast. Prices are 83 and 55 cents, tax included.

The girls at Smith college carry their books on their heads to correct their posture. It must be true that all learning goes to our heads.

New Staff Men Already at Work

(Continued from page 1)

and Fred Leason as assignment editors. The news reporters will work directly under these men. Several cub reporters were promoted to the full status of news reporters.

Gordon A. Zwissler, the new copy editor, replacing Otto P. Freilinger, has three assistants, Victor J. Kropf, William S. Hamlin, and Robert H. Knabe. These men will check on accuracy and journalistic style of the copy turned in by the reporters and will supervise the writing of headlines.

Galandak Feature Editor

John Galandak, as feature editor, the post formerly held by Curtis R. Bristol, will supervise the various columns and features of the newspaper, including the Arx News, Student Musings, Fraternity Notes, and others. Nicholas Balai, the new proof editor, will do the work formerly done by John F. Humiston in supervising the work at the print shop on Saturday mornings. Robert M. Lundberg, who has been serving as circulation manager for the past semester in the absence from school of Frank W. Schmidt, will continue in that capacity.

About sixty members of the staff were present at the News banquet held in the Student Union last Wednesday evening. In addition, N. E. Colburn, H. W. A. Davidson, R. A. Fleissner, and C. N. Clarkson of last year's managing board and Professors Hendricks and Colvert, faculty advisors of the News, were present. Short speeches were made by the retiring editors and the visitors. E. N.

Heat Insulation Is Graduates' Work

J. A. Clear, B. E. Wolgemuth Prepare Joint Thesis

For the past four months Mr. J. A. Clear, '30, and Mr. B. E. Wolgemuth, '21, have been experimenting on heat losses through pipe coverings, particularly at high temperature, in preparation for the writing of a combined thesis.

With the development of high pressure steam and boiler plants throughout industry, a need for pipe coverings that would withstand high temperatures became necessary. Mr. Clear and Mr. Wolgemuth, under the direction of Professor J. C. Peebles, a recognized authority on insulation, are collecting experimental data as to the efficiency of the pipe covers now in commercial use.

The apparatus used in the experiments consists of standard pipe about eight feet in length suspended from the ceiling. Through the inside of the pipe runs a resistance coil to supply the heat. Both ends of the pipe are sealed with asbestos.

One of the difficulties of accurate work is the time element. For correct readings a constant temperature must be obtained on the outside of the pipe and the outside of the covering. It takes from eight to ten hours of heating to get this balanced condition.

A number of commercial pipe cov-

Searl, the retiring editor-in-chief, acted as toastmaster and R. D. Armsbury headed the committee on arrangements.

erings have been tested. Glass wool has so far proven to be the best insulator. Much higher temperatures can be reached with a covering than without one. Under their experimental conditions, Mr. Clear and Mr. Wolgemuth found that a temperature of only 200 degrees F. could be reached without an efficient covering whereas a temperature of 100 degrees F. could be reached with an efficient covering.

In a short time a new covering will be received for testing. This covering is made of vermiculite, a mineral which when mined looks like mica and when heated expands to about ten times its original volume. The heated mineral is ground up, mixed with a suitable clay, and molded into pipe covering.

Both Armour Graduates

Mr. Wolgemuth graduated from Armour in 1921. Since his graduation, he has had varied experience in engineering work. Among the companies he has assisted are: H. M. Byllesby & Co., consulting engineers in power plants; Sargent & Lundy, consulting engineers in power plants; V. D. Simons, consulting engineers in paper mills and power house construction, and Public Utilities Commission, Mantowoc, Wisconsin.

Mr. Clear taught for two years at the Chicago Christian College since his graduation in 1932. During the absence of Professor Seegrist, he assisted in teaching freshman drawing.

Designing Power Plant

Under the direction of Professor R. V. Perry, Mr. Clear and Mr. Wolgemuth are designing a complete five thousand kilowatt power plant for a municipality with a light industrial load.

STUDYING TILL ALL HOURS?..

**COSTLIER TOBACCOS
ARE USED**

"Camels are made from finer, MORE EXPENSIVE TOBACCOS - Turkish and Domestic - than any other popular brand."

(Signed) R. J. REYNOLDS TOBACCO COMPANY
Winston-Salem, North Carolina

GET A LIFT WITH A CAMEL!

"LIFE IN COLLEGE is a busy one," says John Cowdery, '38. "Take my case, for example: I have a leaning toward dramatics, and spend every minute possible studying the drama and playwriting, in addition to the work required by my general course. On top of that, I have a job that takes up three nights a week. So you can see my time is pretty full. I get tired...feel 'blue' sometimes when my energy is at a low ebb. Then a Camel sure does taste good! It's really swell how Camels bring me back. Although I smoke them all the time, Camels have never made me feel nervous."

(Signed) JOHN COWDERY, '38

ON YOUR RADIO!
YOU'LL LIKE THE CAMEL CARAVAN

starring Walter O'Keefe, Annette Hanshaw,
Glen Gray's Casa Loma Orchestra over coast-to-coast
WABC-Columbia Network

TUESDAY		THURSDAY	
10:00 p.m. E.S.T.	8:00 p.m. M.S.T.	9:00 p.m. E.S.T.	9:30 p.m. M.S.T.
9:00 p.m. C.S.T.	7:00 p.m. P.S.T.	8:00 p.m. C.S.T.	8:30 p.m. P.S.T.

ANNETTE HANSHAW

**"WHEN I COME OFF
THE RINK, tired, I want a
Camel. Camels have a way of
taking the load off my shoulders.
And I've found that I can
smoke all I want and still
keep my nerves healthy
-when I smoke Camels."**

(Signed) P. THOMPSON
Star of Chicago Black Hawks

**"WHEN I WENT TO
COLLEGE, I switched to
Camels. I found that smoking
a Camel when you're
tired somehow makes you
feel fresher...more alert.
And what a grand taste
Camels have...so mild and
appealing!"**

(Signed)
MARGUERITE OSMUN

**CAMEL'S COSTLIER TOBACCOS
NEVER GET ON YOUR NERVES!**

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