

## INSTITUTE RECEIVES AN ANONYMOUS GIFT

President Maclaurin Announces  
a Gift of \$400,000 to the Insti-  
tute at a Meeting of the  
Corporation

### TO HELP MEET WAR EXPENSES

At a meeting of the Corporation of the Institute yesterday President Maclaurin announced a gift of \$400,000 from an anonymous benefactor. The income of this fund is to be available for the general needs of the Institute during the war and thereafter is to be applied to the development of courses in chemistry and physics.

It is a matter of the first importance in a school of applied science to develop the fundamental sciences of physics and chemistry as thoroughly as possible. The Institute has already a strong staff in these departments. In view of the relations between Harvard and Technology it is interesting to note that Technology owes much both in physics and chemistry to men who have long been prominently associated with Harvard. Professor E. C. Pickering who has presided with so much distinction over the Harvard Observatory for many years was one of the first professors of physics at the Institute and laid the foundations of its laboratory method. One of Professor Pickering's pupils, Professor Cross, carried on the Pickering tradition and many of the alumni have earned great distinction as physicists both in pure science and in applied notably George E. Hale, one of the leading astro-physicists in the world. Director of the Mount Wilson Solar Observatory and Chairman of the National Research Council, and in the field of applied physics Dr. Coolidge, of the Research Laboratory of the General Electric Company, whose notable contributions to the improvement of the electric lamp and the X-ray tube have been amongst the most important ones to practical science in recent years. The first professor of chemistry at the Institute was Charles W. Eliot, who left this post to become President of Harvard. Many noted men have succeeded him and some of the ablest are happily still in the service to the Institute, whose department of chemistry is "easily first amongst the educational institutions of America" according to the impartial testimony of "American Men of Science" as regards the number of men of eminence on its staff. A great group of the graduates of this department are now serving the country in the development of its chemical industries and in the prosecution of research with reference to war problems, amongst this number being ten of the professors of chemistry who have been wholly relieved from regular academic duties to devote themselves to the national cause.

The building up of strong departments of physics and chemistry at a school like Technology which draws men in large numbers from all parts of the country is a matter of national importance. There is not only a great need for well trained chemists and physicists to solve the vital problems of the war but there will be a similar need in the industrial struggle that will come when peace is declared. The opportunities presented by the war are being seized upon by alert Americans and great chemical industries are being built up which will need the support of the most highly trained experts to carry them on successfully under the conditions that will later prevail. It is interesting to note that the rising generation also recognizes the opportunity as evidenced amongst other things by the fact that out of the 620 freshmen at the Institute of Technology this year 160 are being trained for the profession of the chemist. If this supply is maintained, in a few years the Institute will be graduating every year considerably over a hundred well trained chemists available for the advancement of science and for the development of the chemical industries of the country.

## SIGNAL CORPS NEEDS TECHNICALLY TRAINED MEN

Opportunity to Perfect Themselves in  
Radio Work Given to Draft Men.

The War Department authorizes the following statement from the Land Division of the Signal Corps:

The demand for specialists in the American Army is increasing daily. Mechanics and technicians of every kind, including radio and buzzer operators, are needed by the Land Division of the Signal Corps.

Through the assistance of the Federal Board for Vocational Training, an opportunity is extended to men in the draft to perfect themselves in radio and buzzer work without expense, enabling them to select this branch of the service in the Signal Corps when they are called.

The Signal Corps has charge of all signaling and communication, including radio, telegraph, telephone, and cable service for the mobile Army, both at the immediate front and behind the lines. It is important and interesting work, since without this branch of service the Army's "ears" would be stopped and in many instances its "eyes" would be valueless. Men who are expert telegraph and radio operators in civil life have an opportunity here to continue their specialty.

In nearly every large city the Federal Board, through local school authorities, has established schools of radio communication where all men of draft age who have not yet been called may receive a preliminary course in the operation of radio and buzzer instruments. There are now about 600 of these schools, where continuous instruction is given, usually during afternoons and evenings. It takes practically 200 hours for a student of average ability to attain a speed of 20 words a minute, sending and receiving.

If a student enrolled in one of these schools is ordered to report for military service by his local draft board before he has completed his course, he will be furnished with a proficiency card, stating the number of words he can send

(Continued on page 4)

## SHIPYARD WORK

Many Institute Students Leave  
Today for the Shipyards

The first shipyard quota to leave Cambridge was the one signed up for the Bath Iron Works and the Texas Company at Bath, Maine, the forty odd men starting their journey this morning by train. The original intention of the men going to Maine was to make the trip by boat, but as the steamer leaves Boston only on Tuesday, Thursday and Saturday evenings, and as they were expected in Bath this afternoon, the only alternative was to make the trip entirely by rail. The men left this morning on the 9.00 o'clock Portland train, and will connect at Portland for the Bath train.

The future Bath shipbuilders will meet this afternoon at the Bath Y. M. C. A. at 5.00 o'clock to arrange about the sleeping accommodations while they are staying at the yards. About twenty-five of the company will be housed in the building of the Y. M. C. A. at Bath, which is reopening after a season of inactivity on account of the lack of coal. The other men will be distributed in other public buildings near the two shipyards.

The U. S. Government is to look after the sanitation of the areas including the shipyards, in order to prevent any possible epidemics. C. E. Turner '18, a special student at the Institute, has been suggested as an overseer for this work, so that the Technology students would not be liable to any illness due to unsanitary conditions, during their work at the shipyards. Turner is a Maine man from the town of Harmony, and has made a number of sanitary surveys last summer for the Maine State Board of Health.

The men who have been assigned to the Maine shipyards are as follows:

(Continued on page 2)

## MARINE AVIATION SCHOOL STARTED

Institute Has the Honor of  
Furnishing the Facilities for  
the First Marine Aviation  
Ground School

### 25 MEN IN EACH FLIGHT

It is interesting to note that a new branch of the service has come to the Institute. There are already two aviation sections which have ground schools here, and now the Marine Corps, the "Soldiers of the Sea," are establishing the first ground school for their aviation section. Although the Marine Corps have had an aviation section for about a year, and have about 200 flyers who have "won their wings," the Institute has the honor of furnishing the facilities for their first ground school. About 25 men will come here at intervals of two weeks, and the school will be one-fifth as large as the Navy School. Men who are interested in this service should apply at the recruiting office of the Marine Corps, or write direct to the Marine Corps Headquarters, Washington, D. C. To be acceptable a man must have had mathematics through trigonometry, or approximately two years of college. After completing the ten weeks' course at Cambridge, the men will be sent to Miami, Florida, where the flying school is located.

Contrary to the original intention, the Marine Aviators will fly only land planes. There will be a separate squadron in France, and the marines will work in conjunction with the Navy. Everyone who is acquainted with the previous efficiency of the Marine Corps will have the utmost confidence in this new branch of the service. Applications for enlistment may be obtained from Lieutenant Archibald, in the Walker Memorial.

## JUNE 26 DESIGNATED AS THE NATIONAL WAR SAVINGS DAY.

June 26th has been designated by the National War Savings Committee as National War Savings Day. In every city, town and school district in the United States this day will be observed as National War Savings Day and as a day on which the citizens take measure of their ability and serve the Government. It is expected that President Wilson will issue a proclamation naming this day officially and that the Governors will also issue proclamations to the same end, and the Mayors of all cities will proclaim it.

It is expected that a sufficient amount of pledges will be secured on this day to complete the quota for every state in the Union, which is based at twenty dollars (\$20.00) per capita for every man, woman and child.

Many states have not nearly reached their quota, so it was decided that an intensive campaign would be necessary. Only one state in the Union has completed its quota—Nebraska. Missouri is very near to its quota and Mississippi is the only Southern state that has reached as high as fifty per cent of its quota.

The National Committee has come to the conclusion that there is a widespread error as to the purpose and intent of the War Savings plan, the general belief being that it was designed for women, children and the small wage earner. This campaign that is to be waged in June is aimed specially at the grown-up people. The men of business in all walks of life. Men who are able to purchase War Savings Stamps and not bother with Thrift Stamps. It is figured that Thrift Stamps have already been so widely circulated that it is no longer necessary to continue the campaign to intensify their sale, as it is realized there must be a large percentage of citizens who are willing and able to purchase the full amount of stamps that the law permits any one person to hold.

The plan provides that there will be meetings in every community and every district be assigned its quota to be raised and it is hoped that at those meetings every community will go "over the top" just as it did in the Liberty Loan.

## 17 MILLION PEOPLE SUBSCRIBE TO THE THIRD LIBERTY LOAN

Bonds of First Issue Convertible to  
Those of Later Ones

The Third Liberty Loan yielded \$4,170,019,650, subscribed to by about 17,000,000 buyers. Secretary McAdoo congratulates the country on the result, which he says is "irrefutable evidence of the strength, patriotism, and determination of the American people."

The loan is larger and the number of subscribers much greater than any previous loan of this country, and every bond buyer bought with the full knowledge that he would be allotted the full amount of his subscription.

The great subscription was made despite the fact that the country has been called upon to pay since the preceding loan income and excess-profit taxes approximating \$3,000,000,000. The loan and these taxes will make a total of about \$7,000,000,000 turned into the Treasury of the United States since the second loan, including the month of June. Yet every district oversubscribed its quota, the Minneapolis district leading with an oversubscription of 172 per cent.

Liberty Bonds of the first issue, Liberty Bonds of the second issue, and Liberty Bonds obtained by converting bonds of the first issue into bonds of the second issue can be converted into bonds of the third issue during the six months' period beginning May 9 and ending November 9, 1918.

Delivery of the bonds issued in conversion can not be made prior to July 1, but bonds presented for conversion on or before that date will be retained by the Treasury and a nonnegotiable receipt issued therefor. Interest will be adjusted in each case between the Government and the bondholder.

After November 9, 1918, no further rights of conversion will attach to the 4 per cent bonds, either the original bonds of the second loan or those obtained by conversion of bonds of the first loan. Bonds of the first issue, however, will still have the privilege of conversion into any bonds issued, at a higher rate of interest than 3 1/2

(Continued on page 4)

## SUMMER COURSES

Regular Classes Will Start Again  
on Monday, June 10

For two days, Friday and Saturday, Technology is taking a rest so far as its regular educational work is concerned, the examinations are over and the summer school exercises in Chemistry and Chemical Engineering will be taken up on Monday. These courses will be continued in one department or another throughout the summer, emphasized this year by the compulsory presence of the group of freshmen who entered in February and the members of Junior Class who wish to graduate in January, 1919.

Although the regular functions of the Institute will have this two-day interval between the new and the old terms, the supplementary educational activities will not halt a moment. The School of Military Aeronautics continues on much the original plan and the Naval Aviation Detachment will keep at its work with increased facilities. The new naval barracks for a couple of hundred men is in commission, the slates have been laid on the roof of the new club house and social centre for the naval men and this will be ready for occupancy within two or three weeks. Basket ball and lawn tennis courts have been placed for this group of men at the barracks or the Walker Memorial so that their social needs will be pretty well cared for.

Graduation exercises, originally set for Tuesday, will be omitted, and the diplomas will be sent forward to the men, most of whom are already in military or naval service or in the industries allied to war. The seniors have been leaving the Institute as fast as they completed the work, these sometimes omitted and some of the recommendations for degrees were made as far back as December of last year. Practically every able-bodied American born Senior who has been forward in his studies has gone, so

(Continued on page 4)

## HEALTH CONVOCATION HELD AT INSTITUTE

Technology Offers Much Aid  
and Co-operation to the M. M.  
S.—Several Institute Men Are  
Speakers

### MEETINGS LAST TWO DAYS

The initiative and support of the recent Convocation and Four-Day Health Officers' School is due to the Massachusetts Medical Society, whose committee on Public Health is entitled to greatest praise for undertaking as a private organization this important public health work. Massachusetts does not follow the lead of various others of the United States in having a regular annual official meeting of the kind, and thus the matter remains for public spirited private organizations to administer. As in the previous convocation the M. M. S. sought the aid and co-operation of Technology, and this was afforded in the whole-hearted way in which the Institute enters into the projects that it undertakes. It is out of the question here to undertake to set forth all the features of this splendid help to health officers of the State, but attention can be called to some of the helpful means taken by Technology and its representatives during the four days.

The Institute furnished the halls in which the meetings were held, two days at the Rogers Building in Huntington Hall and two days in Cambridge in room 10-250. The agent selected by the M. M. S. was Claire E. Turner, '18, a special student, and at the same time an instructor in the department of Biology. On his shoulders rested the burden of the executive work which was fully approved by officers of the society, through its president, Samuel P. Woodward, M. D., and the chairman of its committee on Public Health, Enos H. Bigelow, M. D., both of whom appeared at the sessions and took a hand in the debates. Mr. Turner was able to gather more than a score of important speakers, divided the sessions into topics symmetrically grouped, and throughout the meeting was ever ready to say the right word or give the proper push to the direction of the discussion.

First among the speakers related to the M. I. T. was Professor Robert Spurr Weston, '04, recently assistant professor of Public Health Engineering here, whose topic was "Sewage Disposal for Residences." He took up in connected order the various problems that confront the dweller apart from municipal methods of disposing of wastes and outlined the different septic tanks and other devices practicable for country residences when isolated or when grouped into little villages. His paper was illustrated by means of many lantern projections.

At the second session the bacteriologists, two in number, held sway, the first an alumnus and the second, long a lecturer at the Institute, Miss Edith A. Becker, '02, bacteriologist to the Massachusetts State Department of Health, discussed the technical topic of "pneumococcus determination," a most important matter in the question of early diagnosis of pneumonia, while Dr. Slack, formerly director of the laboratory of the Boston Health Department, and now in professional consulting bacteriologist work, outlined the development of the public health laboratory.

For the opening paper of the second day Professor George C. Whipple '89, long engaged in private work of consultation in New York and now professor of Sanitary Engineering in Harvard and Technology spoke on "Statistical Arithmetic," while Dr. J. P. Bill, of the Harvard Medical School, not an Institute man, carried the discussion a step further by presenting the vagaries of graphs. His lecture is one that every man who prepares graphic curves and statistics for public view ought to attend as a compulsory exercise. Nine-tenths of the showings were faulty in one respect or another, poor lettering, hasty drawing, omission of desirable or necessary facts

(Continued on page 3)

# The Tech

Established 1881

Entered as second-class matter, September 16, 1911, at the Post Office at Boston, Mass., under the act of Congress of March 3, 1879.

Published twice a week during the college year by students of the Massachusetts Institute of Technology.

## MANAGING BOARD

Paul C. Leonard '17.....Chairman of the Board  
Donald D. Way '19.....General Manager  
Count B. Capps '20.....Managing Editor  
Lincoln B. Barker '21.....Circulation Manager

News Department—Assistant Managing Editor, H. V. Howes '20; Night Editor, K. Roman '20; Assistant Night Editor, R. H. Smithwick '21; News Board, C. A. Clarke '21, H. Kurth '21, Z. Giddens '21, C. F. Parker '21.

Advertising Department—H. F. MacMillin '21, A. W. Morse '21, R. A. St. Laurent '21, R. P. Windisch '21.

Circulation Department—M. K. Burekett '21, H. D. Moore '21.

Subscription \$1.50 for 53 issues, in advance. Single copies 3 cents.

Subscriptions within the Boston Postal District or outside the United States must be accompanied by postage at the rate of one cent a copy. Issues mailed to all other points without extra charge.

News Offices, Charles River Road, Cambridge, Mass. News Phones, Cambridge 2600; Tuesday and Friday after 7 p. m., Cambridge 6265. Business Offices, Charles River Road. Business Phone, Cambridge 2600.

Although communications may be published unsigned if so requested, the name of the writer must in every case be submitted to the editor. The Tech assumes no responsibility, however, for the facts as stated nor for the opinions expressed.

The Editor-in-Chief is always responsible for the opinions expressed in the editorial columns, and the Managing Editor for the matter which appears in the news columns.

## IN CHARGE THIS ISSUE

R. H. Smithwick '21.....Assistant Night Editor

SATURDAY, JUNE 8, 1918

## STRIKE UP THE BAND—THERE GO THE SHIPYARD MEN!

TODAY witnesses the departure of many of the shipyard men, the final step in the campaign started only a month ago. Some are already at work. Of the two hundred and fifty men who signed up, by Wednesday hardly a man will be left at the Institute. A great deal of credit must be given to the Committee who handled the shipyard campaign so efficiently and effectively. It is no easy matter to enthrone two hundred and fifty men of varying financial levels and varying interests in one particular kind of work, especially when that work amounts to a job, not a position, involving heavy, dirty labor.

But much more credit and praise properly belong to the men who in nearly every case have made sacrifices. All but a few Course XIII men have sacrificed an opportunity to gain experience in their respective lines. Many have given up an opportunity to live at home, and thereby suffer an actual financial loss, and in all cases the men have lost the opportunity for a much needed rest during the summer; for the jobs these men have taken are not easy jobs. There will be many days during the summer when even in the northern most yards the steel decks of the ships will be so hot from the sun's rays that planks must be laid to walk upon. There will be hot rivets to handle and heavy plates, and angles, and brackets to lift. The jobs these men have taken are men's jobs and it will require hard work to hold them down.

There is much, however, that the shipyard men will gain in payment for their sacrifices. Ruddy health which accompanies outdoor work is not among the least of these. An opportunity to study and familiarize themselves with a type of workman, with which many of them must contend in a few years, might be mentioned as another advantage. Then last of all the consciousness of having done one's duty; of having jumped in where the men were few and the work plenty will yield a sense of lasting satisfaction.

## AN UNTIDY CORNER

TO a person entering the Institute on the right hand side of the court, a most unpleasant aspect is gained upon reaching the lower corner near the junction of buildings four and ten. Here the pebble filling of the court has been either washed out or dug away from the stone foundation of the building, exposing rough stone and presenting a very uneven surface. Especially is this true near the air-intake for the ventilating system where the court appears as if it had been bombed.

In addition to the shell crater surface the court at this point is rendered still more untidy by grass and weeds which have been allowed to grow up between the pebbles. The pebble surface of the court presents a neat appearance when it is composed entirely of pebbles, but when grass and weeds are incorporated with it, only a few spent tin cans are needed to put up a first class imitation of a vacant corner lot. We would estimate that it would take one workman armed with a hoe and rake nearly a half hour to fix this up. The cost of the operation including interest on the capital invested in the tools might be twenty-five cents!

Nobody around but the freshmen and Seniors. Sort of like a Cafeteria sandwich—nothing in between.

The Tech announces with pleasure the election of George W. Cann '19 to the Editorial Board.



COLUMBIA UNIVERSITY — S. C. Williams, of the class of 1917, was killed in an airplane accident while flying at an altitude over three thousand feet at a Louisiana aviation field. The deceased was a prominent man at Columbia, and his loss is greatly felt by the whole college.

UNIVERSITY OF MICHIGAN. — A movement has been started at Michigan to train women students in engineering courses which will be of service in the present war demands. The courses which have been commenced are drafting, tracing, inspection and testing of materials. These studies have been proposed as a means of releasing men from industry for active war service.

NEWPORT U. S. NAVAL RESERVE FORCES—After a prolonged and anxious period of suspense the successful candidates for the commission of ensign, as determined by the examinations held some time ago, sixty-five men have been so appointed. This quota of men is the third and last resulting from the examinations, and the men will go into active duty as soon as they can be assigned. At present they will remain at the training station, and after enrolling as ensigns in the Naval Reserve, will await further official orders.

UNIVERSITY OF TEXAS—The societies and fraternities at the University of Texas have made themselves liable to severe penalties and other punishment because of failure to send their war tax returns in to the government officials. Dances, dues, initiation fees, and other sources of revenue are, in consideration of the government regulation, liable to a tax of ten per cent. If this ruling is not followed out, fines up to two hundred per cent of the income are possible, in addition to punishment for the offenders. The faculty are attempting to avoid trouble by special investigation and hope to straighten things out.

## PERSONALS.

Dr. A. E. Kennelly of Cambridge, acting head of the department of Electrical Engineering at Technological Institute of Professor D. C. Jackson, who went into Government service a month ago, has been comandered by the authorities in Washington for special work during the summer months. His position is that of civilian liaison officer to the Signal Corps and his duties will be in line with his special attainments. He will be away from the Institute during the summer months, but expects to report back again in the fall. In his absence Dr. F. A. Laws will care for the direction of the special school for radio-engineers.

It is announced at the Institute that Captain A. S. Smith, of Wintthrop Engineer Reserve Corps, formerly superintendent of Buildings and Power, has been advanced to the rank of major.

Charles W. Drew, Jr., prominent at the Institute not only in the ports but as a newspaper correspondent, has been elected president of the N. E. Inter-Collegiate Athletic Association. Mr. Drew, who is a Minneapolis student, expects to pass the summer in Philadelphia and in work that will help toward the popular student movement "to build ship to beat the Kaiser."

## SHIPYARD WORK

(Continued from page 1)

BATH IRON WORKS—K. F. Akers, L. B. Barker, F. S. Britton, L. H. Burnham, G. C. Carven, G. Dateo, J. C. Facey, H. L. Grosscup, E. W. Jackson, T. L. McMahon, H. P. Massey, J. J. Murphy, N. C. Scudder, A. J. Shaughnessy, G. W. Spaulding, A. Vepsala, G. B. Wetherbee.

TEXAS COMPANY YARD—F. W. Adams, W. R. Barger, G. Bliss, J. L. Baston, H. M. Estabrook, B. Fisher, Jr., G. F. Gokey, Jr., J. D. Harvey, C. H. Mabie, J. Nolen, Jr., A. W. Norton, F. Olson, F. Pratt, J. W. Rockefeller, J. M. Sherman, R. J. Spitz, C. D. Sullivan, F. C. Vogel, P. A. Willis.

## NITROGEN FIXATION.

The work of the Government in developing processes for the fixation of nitrogen is discussed at length in the new Year Book of the United States Department of Agriculture. In this discussion Frederick W. Brown, of the Bureau of Soils, speaks very encouragingly of a new process, involving the use of carbide, which appears to have advantage over the cyanamid methods, and which, through economies effected, may be able to operate successfully under American conditions.

## BACK BAY NATIONAL BANK

109 MASSACHUSETTS AVE.

All Accounts Receive Personal Interest

Savings Accounts Receive In addition

4½%

## The Massachusetts Institute of Technology

CAMBRIDGE

RICHARD C. MACLAURIN, M. A., Sc. D., LL.D.

President

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY offers courses, each of four years' duration, leading to the degree of Bachelor of Science, in Civil, Mechanical, Mining, Electrical, Chemical, and Sanitary Engineering; in Architecture, Chemistry, Electro-chemistry, Biology and Public Health, Physics, General Science, Geology and Naval Architecture, and in Engineering Administration.

To be admitted to the first-year class, applicants must have attained the age of seventeen, and must pass satisfactory examinations in Algebra, Plane and Solid Geometry, Physics, English, History, French, and German, and must present teachers' certificates for two of a series of elective subjects. A division of these entrance subjects between June and September or between two successive years is permitted.

Entrance examinations are held at the Institute in June and September of each year. In June, applicants may be examined also by the College Entrance Examination Board in New York, Philadelphia, Chicago, and many other cities in America and Europe. A circular stating times and places is issued in advance, and will be mailed on application.

Graduates of colleges and scientific schools of collegiate grade are admitted, without examination, to such advanced standing as is warranted by their previous training.

Graduate courses leading to the degrees of Master of Science, Doctor of Philosophy, and Doctor of Engineering are also offered. Special Research Laboratories of Physical Chemistry, Applied Chemistry, and Sanitary Science have been established.

Correspondence should be addressed to Prof. A. L. Merrill, Secretary of the Faculty.

## PUBLICATIONS

The Annual Catalog (issued in December), the Report of the President and the Treasurer (issued in January), the Programme (issued in June, and circulars in regard to Admission of Students from other Colleges; Summer Courses; Advanced Study and Research.

Any of the above-named publications will be mailed free upon application

## SIMPLEX WIRES AND CABLES

A STEEL TAPED CABLE  
REQUIRES NO CONDUIT

IT SAVES TIME AND MONEY

Get our booklet

"STEEL TAPED CABLES"

SIMPLEX WIRE & CABLE CO.

MANUFACTURERS

201 DEVONSHIRE ST. BOSTON

CHICAGO SAN FRANCISCO

## Gilmour, Rothery & Co.

### INSURANCE

Safety Engineering

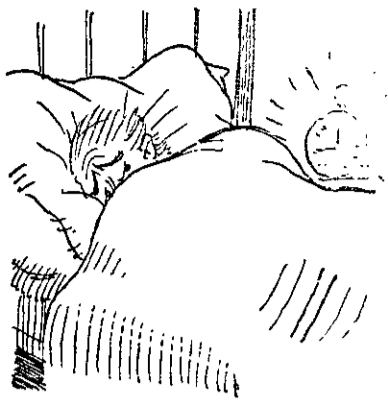
Fire Protection and Prevention

Corporation Insurance

120 Water Street  
BOSTON

100 Williams Street  
NEW YORK CITY

# Wake Up



Big things are happening at Technology that you ought to know about.

Subscribe to The Tech and you can read about these happenings when they happen.



CHARLES RIVER ROAD, CAMBRIDGE

**\$1.50 six months \$3.00 a year**

# Technology Seal Die Stamped Stationery

ON

OLD HAMPSHIRE VELLUM PAPER

1 Quire Box

(24 Sheets and 24 Envelopes)

Stamped Plain Red.....65c box

Same Stamped in Gold.....75c box

Same Stamped in Silver Over Red.....85c box

# Technology Branch

## HEALTH CONVOCATION

(Continued from page 1.)

from the legends, or faulty presentation of the material. Criticisms were made in a friendly way to illustrate what to do and what not to do in making graphic diagrams. For his contribution to the work of general benefit, Mr. Ritchie director of the News Service of the Institute, former Health Commissioner of the City of Boston, who keeps up an interest in health administration, and is related to nearly every movement of the kind in this vicinity, spoke on the relations of health departments to the newspapers and press. He outlined the modern po-

sition of the sanitarian who seeks to accomplish his ends through the backing of an enlightened public educated to a knowledge of at least the elements of sanitation, and gave the audience direct "pointers" on co-operation with the press in the publication of health news. Following him came A. W. Hedrich, who is in the School for Health Officers, who spoke about the health report. He is secretary of the American Public Health Association, the great national organization and editor of its Journal, and in his work has come to be well aware of the form and contents of the various city and state reports. He showed that there is absolute lack of standard and began to question the purpose of such reports. If intended to get more

money in appropriations they should be in popular terms so as to be understood by mayors and city and town councils, but at the time they should convey to other health officers the main facts of the local vital statistics.

Seventh among speakers related to the Institute came Dr. Percy G. Stiles, assistant professor of physiology at Harvard, formerly connected with Professor Sedgwick's department at Technology. His topic was the food of the worker, and its relation to his health and efficiency, a discussion directly in line with the thought and action of these times of conservation. In a few words his conclusions were, that any diminution in amount of food, considered in standard units, would have its effects on the people. They would become smaller or less active and the children would be robbed of what they need during the formative period of their lives. But in the matter of substitution of other foods for those customarily consumed, Dr. Stiles found there was vast opportunity for conservation without injury to the people.

Last in the list of contributions of Technology men to the Health Convocation was the splendid address of Dr. W. W. Peter, on the campaign of health education which he is conducting in China. Dr. Peter is attending the Health Officers' School during a leave of absence from his post in China. He is the secretary and executive man in a great movement against tuberculosis and other infectious diseases in China, where such maladies have been homed for centuries, and his paper was a presentation of some of his methods of work. It was a study in psychology such as one seldom has an opportunity to become acquainted with, for adapting and inventing means to accord with the simple and imaginative minds of these Oriental people. He has had recourse to toys and gimeracks, each one of which illustrates some fact to be impressed on the mind. Death rates, which in graphic form would be merely a bore to the Chinese become of interest when they are shown by toys like the Jacob's Ladder, one side of which presents the name of a country and the other a skull for every death—per thousand of population—each year. Density of population was illustrated by means of little men who jumped through holes in a table top, while other facts were shown impressively by the completion of an electric circuit and the ringing of a bell or the lighting of a tiny incandescent bulb. The whole lecture was illustrative of the right intellect and means in attacking the serious problems of the earth, and of such problems, health men realize that no one is more difficult than the need of conquering in their own storehouses of infection the plagues which, originated in the East, have again and again made the people of Europe tremble.

The showing of the Institute was a notable and important one and it is thus seconding the important missionary work of the M. M. S. in our own Commonwealth.

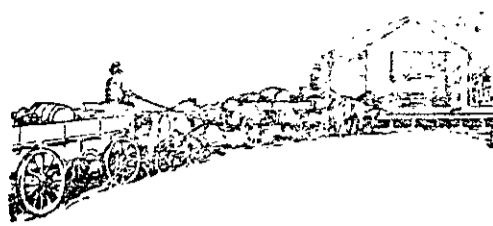
### CHANGES IN CHEVRONS

The senior non-commissioned officers in each branch of the Service will wear a star embroidered above the corps insignia. A special design is being prepared for the chevrons intended to be worn by first class privates in each corps and chevrons indicating their special duties will be issued for chauffeurs and specially qualified men in the mechanical units, as well as for stable sergeants.

Chevrons for marksmanship will be substituted for the metal marksman's and sharpshooter's medals, which will not be issued or worn with the Service uniform during the period of war. The chevrons indicating efficiency in marksmanship will also be worn by officers who are entitled to them, and all of the marksmanship chevrons will be worn on the cuff. The designs will indicate the branch of marksmanship in which the wearer has demonstrated his proficiency. Those who have become entitled to marksman's badges for efficiency in pistol shooting will wear a chevron with crossed pistols embroidered thereon; the riflemen will wear crossed rifles and a special design showing a section of the cartridge belt used in machine gun work will be worn by the men entitled to badges in that branch of the Service. There are several minor details involving other changes which have not been finally determined, but the designs have been accepted and contracts prepared for the manufacture of those herein enumerated. The new chevrons for all branches of the service will be worn on the right sleeve only. The object in wearing the chevrons on one arm only is just one part of the plan of the Quartermaster Corps to save material wherever it is possible.

It is expected that soldiers who have served with the American Expeditionary Forces but who have been ordered home before the expiration of six months will be permitted to wear a blue chevron instead of the gold chevron authorized for the full period.

## Origin and Development of Hydraulic Cider Presses



Back in 1867 the idea of a hydraulic press for expressing cider from apple pomace was conceived by Mr. A. Q. Tucker, founder of the Hydraulic Press Mfg. Co. From this idea has been developed a line of cider and fruit juice presses now embracing over fifty distinct models and sizes

along with a complete line of auxiliary equipment such as evaporators, vinegar making machinery, filters, etc. These presses range from small hand presses to big commercial mills of 400 bbls. per day capacity.

As the first to adapt the hydraulic principle to cider and grape juice machinery, we have maintained the lead in this industry as evidenced by the sale of our presses in the ratio of about ten to one of any other make, and the consistent winning of highest awards at every World's Fair, Exposition, State and County Fairs at which we have exhibited. These include Worlds' Columbian, Pan-American, St. Louis and Panama Pacific International Exposition.

Our catalogs Nos. 22, 33, 37 and 82 illustrate and describe our cider, grape juice, wine and olive oil presses and contain much information of value on conserving the waste in fruits, especially apples and grapes.

### THE HYDRAULIC PRESS MFG. CO.

Engineer-Builders of Hydraulic Machinery Exclusively

MOUNT GILEAD, OHIO

Branches: New York City, Cleveland and San Francisco

FRANK R. McMILLIN, Gen. Mgr. and Secy.

## DU PONT AMERICAN INDUSTRIES



# PYROXYLIN AND TAR PRODUCTS

We specialize in the manufacture of high grade Pyroxylin, Tar and Benzol Products and years of experience in the production of these classes of chemicals for use in the manufacture of Explosives have given us a valuable knowledge in their use in the commercial field. We aim to suit our product to the consumer's need and with this end in view, conduct laboratory experiments on all shipments of our products to make certain that the requirements have been satisfied in every respect.

The engineer who specifies Du Pont will be certain of getting a uniform, high quality product guaranteed to do the work for which it is intended.

Some of our principal products are:

- |                         |                          |
|-------------------------|--------------------------|
| Acetic Ether            | Patent Leather Solutions |
| Amyl Acetate            | Pegamoid Aluminum        |
| Anaesthesia Ether       | Paint                    |
| Aniline Oil             | Pitch                    |
| Bronzing Liquids        | Pontar—Road Tar          |
| Collodion               | Pontoklene—Tar           |
| Dark Creosote           | Remover                  |
| Dead Oil                | Py-ra-lin Enamels        |
| Dinitrophenol           | Refined Aceton Oil       |
| Ether, U. S. P.—1910    | Refined Creosote         |
| Ethyl Acetate           | Refined Fusel Oil        |
| Flotation Oils          | Salicylic Acid           |
| Iso Amyl Acetate C. P.  | Shingle Oil              |
| Iso Amyl Alcohol C. P.  | Sodium Acetate           |
| Wood and Metal Lacquers | Solvent Naphtha          |
| Leather Renovators      | Solvent Thinners         |
| Leather Substitute      | Split Leather Solutions  |
| Solutions               | Special Pyroxylin        |
| Mantle Dips             | Solutions                |
| Nitre Cake              | Sulphanilic Acid         |
| Nitrobenzol             | Waterproof Cement        |
| Parlodion               | Wood Preservatives       |

Du Pont Chemical Works

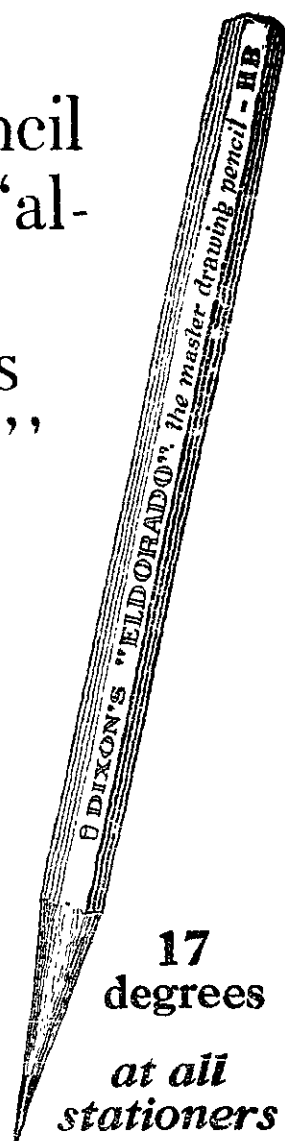
Equitable Bldg.

New York, N. Y.



A pencil that "almost writes alone"

the lead flows so easily



17 degrees

at all stationers

**DIXON'S ELDORADO**

"the master drawing pencil"

#### SIGNAL CORPS NEEDS TECHNICALLY TRAINED MEN

(Continued from page 1.)

and receive. Upon the presentation of this card to the personnel officer at the mobilization camp to which he is sent he will be assigned to the Signal Corps.

If, after attaining a proficiency of 10 or more words per minute, a student decides that he desires to enter the service immediately, he may apply through the local school authorities to the Signal Corps for papers authorizing his individual induction into the service and his assignment to a radio school for advanced training.

The opportunities offered by the Federal Board for Vocational Training permit men in the draft to educate themselves further and to select their work instead of waiting assignment to a branch of the service in which they may have no special interest. It is from these men that the noncommissioned officers must be chosen.

Further information concerning admission to these schools may be secured from local school authorities.

The Signal Corps is particularly in need of highly trained technical personnel. Electrical engineers and men with a good fundamental training in engineering or physics will find excellent opportunities for service of a character which will permit them to make full use of their training and experience. Men of satisfactory qualifications are given three months' training in special Signal Corps schools operated under the supervision of the Land Division of the Signal Corps, and are given every opportunity to take examinations leading to promotion.

Men who have had experience as electrical repair men, wiremen, and mechanics are also desired for assignment to special schools and later to field organizations. Instruction of a high grade is given, and opportunity for promotion is excellent.

#### 17 MILLION PEOPLE SUBSCRIBE TO THE THIRD LIBERTY LOAN

(Continued from page 1)

per cent, before the termination of the war. All of the 4½ per cent bonds are nonconvertible.

Bonds for conversion may be surrendered at any Federal reserve bank or at the Treasury Department. Registered bonds must be assigned to the Secretary of the Treasury, but such assignment need not be witnessed.

On conversion of registered bonds, registered bonds only will be delivered, neither change of ownership nor change into coupon bonds being permitted.

Coupon bonds, however, may be converted into registered bonds upon request. Coupon bonds must have the May 15, or June 15, 1918, coupons and all subsequent coupons attached. Coupon bonds issued from conversion will have only four interest coupons attached, and later must be exchanged for new bonds with the full number of coupons attached.

### Robert A. Boit & Co.

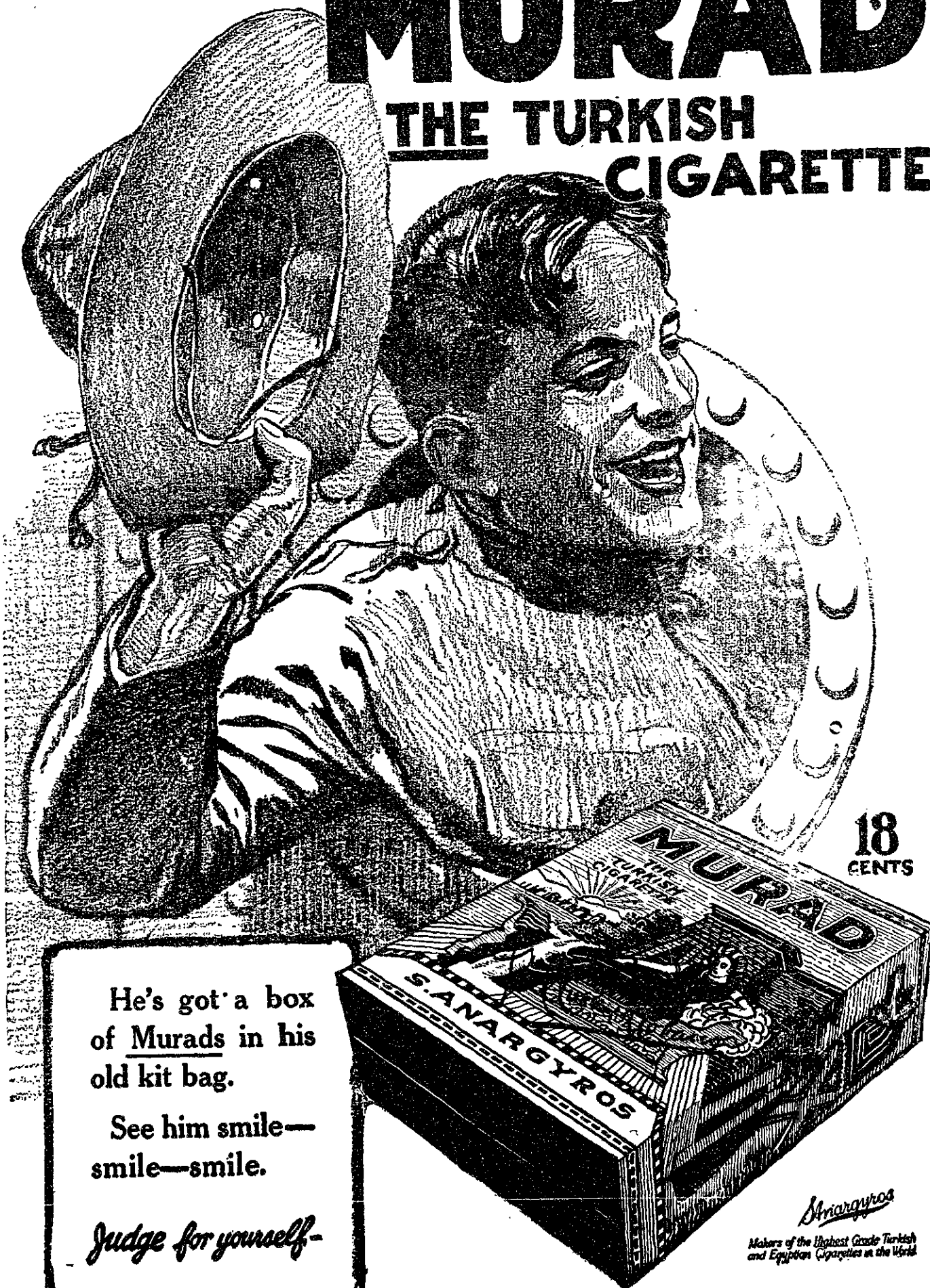
40 Kilby Street

Boston

**INSURANCE OF ALL KINDS**

# MURAD

## THE TURKISH CIGARETTE



He's got a box of Murads in his old kit bag.

See him smile—  
smile—smile.

*Judge for yourself.*

*Anargyros*  
Makers of the Highest Grade Turkish and Egyptian Cigarettes in the World

All bonds issued upon conversion into 4½ per cent bonds will be dated May 9. The bonds secured upon conversion of bonds of the first loan and bonds obtained by conversion of bonds of the first loan into 4 per cent bonds will carry interest from June 15. Bonds issued upon conversion of 4 per cent bonds of the second issue will carry interest from May 15.

#### SUMMER COURSES

(Continued from page 1)

that any exercises would be to a very small group.

At Commencement time, it has been the custom for a good many years for the alumni to gather at the Institute and in deference to this custom it has been arranged that they assemble at the Institute Tuesday afternoon between four and six for a word or two one with another. There will be an added feature in special drills of the military and naval aviators which will be in order on the new ground between the educational buildings and the Walker Memorial.

The other schools that the Institute has established for the Government will continue through the summer. The Deck Officers' School under the care of Professor Burton receives and discharges its men every fortnight, the mature students remaining different lengths of time, some of them striving for a captain's commission, while the school for Marine Engineers of which Professor Miller has the direction, took on its tenth group a week ago. The new radio-engineering school, the second in its series, is due to start on Monday with some fifteen students of the rank and attainment of seniors, the third in the group of intensive schools in Naval Architecture, under Professor Peabody will be under way a few days later, while the special work undertaken at Government instigation in Professor Sedgwick's department will open on June 18 with courses in bacteriology and physiology. This work is in response to urgent requests for more laboratory workers in connection with the needs for persons understanding public health and sanitation.

#### TECHNOLOGY'S HONOR ROLL INCREASES DURING MAY.

Total on Institute's Death Roll to June Numbers 36.

The contribution of the alumni of Technology to the country's cause in the great World War was during the month of May no less than seven reported on the death roll, the total to the beginning of June being 36. The other statistics of men in the fighting arms of the country, as compiled by the M. I. T. War Service Auxiliary is the following: the smaller figure indicating increase since the end of April: Men in service, 2281 (102); Foreign Service, 569 (40); Aviation, 382 (20); Navy, 459 (23); Officers, 1422 (47); Officers' Training Camps, 151 (14); Inspectors or Instructors, 109 (11); Ambulance, Red Cross, Y. M. C. A. (A. E. F.), 55 (3); Lt. Col. of higher, 31; Cited for Bravery, 15.

Technology is contributing from its alumni nearly three men a day to the active services, is averaging more than one a day who gain the rank of officers and from its group more than one a day is sent "Over There." The list of men and women in industries directly allied to the war is above two thousand.

**WILLIAMS COLLEGE**—A streak of good luck has favored the Williams athletes lately, for the tennis team defeated Tufts, the baseball nine won a victory from Wesleyan, and the track team tied Amherst in a closely contested meet.

### BEMIS BRO. BAG CO.

Established 1858

Burlap Importers

Manufacturers

Burlap, Cotton, Paper Bags

Factories and Mills at:

St. Louis	Memphis
Minneapolis	San Francisco
Indianapolis	Seattle
Kansas City	Winnipeg
Omaha	Houston
New Orleans	Peoria

Bemis, Tenn.

Boston Office: 40 Central Street

**THE ANGUS CO., LTD.,**  
CALCUTTA, INDIA

Merchants and Manufacturers  
Proprietors, Angus Jute Works,  
Bhadreswar, Bengal

## All Walker Memorial Dining Rooms

Are Open to All Tech Men NOW

Open Daily and Sunday



**STONE & WEBSTER**

FINANCE public utility developments.

BUY AND SELL securities.

DESIGN steam power stations, hydro-electric developments, transmission lines, city and interurban railways, gas plants, industrial plants and buildings.

CONSTRUCT either from our own designs or from designs of other engineers or architects.

REPORT on public utility properties, proposed extensions or new projects.

MANAGE railway, light, power and gas companies.

NEW YORK BOSTON CHICAGO

#### CORDAGE and TWINE



Trade Mark

**Samson Cordage Works**  
BOSTON, MASS.

Telephone Cambridge 6900

**FRANK COHEN**  
MILITARY TAILOR

Massachusetts Institute of Technology  
Army Aviation School  
Room 1-372

Officers' Uniforms Reasonable Prices  
a Specialty Best Quality Goods

Headquarters M. I. T. War Service Auxiliary

491 Boylston St., Boston  
Information Bureau open daily. Workroom open Tuesday, Wednesday and Thursday from 10 A. M. to 4 P. M. Everyone interested in Technology welcome, as visitor or worker.

Technology Bureau  
University Union  
8 Rue Richelieu, Paris  
London Branch, London