

DR. DAVIS FAVORS GENERAL COURSE IN FUNDAMENTALS

(Mr. Davis was one of a number of prominent educators and industrialists consulted during the preparation of the new Armour Plan. In the following interview he gives his ideas on certain phases of engineering education.)

Dr. Davis opened his discussion with the consideration of two facts. The first deals with the amount and variety of specialization provided for in the multiplicity of curricula found in the catalogues of our engineering schools.

"Is it possible for any freshman, however sophisticated, to know in which of the highly specialized fields of engineering his career is going to fall, or to which of them his natural aptitudes are most appropriate, or even in which of them he can hope to find in his mature years most personal satisfaction?"

Sights Career Choosing

According to Doctor Davis, even if such a freshman can be imagined to have selected unerringly his actual future career, it is by no means certain that a curriculum designed with that particular career in view is in fact the best undergraduate training, even for that career, to say nothing of being the best for the man as a whole.

The second fact which Dr. Davis considers is the frequency with which one finds an apparent contrast between the nature of the field in which an academically trained engineer has, in fact, won distinction, and the label of the training that preceded and, we may hope, prepared the way for his success.

Men Need Fundamentals

"Among my own acquaintances there is, for example, a man who took his degree in electrical engineering and then proceeded to win for himself a reputation in a line of work that lies in the borderland between chemical engineering and metallurgy, with scarcely a trace of electricity, or even of electro-chemistry in the whole picture. On the other hand, one of the most sagacious of practicing mechanical engineers, and a much sought consultant in that branch of, presumably, civil engineering which deals with the estimation and development of water powers, had an academic training which was supposed to produce a chemist."

Dr. Davis believes that almost any curriculum in fundamental engineering will suffice to start almost any competent man on the road to success in almost any field of engineering, provided the curriculum is thoroughly grounded on fundamental principles, and that its spirit throughout is characterized by sincerity of mind.

Stresses Basic Subjects

According to Dr. Davis, a certain great industry makes it an invariable rule never to use a newly employed graduate in a job in the graduate's own field. The reason given is that by this means the young man is free to think for himself. His mind is kept on edge and there is an irresistible pressure on him to work eagerly and hard, to keep on learning, to realize that his real education is not behind him, but ahead, not finished, but scarcely begun.

Dr. Davis believes in one curriculum with emphasis on basic disciplines that underlie all engineering careers. He believes in plenty of mathematics, physics, chemistry and mechanics in all its branches.

Self-expression Needed

He would emphasize equally the fundamental sciences and fundamental engineering subjects and the fundamental humanities—history and language, psychology, philosophy and economics, and even art. He would stress the humanistic side of engineering in every available way.

He believes that engineers without the art of self-expression find their usefulness greatly curtailed. He believes many engineers are hopelessly inarticulate and would compensate for this by every course which could possibly assist in the good use of the written and spoken word.

His idea throughout is to raise engineering education from the status of the trade school to the status of the training schools of the older professions of law and medicine. His last significant statement was,

Men in Industry Discuss New Plan

Many educational leaders, industrial executives, professional engineers, and architects who were consulted during the survey which preceded announcement of the development program gave valuable assistance to Trustees of the Institute in formulating the new Armour Plan. Their opinions were carefully considered throughout, and the plan recognizes the precepts laid down in their statements.

Following are brief quotations from interviews with a few of these men:

Dr. William E. Wickenden, (President, Case School of Applied Science, Cleveland, Ohio): "The four-year undergraduate engineering curriculum should be broader, more fundamental, and more generally educative than it is in most engineering schools today. Greater opportunity should be given to the best graduates of a four year curriculum to do further work in science and professional engineering subjects in a graduate school."

Briton I. Budd (President, Public Service Company of Northern Illinois): "In my opinion, a relatively small percent of graduate engineers in the past have advanced to executive positions, due primarily to lack of a broad, liberal educational schooling. Consequently, the tendency of such a graduate has been to develop his experience along rather narrow lines, and to lack broad business vision."

Dr. Edward R. Weidlein, (Director, Mellon Institute of Industrial Research, Pittsburgh, Pa.): "Mellon Institute does not have and does not need one dollar of endowment. It is selling the services of science to industry every step of the way; industry pays the Institute for results, and all work is done at cost. Your hope for results rests with the purpose and election of men; buildings are secondary." (Dr. Weidlein's remarks, of course, apply to the proposed industrial research Institute for Armour.)

Samuel Insull, (Capitalist): "Engineering educational methods frequently fall short of expectations because the engineering college of the past has not had very effective means of translating the needs of industry in terms of curriculum and teaching methods. The new plan fills that gap completely."

PROMINENT MEN ON COMMITTEES

(Continued from page 1)

industrial life, with which the Armour family has always been identified.

Alfred S. Alschuler graduated from Armour Institute in 1899, and received his master's degree in 1904. He is one of Chicago's prominent architects, and has always been actively interested in Armour alumni affairs. He also participated in the preliminary survey of the development program, and is a member of the Board of Trustees. John J. Mitchell, another Trustee, is a director of several large industrial corporations in Chicago.

John J. Schommer has been on the faculty of Armour Institute since 1912. He is now Athletic Director, President of the Alumni Association, and a member of the Board of Trustees. He has been made the manager of all publicity and promotional activity at the Institute for the duration of the development program. His years of experience and his wide acquaintance with college men and officials throughout the country will enable him to do an invaluable service for Armour in this capacity.

PROFESSOR RETURNS

Professor Thompson, of the physics department, returned to school last Friday, February 4, after a two day illness.

"There are surgeons and obstetricians and pediatricians and psychiatrists and orthopedists and specialists in the nose and throat and even a few good old fashioned family doctors, but every good medical school gives them all the same fundamental training. The same should be true of our engineering schools."

HALPERIN SPEAKS BEFORE A. I. E. E. ON CABLE SERVICE

On Friday, March 4 of last week, the A. I. E. E. members were again given the privilege of listening to Mr. Herman Halperin of the Commonwealth Edison Company. His subject, "Underground Cables," was thoroughly enjoyed by those present.

In underground cables, impregnated paper insulation, because of its cheapness and its high maximum operating temperature, is most widely used; in the three conductor cable the maximum operating potential is 33 KV. Oil filled cables of the same type can be used for potentials up to 132 KV. This is due to the perfect impregnation of the latter cable. The expansion and contraction of the oil in the cable is taken care of by ingenious diaphragm arrangements at various points along the line, and at each end; this also keeps the oil under a positive pressure. In an ordinary cable the pressure varies from positive to partial vacuum with changing conditions.

During the past ten years impregnating material have changed from heavy resinous compounds to comparatively light oils.

Dielectric losses at maximum operating temperatures have been decreased sixty per cent.

Mr. Halperin summed up the high points of his discussion and closed by saying that he saw no reason why the improvements in the next decade on cables should not be fully comparable to those of the last.

FRATERNITY NOTES

PHI KAPPA SIGMA

Should one visit the house any time except during dinner and study hours, he would hear a tapping noise similar to that of a slow, muffled machine gun. Whoa! Don't get excited. It is only the boys at their physical culture exercises, batting a ball back and forth on our new ping pong table.

After a week's illness, Ron Dobson has returned to school to resume the role of student.

Among the alumni who visited the house last week was the one and only, bright faced, Don William. Although he arrived just in time for dinner he still ranks A-1 with us.

SIGMA KAPPA DELTA

Sigma Kappa Delta announces the pledging of A. Kulpak, M. E. '35.

A radio dance was enjoyed at the house by the members and many alumni on Saturday evening, March 5th.

KAPPA DELTA EPSILON

The fraternity takes pleasure in announcing the pledging of L. Marcus, C. E., '34.

Hell Week starts March 7th and the initiation of the pledges will take

place during the 11th to the 13th of the month.

J. Rosenfield has been appointed Social Chairman by the president of the chapter. The chairman and his committee are busy making plans for the pledge party which will be held on March 11th.

H. Goldman recently received the emblem denoting having made the highest average in the Freshman class from the A. I. Ch. E.

DELTA TAU DELTA

The 37th annual Western Division Conference of the Fraternity was held at Gamma Kappa Chapter, University of Missouri, from February 26th to 29th.

All twenty-two chapters of the Western Division were represented and "Murph" Gibian served as our delegate.

A Radio Dance will be held at the House on the evening of Saturday, March 12.

BETA PSI

We extend a belated welcome to our newly initiated Brother, Edward Staron, M. E., '34. Due to an oversight, his name was omitted from

the last issue of the News.

Brother Walter Stark, former National President of Beta Psi, was a visitor at the Chapter house over the week-end. He gave an inspiring address to the new members.

THETA XI

A Radio Dance was held at the Chapter house on Saturday evening, March 5. Many of the alumni were present and all who attended report a good time.

Brothers Harry Sheppelman, Armour, ex-'31, and Walter Mackey, a graduate of Wisconsin, were visitors at the house last week.

Pledge Brother Landis is again back in school after being ill at the Chicago Memorial hospital.

PHI PI PHI

On Monday evening, February 29, the installation of the officers for the year 1932-33 was held. The following is a list of the new officers:

C. R. Mitchell, President.

J. L. Lynch, Vice-President.

R. E. Kaup, Treasurer.

J. J. MacLennan, Secretary.

The annual Formal Dinner Dance will take place March 19, at the St. Clair hotel.

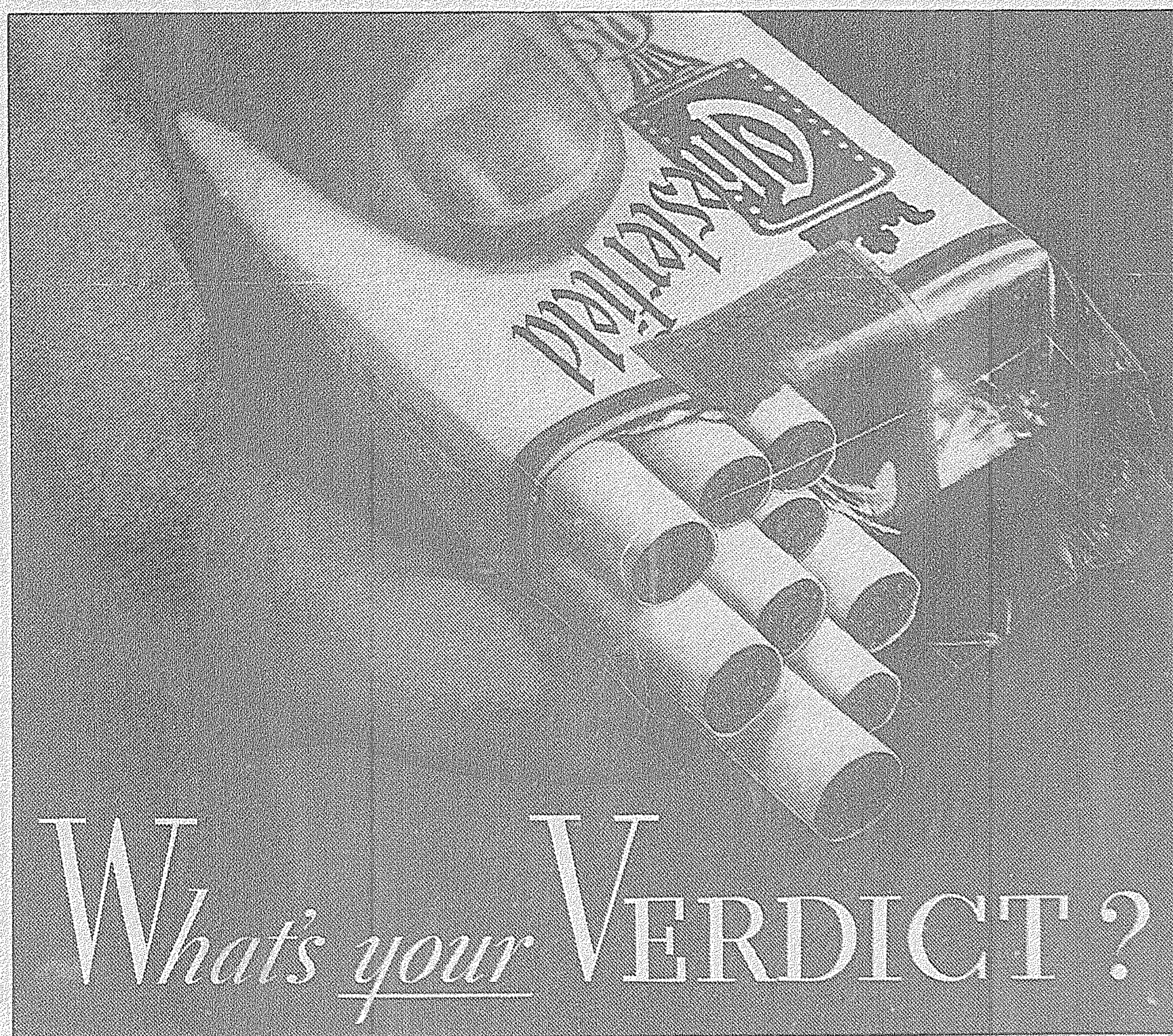
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Mister...you're dead right. They're milder!

It's no secret in tobacco circles that Chesterfield buys the finest tobaccos that grow...Turkish and Domestic...sun-ripened, mellow, pure!

Chesterfields are blended first... then cross-blended... to make them milder... and milder still! There's no



mistaking that rare balance of flavor built up by Cross-Blending. You enjoy it in every fragrant puff!

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Listen, smokers... this is straight. You can't put taste in a cigarette... unless quality goes in, too.

Pass your verdict on Chesterfield's Radio Program, too! Nat Shilkret's 35-piece Orchestra with Alex Gray, soloist, are on the Columbia Network every night except Sunday, at 10:30 Eastern Standard Time.

THEY'RE Milder... THEY'RE Pure... THEY TASTE BETTER... *They Satisfy*