

NAVAL AVIATORS HOLD DUAL MEET

Main and Receiving Ships Tie at
Tech Field. Mile Cutter Race,
Deciding Event, Won by Main
Ship. Trench Fight Feature

1500 WATCH CONTEST

Spirited competition developed in the dual meet between the Main and Receiving Ships of the U. S. naval aviation schools at Tech Field yesterday afternoon. Because the station is quarantined, all of the students were present. After eight contests the teams were tied, and it was decided to have a one-mile cutter race to settle the meet. This was won by the Main Ship by a length, the crew being coxswained by Ensign Charles Squibb, former Harvard track manager. The Receiving Ship boat had Lt. R. Sargent at the tiller.

Few men failed to get into action. The trench fight was very interesting. Each ship was represented by 10 men, and after three minutes of terrific slugging the Main Ship had eight men "on the top" as against seven for the Receiving Ship. Steele, who played half back for Syracuse University last fall, earned a reputation as a boxer when he knocked out one of his opponents.

The Main Ship's relay team was speedy. Leavenworth, the anchor man, winning handily. In the event between the officers of the two ships the result was reversed, Ensign Satterfield, a former southern college champion, out-sprinting Ensign Squibb on the last relay.

Wall scaling was tried for the first time and each team was represented by 115 men, the Receiving Ship winning. The Main Ship won the push ball game, scoring in the first half.

The strong men of the Receiving Ship proved powerful in the tug-of-war. The chariot race also was won by the Receiving Ship. One hundred men raced on each team and the driver was changed at the end of each relay. More than 1500 men watched the contests, the Main Ship wearing blue and the Receiving Ship red arm bands.

Trench fight—Main Ship 8, Receiving Ship 7.

Relay race, 220 yards each relay—Won by Main Ship (Pierce, Newsom, Stanton, Liehr, McDowell Read, Roubush Leavenworth).

Officers' relay—Receiving Ship (Sargent, Niblick, Churchill, Satterfield) defeated Main Ship (Wolcott, Morgan, Squibb, McKown).

Shoe race—Won by Smith Main Ship; second, Esterly, Main Ship; third, McLaughlin, Main Ship.

Wall scaling—Won by Receiving Ship.

Pushball—Main Ship 1, Receiving Ship 0.

Tug-of-war—Won by Receiving Ship.

Chariot race—Won by Receiving Ship.

Cutter race—Won by Main Ship (Ensign Charles Squibb); Receiving Ship (Lt. R. Sargent).

Technique 1920

There will be a meeting of the Technique 1920 Board on Wed. Oct. 9th at 4:30 P. M. in the Technique office.

NOTICE

Any students desiring to compete for positions on the staff of THE TECH should call at the office of THE TECH, 75 Massachusetts Avenue, any day between the hours of 10 and 12.

EXERCISES POSTPONED

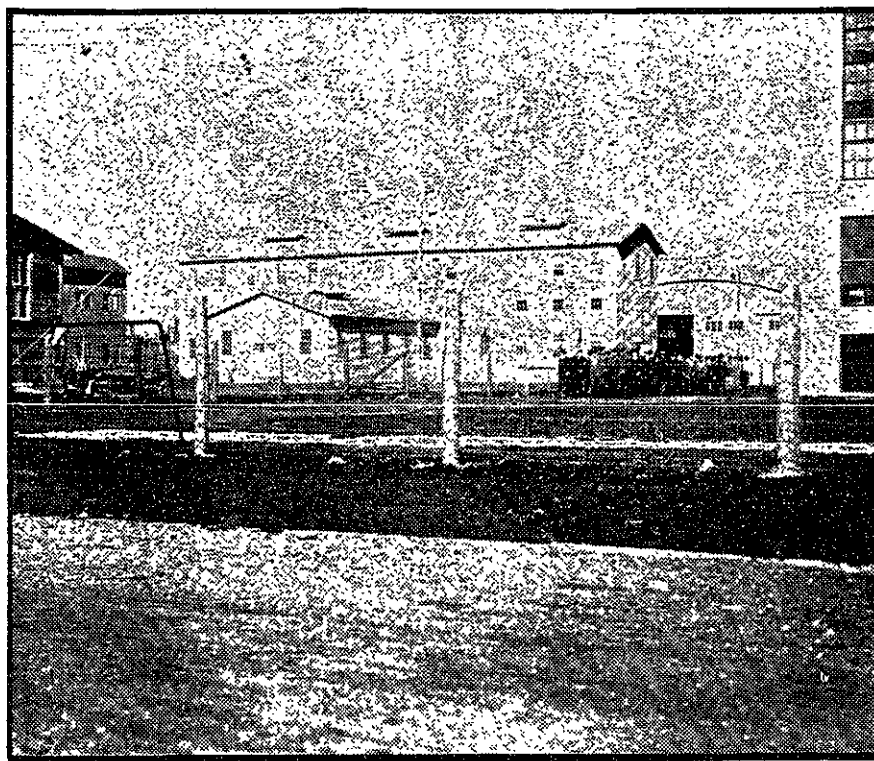
The academic exercises of the Institute have been postponed again in compliance with the request made by the Health authorities until October 14. Military work will, however, start October 10. Induction into the S. A. T. C. will continue until October 10.

TECH LOUNGE OPENED TO ALL S. A. T. C. MEN

One is filled with keen delight and impressed with the coziness of the "rest room" appropriated by the TECH to the men who are enlisted in both the Army and Naval Units of the S. A. T. C. The large windows bordering the three sides of the room afford ample sunshine to flood it at all hours of the day. From the writing tables on which piles of writing paper and envelopes are neatly arranged, and the large roomy lounges and soft easy chairs a sense of cheerfulness is pervaded. Books and current periodicals are at the disposal of the visitors. The Tech Lounge, as the room has been named from The Lounger, the TECH'S feature column, is opened at all hours of the day. The TECH cordially invites all S. A. T. C. men to visit and use the Tech Lounge.

Hear the news from Pearl Harbor. A total of \$87,100 comes in on the first report. The civilian personnel made a per capita subscription of \$63.20, 85 per cent of them subscribing an average of \$74.00 each. Get a eukalele and learn to play this tune.

Naval Aviation Building For Aerial Observation



Courtesy Boston Photo News.

This is the building erected by the Institute for Observation Gallery for the Naval Aviation Detachment. One wing of it serves for studies in navigation and the other for nautical work. The two-story portion is equipped so that it will afford prospective aviators the practice they need in signal work from aeroplanes, largely wireless. The observer in the gallery notes the flashes meant to represent artillery bomb explosions and signals by wireless to the director of the fire the correction required for accomplishing the purpose in mind.

COLLEGE IDEA IS NOW APPLIED TO THE TRAINING OF ALL THE MARINE ENGINEERS

Mechanics Given Technical Courses at Technology
Solve Problem of Supplying Licensed
Men For Ships Being Built

SHIPPING BOARD METHODS EFFECTIVE

"Where you going to get engineers for all these ships?"

This colloquial inquiry was directed many times to representatives of the United States Shipping Board Recruiting Service when the bigness of the plan for bridging the Atlantic with American cargo carriers first projected itself upon the lay mind of the country. The public had been told there were not even enough marine engineers who were citizens to man the ships flying the flag in peace times. So the man in the street could not see where the supply was coming from for the thousand ships to be manned as merchantmen out of the 2,000 to be built by the Shipping Board for the new merchant marine.

The Shipping Board has provided, and continues to provide, an answer to the question, through a training system for marine engineers which it has developed since the war began. No outside talent has been required to provide instructors, and no student not a citizen has been given instruction.

Plenty of "Raw Material"

When the war began the Board proceeded on the theory that there was plenty of material in the country for an adequate supply of marine engineers. It estimated that there were several thousand men in the engine rooms and fire rooms of existing merchant ships—oilers, water tenders and firemen—who could be made into engineers by a little encouragement and instruction. It estimated also that there were many hundred of marine engineers following other pursuits ashore when the war began who could be induced to return to the sea.

Finally it estimated that there were thousands of stationary engineers, locomotive drivers and machinists who had

worked on marine engine construction or repairs ashore who could be quickly trained to become marine engineers. These men were known to have the groundwork of knowledge necessary for handling marine engines. If remained merely a question of teaching them the things they should know about salt-water practice in engineering, and to give them their "sea legs" before starting them off on voyages in the new merchant fleet.

Of the many revolutionary training practices growing out of this war, none was more striking than the Shipping Board's plan for giving these men technical drilling. The plan originated in Boston, with Henry Howard, the Board's Director of Recruiting. Mr. Howard is a graduate of Technology, and a firm believer in the value of technical training to every kind of mechanical worker. His idea was to give the men needed as marine engineers a short, intensive course of training at the best technical colleges before sending them to sea. The new method had not long made its bow before mechanics seemed to see something in it. The firemen and oilers took to it; and they came out with second or third assistant engineer's licenses in such a surprisingly short time that the method of their advancement commanded respect.

The Institute was chosen to launch the new idea for training engineers under Prof. Edward F. Miller, head of the engineering section. The first Shipping Board class at Technology approved of Prof. Miller and the "college stuff" so decidedly, that it had not been at the college a week before the value of the new system was fully demonstrated. Prof. Miller had been designated by

(Continued on page 4)

LANSING'S REPORT

Technology Bureau Makes Full
Report to Alumni Council

(SECOND INSTALLMENT)

(18) Distributing to Tech men the sweaters, wristlets, etc., which are sent to Paris by the Woman's War Auxiliary of which Mrs. Cunningham is chairman and Mrs. Sedgwick director, in charge of the workroom.

This briefly outlines the work as it developed, but the service was and is flexible, and aims to meet new conditions as they arise.

In the middle of August, 1917, there arrived Professor Nettleton of Yale, Dr. Van Dyke of Princeton, and Mr. Wendell of Harvard, who, together with the writer, had been appointed members of the executive committee of the Union. Professor Nettleton was elected Director and the writer Assistant Director and Business Manager. Owing to the death of Mr. Wendell shortly after his arrival in France, Mr. James Hazen Hyde of Harvard was appointed in his stead. The two other members of the executive committee, who arrived later, were Professor Vibbert of Michigan and Mr. Crenshaw of Virginia.

The work of finding suitable quarters for the Union was at once taken up, but owing to numerous difficulties, such as coal supply, etc., coal being \$75 a ton when obtainable, the Union was unable to find a suitable place to open up before October 20. In the meantime, Dr. Van Dyke and Professor Nettleton lived at the Tech Club which, more than ever, became the center of American University life. Meetings of the Advisory Council of the Union, as well as others were held in the Tech salon, so that the Tech Club from the outset played an important part in the early days of the formation of the Union.

As the Club's lease expired on Sept. 15, the Club was moved to the Hotel d'Opera for a month, before moving to the Royal Palace Hotel, 8 rue de Richelieu, in the heart of Paris, where the Union opened on Oct. 20. The work and activities of the Club and Union are so interwoven that it is impossible

(Continued on page 3)

MESS HALL READY TO SERVE S. A. T. C.

Seats for 1000 at One Serving.
Two Mess Periods to Care For
All. Cooking Apparatus Bat-
tleship Size

MRS. McLEAN AT HEAD

The big mess hall is ready to serve meals to the S. A. T. C. and the moment the Government lifts the ban imposed on account of the influenza, it will spring into instant action. It is just three weeks since this ground was occupied by some of the minor army sheds which have been removed and a dining room 180 feet by 80 feet, together with a kitchen 100 feet by 60 feet, have sprung up and today are ready with tables, seats, bathtubs, serving outfit, refrigerators, store rooms and cooking appliances, together with the force that is to care for service and cleanliness in the buildings. There are seats for 1000 at a serving and two mess periods will serve to care for the members of the S. A. T. C. on the Institute's roll.

Here as at the Walker Memorial dining and mess halls, it is Mrs. Helen E. McLean, who is at the head of everything, and altogether she will be serving ten thousand meals a day. Incidental to this large work of the restaurant department of the M. I. T., Mrs. McLean is caring for the two army and navy hospitals at Technology of fifty beds each, well filled during the present season of sickness. For each of these hospitals there is a special kitchen and a dietician in attendance.

For her staff Mrs. McLean has appointed to the superintendency of the Walker Memorial, Miss Marguerite Duncan, on whom the immediate responsibility will fall, while at the S. A. T. C. mess hall the superintendent will be Miss Edna Hamblin, a Martha's Vineyard woman.

In the new kitchen the force is one chef, eight cooks and five kitchen men, with a score or more of women in the various operations from the serving counters to the floor washing. Women have been used in every place possible, and some of the fittings have been selected in their light forms with especial reference to their use by women. The kitchen is fitted with six soup kettles of a capacity of 500 gallons. There are seven large gas ranges and a number of ovens, but these will be devoted to pastry, the war bread being made at the Walker Memorial. The potato

(Continued on page 3)

NAVAL ARCHITECTURE

Despite some reports to the contrary, Technology will continue its regular courses in Naval Architecture. The Juniors have registered for this work in reasonable numbers but there is room for others. It has proved to be one of the most important courses in the curriculum and has continued through the vacation without cessation. The last group to graduate, the members of the Class of 1919, were taken in a body by the Government as was the case with the earlier special intensive schools. The third intensive group is now at work, and in this there is a company of a dozen studying under scholarships of the Newport News Shipbuilding Co., which will take the students when they finish.

The young man, who wishes to be of most valuable assistance to his country in a work in which there is the greatest dearth of competent men, will find his opportunity here. The students registering in this course, will, of course, find their affinity in the Students' Naval Training Corps, which at Technology is inducting its quota of four hundred quite rapidly, being now along into the third hundred.

The Tech

Established 1881

Published twice a week throughout the year by the students of the MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Entered as second-class matter, September 16, 1911, at the Post Office at Boston, Mass., under the act of Congress of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917, authorized on July 19, 1918.

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

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.

WEDNESDAY, OCTOBER 9, 1918

ARMY OR NAVY?

THERE are two centres of induction active in the Institute at this moment, the group of army officers on the second floor and the naval unit on the fourth. Each of these in its own way is presenting the advantages of its own corps, the S. A. T. C. on the one hand and what has been heretofore designated, the Naval unit of the S. A. T. C. on the other. It seems as if with the establishment of the naval units in so many colleges they should have a distinctive title, but thus far at the Institute even the name of its commanding officer has not yet been stated. Technology has however promptly assigned quarters for these men in the drawing and other rooms of Civil Engineering, just vacated by the Army School of Aeronautics, while their mess will be with the S. A. T. C.

In the setting forth of the question from all sides THE TECH has already presented some of the facts, while others have been filtered by the daily press from the mass of publicity issued by the approved mouthpieces.

There is a small difference in salary, which has been explained in various ways, but it is certain that economically there must be "extenuating circumstances," else all the men we see would be in the Navy. There are some differences in methods of subsistence, some has remarked, for example, that the sailor on his ship is not far separated from his breakfast; but these have been the result of long experience and are probably balanced to a nicety, as are the prices of cordwood and coal, when the fuel administrator advises to lay in a stock of the former.

But one of the real differences will be in the treatment so far as studies are concerned by the two great departments. The young men may readily have two different points of view. One, which the Institute has tried to present as forcibly as possible to its students, is the increased value that they will have to the country as engineers when they have finished the Technology courses; the other is the view taken by the impetuous, patriotic young man, who "wants to see wheels go round." The wheels in his case are the action and excitement of battle and the feeling that he is truly a part of the great force that is struggling to make liberty a wider reality.

War Department publicity with reference to the aims of the S. A. T. C. units announces that, "it cannot be stated how long any particular student will remain in college. . . . Students will not ordinarily be permitted to remain on duty in the college units after the majority of their fellow students of like age have been called to military duty at the camp."

On the part of the Navy there has been made this statement of probabilities. "We want these undergraduates to remain in college until they have finished their educations. The course may be reduced in length and intensified in character so as to get a man through college in three years, or even two."

Even here the finality may not be so different as would seem from such varied settings forth, for in the Navy the man is not eligible for a commission till he is twenty-one, whereas in the army he will be eligible whenever he is fitted to receive it. From certain points of view this is considered a vast difference, and the man who is in a tearing hurry to get on the field will doubtless act by it.

Then to make the puzzle even more difficult, there has been the feeling at the Institute that the War Department realizes the greater value of men technically trained, and the chances for any young man who maintains his standing to complete the new eight term work are favorable. In fact it would be absurd to have effected the re-arrangement of courses at the cost of so much skilled effort, were there not some likelihood of their utilization. Against this the War Department says specifically that it does not want men in the S. A. T. C. "who will not in good faith submit to the comprehensive plan of transfer."

It is a case where apparently everybody is "kept guessing," but these seem to be the salient points thus far presented.

PERSONALS

Announcement is made of the marriage at the bride's home in Rumford, Me., on Thursday evening, of Miss Frances May Harris, daughter of Mr. and Mrs. James W. Harris, to Lt. Theodore Franklin Spear, son of Mr. and Mrs. Willard Spear of this city. Lt. Spear, who is a graduate of Technology, is now with the chemical warfare service, and is located at Hastings-on-the-Hudson, N. Y.

The bride is a graduate of Lasell seminary and has been active in Red Cross work. Lt. and Mrs. Spear are to make their home at Yonkers, N. Y.

Captain J. P. Gardner '17 should now be addressed at Battery E 42nd Artillery, C. A. C. A. E. F.

In speaking of his battery in a recent letter, he says, "We have fired 2500 rounds and we know that is a record for any heavy artillery in the American forces. Also believe that we hold the record for getting fired upon."

Irving W. Young, Jr., '17, Course XV, is at Washington Bks., D. C. and expects to be sent to the Engineer O. T. C. at Camp Humphries Virginia very shortly. He was voluntarily inducted on September 8, and has been in Washington since that time awaiting the formation of another company at Camp Humphries.

After leaving Technology, Young took a position with the Renfrew Mfg. Company at Adams, Mass., as Employ-

Stanley C. Sears '01 has been commissioned a Captain of Engineers, United States Army, and ordered to Camp Humphries, Virginia.

TO ASK EXEMPTION OF HARVARD FACULTY

Harvard University Corporation this week will request a number of its officers of instruction and government to claim deferred classification in the new draft, and the university will present affidavits that they are essential to the maintenance of adequate and efficient educational facilities at that institution. The names of the men are now being decided upon.

Prof. Edward H. Warren of the law school has volunteered to help solve the questionnaire difficulties for the men, providing their local boards are unable to do so. Registrants, although they must decide on their own initiative whether they should claim exemption for dependency, will be given aid in determining their status in this respect.

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Keep the Stars and Stripes marching with our heroes to Berlin.



IRVING W. YOUNG, JR., '17

SHIPYARD PRIZES

Men who are students at the Institute of Technology during the year 1917-1918 and who have worked in a shipyard this summer for a period of six weeks or more are eligible.

Reports. Five prizes of \$100.00 \$90.00, \$80.00, \$70.00, \$60.00 have been offered for reports on the students' work in a shipyard.

Men desiring to compete for this prize must hand in before October 15, a report of between 150 and 2000 words. They must be in the usual form of engineering reports, with title page, table of contents, appendix, etc. With subject matter the report must include the following:

- A record of the students' work including:
 - a. A description of the principal kinds of work or tasks performed.
 - b. A statement of the total number of hours and days actually worked and the corresponding maximum number of hours possible during the period the student was employed at the yard.
 - c. A statement of the total wages received.
 - d. Descriptions of the students' most interesting or valuable experiences.

The report must be written upon paper 8 by 10 1-2 inches in size punched 6 5-8 inches between the holes. A left-hand margin of at least 1 inch and a half right-hand margin of about an inch and a quarter must be allowed. Each report must be provided with a backing. The reports must be typewritten and only one side of the paper must be used. On the title page an assumed name must be given and the report must be accompanied by a sealed envelope containing the assumed name and the writer's true name. These reports must be sent to Professor H. G. Pearson by October 15, 1918.

(Note) The award of prizes will be based on the relative excellence of the reports submitted, as determined by the judges, the following three elements being regarded as equally important.

- (1) Statement of work done during the summer.
- (2) Outline of suggestion for co-operation.
- (3) Form of presentation of subject matter.

Work. Five prizes of \$50.00 each will be awarded to the five men whose work has been most satisfactory. In order to be eligible for these prizes a man must submit:

- a. A statement of the total number of hours and days actually worked and the corresponding maximum number of hours possible during the period the student was employed in the yard.
- b. A statement of the total wages received.

Note: (The statement made in competing for the prize report will suffice.

Suggestions. Five prizes of \$50.00 each for the five best co-operation schemes. A candidate must submit:

An outline of a plan for co-operation between the Institute and the shipbuilding industry in training men for work in the industry or otherwise fostering and maintaining its growth.

No material will be accepted after October 15, and announcement of the winners will be made November 1, 1918.

ment and Service Manager. He remained with this concern until July 1, 1918, when he took a similar position with the E. I. duPont de Nemours Powder Company. His application for the Engineers came through shortly after taking his new position.

His activities at Technology were hockey manager (3); Athletic Association (3 & 4); Advisory Council on Athletics (4); Osiris.

The Massachusetts Institute of Technology Cambridge

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

President

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY offers courses in Civil, Mechanical, Mining, Electrical, Chemical, Sanitary, and Architectural Engineering; in Chemistry, Electro-chemistry, Biology and Public Health, Physics, 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 present records of certificates grade in Algebra, Plane Geometry, Physics and English, and passing grades in six more units of preparatory subjects.

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

A unit of the S. A. T. C. is established at the Institute for both the Army and the Navy.

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

UNIVERSITY UNION

(Continued from page 1)

to chronicle the history of the Tech Club without bringing in much of the history of the Union, especially as the Tech Director played a dual role.

With the opening of the Union, the Technology Club of Paris became the Technology Bureau of the American University Union in Europe. A suite of three pleasant rooms were allotted to Tech, one of which became the office, one the salon, and the third the director's bedroom. While the general public rooms of the Union were, of course, open to all Tech men, they had the special privilege of their own quarters which, while always open to all members of the Union, were nevertheless more like home. In fact, the effort has been all along to create an atmosphere of hominess and to make our Tech men abroad feel that there was at least one place in France which belonged to them, where they could come for advice, assistance or help. It is for this reason, especially, that the new Director, George Crocker Gibbs '00, is so successful.

Six other colleges besides Tech maintain bureaus in the Union, viz., Harvard, Yale, Princeton, Michigan, Columbia, and Virginia, while Cornell is also specially represented. In the plans of the Union for expansion, there will probably be several other institutions which will have their own bureaus, but at present the limited accommodations of the Union prohibit them.

A Tech man who is able to come to Paris has all privileges of the Union, including bedrooms, restaurant, library, music, store, etc., in addition to the special privileges outlined before as work of the Tech Bureau. In London and Rome no colleges maintain bureaus, but all college men have equal facilities.

It will be desirable to outline the relationships between the Union and the different college bureaus. The Union is the supreme authority, but each bureau maintains its own staff, pays its own expenses, and keeps its own individuality and, as long as its policy is in harmony with that of the Union, runs separately. However, the bureaus are closely tied up with the Union. The members of the bureau staffs are members of different Union committees. For example, Professor Vibbert of the Mich-

igan Bureau is Chairman of the Committee on French Affairs, has charge of French pensions, French lessons, etc. Dr. Van Dyke of the Princeton Bureau has charge of all hospital work, casualties, etc. In this work he is assisted by Mr. Gibbs, the Tech representative. A weekly dinner is held at the Union, at which are present all members of both the Union and the bureau staffs. By this method the Union and the bureau work as a unit, with the best of results.

Note—The first installment of the Technology Bureau's report was printed in the issue of Saturday, Oct. 5, 1918.

S. A. T. C. MESS HALL

(Continued from page 1)

peeler, which is one of the recent utilizations of the abrasive power of carborundum, is of battle-ship size, and the quantities of supplies are in the same ratio. For the cooking there will be required 250 gallons of milk and 120 gallons of cream, while for table use 720 quarts of bottled milk will be required, and three hundred dozen eggs will be necessary for one serving of breakfast.

At the back of the great hall are eight serving units, with steam tables, embedded in serving counters that make one hundred and four feet of length. These are fitted with upper shelves and with a wide ledge for the tray. The men will come into the hall by four aisles and separating at the serving counters will make eight files in constant motion. Having received their rations, the soldiers will select their tables and thus make way for the others.

NOTICE

The Theta Delta Chi Fraternity has taken permanent headquarters for the duration of the war at The Buckminster Hotel Beacon Street at Kenmore Station Boston, Mass.

DIVIDEND OF 10%

The stockholders of the Harvard Cooperative Society have declared a dividend of 10 per cent. on all purchases made at Technology Branch. The rate at the Harvard store was fixed at 6 per cent. on charge purchases and 8 per cent. on cash purchases.

Checks will be ready the last of October

Moral: Join the Tech Branch

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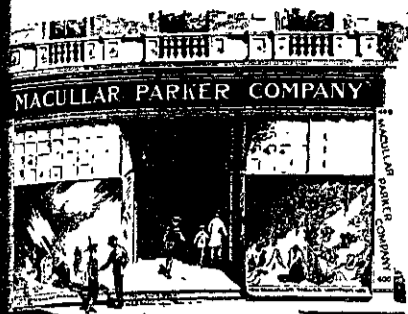
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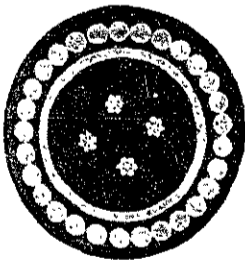
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MARINE ENGINEERS

(Continued from page 1)

the Board as its chief instructor in marine engineering, and classes were started at other technical colleges, including Tulane University at New Orleans, Armour Institute at Chicago, the Case School of Applied Science, Cleveland; University of Pennsylvania, Philadelphia; Johns Hopkins University, Baltimore, and Washington University, Seattle. Later schools were started at the University of California (Berkeley), in New York City and Jersey City, and at the Pratt Institute, Brooklyn.

It is part of the plan of the Board to train men in a knowledge of every kind of special equipment carried in the mechanical outfit of a modern ship. Turbine ships, for example, must have specially trained engineers. The latest development in these wonder machines for driving ships are in the geared turbine, a complicated and highly delicate piece of mechanism.

To provide a proper proportion of turbine engineers to meet coming demands, the Shipping Board has sent picked men to the works where most of its turbines are made, with instructions that the men "grow up with their engines." An engineer so instructed is supposed to watch his engine grow from the castings to its final assembling in the shop, and then follow it aboard ship, superintend its erection there, and run it when finally the ship is ready for service.

The same idea of special instruction is applied in the case of water-tube boilers, the engineers who are to handle them being given a special course in the works where the boilers are made.

In order to reach the men it wishes for training, the Shipping Board Recruiting Service employs officials in various parts of the country known as "section chiefs," who supply information to a constantly growing number of applicants. Much of this is contained in a pamphlet entitled "How to Become an Officer in the Merchant Marine." National Headquarters of the Recruiting Service is at the Custom House, Boston.

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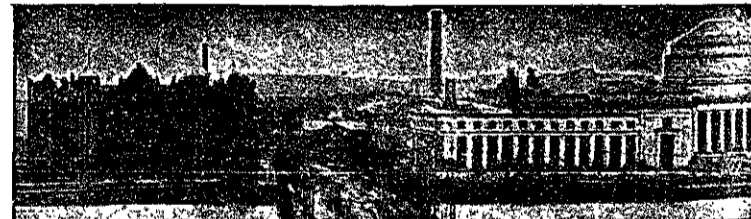
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