



FINE STATIONERY ENGRAVING
and PRINTING. WEDDING.
FRATERNITY INVITATIONS.
RECEPTION & VISITING CARDS
STUDENTS SUPPLIES
and **LOOSE LEAF DEVICES**
57-61 Franklin St.



WE are the largest manu-
facturers in the world
of all-wool and cotton
warp Serges, Gabardines, Sic-
ilians, Lustras, Voiles, Panamas,
Granites, Poplins, Crepes, Ba-
tistes, etc. We also manufac-
ture the most complete line of
wash goods known, including
plain, printed, and bleached
fabrics, such as Crepes, Lawns,
Voiles, Batistes, Serges, Pon-
gees, Taffetas, Tissues, Mulls,
Percales, Cambrics, etc.

**PACIFIC
MILLS**
Lawrence, Mass. Dover, N. H.
Columbia, S. C.

Back Bay 7383

JAMES H. JONES
Wireless Apparatus
88 Mass. Ave. Boston 17, Mass.

**RICHARD'S SCHOOL
OF DANCING**
30 HUNTINGTON AVE.
Private and Class Lessons
SOCIALS MONDAY and FRIDAY EVES.
Hall to Hire
Tel. B. B. 56060

**TARJAN'S
LUNCH**
163 MASS. AVE.
A clean up-to-date Lunch
with best quality foods and
courteous service, at very
reasonable prices.
CHAS. H. TARJAN, Prop.
Formerly at Central Sq.

**ARMSTRONG
TRANSFER
COMPANY**
**BAGGAGE TRANSFER
and TAXI SERVICE**
Telephone Beach 7400
Oldest and most reliable
company in Boston.
Baggage checked to destina-
tion or locally to Railroad
Stations or Steamship
Wharves.
Orders left at the Tech
Dormitory office will re-
ceive prompt attention.
Taxi stands at North, South
and Back Bay Stations.
MAIN OFFICE
271 ALBANY STREET
BOSTON, MASS.

**ENGINEER'S MIND
IS TOO NARROW**
(Continued from Page 1.)

more of co-operation, and this principle he applies to the solution of all difficulties, large and small. In this judgment he is supported by the sociologists who tell us that the advance of civilization is measured by the advance of the idea of co-operation. Now the spirit of co-operation is pre-eminently the spirit of the professional man and one writer has gone so far as to say that society progresses in the measure that additional groups of workers take as their own the standards and purposes of the profession. So in the larger view of things the demand of the engineer to be counted as standing with the minister, the doctor, and the lawyer, is not a mere seeking of selfish preferment, but is a declaration of his recognition of his function in the work of the evolving race, of his duty to place his specialized knowledge at the disposal of society for the advancement of all. Anyone who has read of late the writings of engineers supporting their claim cannot have failed to note the large place taken by the thought of community loyalty.

The justice of Prof. Burr's plea for the full professional training of the engineer is therefore easy to establish. Every engineer should grasp the full significance of the demand he makes when he seeks recognition as a professional man. No engineer can understand the significance of this claim and merit the higher rating unless he has gained a sympathetic knowledge of mankind's advance up from the savagery of the prehistoric past into the complex and disordered present. Only such knowledge can face intelligently and without prejudice the pagan logic of the reactionary and the maudlin sentimentality of the radical whose clamor confuses our ears these days. Wisdom and good will are needed to solve the problems that threaten civilization and the professional man is bound by his loyalty to a leading part in their solution.

Historical Knowledge Needed

The sympathetic knowledge that will command this loyal purpose must of necessity include certain definite subjects. The story of the life of man on this globe from his earliest beginnings to the present, the story of the various community groups he has formed and now maintains, their varying fortunes, the organization and direction of these groups, the ways in which they have made and now make their living, the nature of their environment, the laws of the natural world in which man lives, and the efforts he has made to arrive at an understanding of life by rational inquiry and by emotional evaluation. History, the humanistic sciences (sociology, economics, government), natural science and mathematics, philosophy, literature: Here are five fields of learning in which a man must have real understanding if he is to comprehend the significance of the vast evolutionary procession in which we move and work intelligently for progress. And of course to perform his special task in society the professional man must have expert knowledge and ability in his chosen specialty. Can the engineering profession do less than demand that in the future its members receive a training of this scope?

One of the most vital and interesting of recent contributions to educational discussion is Mr. H. G. Wells' proposition that the backbone of education is history. He is asserting the same thesis that is here maintained, that the schools should open to us the broad horizons of the evolving world race and set our own interests and purposes to racial ends. He is not greatly interested in dynasties and dates but he is very much concerned with getting a clear picture of what man is like, his ways, thought and doings, past and present, that explain man today and the world situation by which he is faced. He makes this background of the past and the vast conflict of the present very live and real in his "Outline of History." One comes from a reading of that book with a vivid idea of what the word "history" really means and with a vast aversion to the scholastic deadness that so often masquerades by that name.

"Scholastic" Knowledge Deadly

As history requires to be related to the living processes of the present so all subjects are under the same necessity if they are to have living force. That which is studied for itself, for its own interest or beauty, is a scholastic, a dead thing. When this principle is adhered to a course in Latin has living value: What are our memories of our schoolboy Latin? When this principle is disregarded our courses in history, social science and literature become dead and rapid scholasticisms. So it is not enough to outline a curriculum. Nor will it be enough to specify, "All courses shall be so arranged and taught that the significance of the subject in the life story of humanity shall be plain." The end can be attained only by ensuring that our teachers be men of vision first and scholars second.

The colleges are in a very self-deprecatory mood at the present time. They complain that their graduates are narrow in range of knowledge and interest and too often self-centered in their

view of life. Our engineering schools join in these complaints and add that the average of student technical ability and initiative is far from what it should be. Of course the prime trouble lies in the roots of human nature, in our inertia, our content to remain without understanding and to live on the plane of least effort: or briefly it lies in our being asleep, unaware of the tremendous drama in which we move and of the immense possibilities that await the active player of his part. The schools have failed because they have not awakened their students to life and action. They have not awakened their students because they have not convinced them that there is any vital connection between their studies and the daily life of the world, because they have not introduced eager young minds to the fresh and stirring human problems that awaken imagination and purpose. (A fine statement of the problem is to be found in "The Liberal College" by President Meiklejohn of Amherst. The outline of the fundamentals of liberal knowledge here given follows his argument.) The curriculum is largely to blame in all this: it contains too much of the scholastic: its range is limited, leaving great gaps in the student's knowledge of life. We teachers are more to blame; we have taught too much from the academic and not enough from the human point of view: we have not had enough life in ourselves to awaken others.

Conclusions

Perhaps at the present stage of growth of our race these failures were inevitable. We all know how few are the men and women whose horizon extends beyond their own petty concerns and how heavily our own spirits move. But in endeavoring to set forth the essentials of a proper training for the engineering profession we should face these failures and do what we can to ensure that henceforth the young men who receive our engineering degree not only shall have been made familiar with a certain range of facts and ideas, but that they shall possess, as a class, vigor of mind and life, broad sympathy and purpose, qualities that grow with properly directed labor in humanistic studies. Properly speaking, then, this end should be attained as a result of the strictly collegiate work and such should be the sturdy quality of the men who matriculate in engineering henceforth.

A large part of the difficulties of technical education will disappear when the men who seek that training come to our schools with alert and vigorous mental power. The present immaturity and low average of ability result in courses definitely low in standard of rigor and accomplishment. The rest of the reform in technical schools is largely one of detail—the pruning of overcrowded curricula and courses, the maximum possible elimination of the merely informational, the giving of more time to economic and industrial factors, increased emphasis on disciplinary studies and basic principles.

Cordage and Twine

Trade Mark
Samson Cordage Works
Boston, Mass

**OLD CLOTHES WANTED BY
MAX KEEZER**
HIGHEST CASH PRICES PAID FOR YOUR CAST-OFF CLOTHING
Also Old Gold, Watches, Chains, Diamonds
Bric-A-Brac, Furniture, Rugs, Etc.
Will call at your room day or evening at your pleasure—my adv.
can be found in The Crimson, Lamoon, Advocate, Illustrated
Magazine and the Monthly
1256 MASSACHUSETTS AVENUE :: CAMBRIDGE, MASS.
Telephones: 302, 52936—If one is busy call the other
SEE MAX KEEZER BEFORE ANYONE ELSE
Do Not Sell To Men On The Streets

TIREX (ALL RUBBER) PORTABLE CORD

A large proportion of portable tool troubles are cord failures. TIREX wears longer than other cords and keeps the tools in operation. It always comes back from one job ready for the next and stays in service, without repairs, more than four times as long as fibrous covered cords.
SIMPLEX WIRE & CABLE CO.
201 DEVONSHIRE ST., BOSTON 9
CHICAGO SAN FRANCISCO

THOUSANDS of smokers have proved it—and now give the verdict to you—
Of all the other tobaccos NATURE has produced—none can approach the finest varieties of pure Turkish for cigarettes—
None has the delicious **FLAVOR** of the finest Turkish—
None gives the **ENJOYMENT** of the finest Turkish—
None will **SATISFY** you as will the finest Turkish—
None but the highest grade and personally selected Turkish tobaccos is used in **MURAD**.
To enjoy 100% pure Turkish at its **VERY BEST**—to reach the **PEAK** of Cigarette Quality—you have but to smoke **MURAD**—
Try **MURAD** today and
"Judge for yourself—!"
20c



THE COOP
Runs a Jewelry Shop for you. We have a large and varied assortment of distinctively M. I. T. Jewelry made up to order.
Rings, both silver and gold, with M. I. T. seal in cardinal red and gold or self color\$2.00 to \$9.00
Brooch Pins, three sizes, either plate or gold85 to 4.00
Pearl T, real or imitation pearls 3.50 to 15.00
Lavalliere, black enamel with pearls 8.50 to 10.00
Vanity Cases 2.50 to 8.50
Bracelet 1.50 to 4.50
Paper Cutters and Book Marks85 to 1.75
Bar Pins 1.75 to 6.50
Cuff Links 3.75
Cigarette Cases 3.00 to 7.50
Knives 3.00 to 5.00
Fobs75 to 12.00
Some of these things you would not use yourself, but your sister or the other fellow's sister might, you know.
Tech Branch, 79 Mass. Ave.