

ALUMNI CAN MAKE DRAFT "SELECTIVE"; INSTITUTE WILL BE SECOND WEST POINT

TECHNICAL MEN MUST KEEP IN TOUCH WITH THE POLITICIANS

Technology Men Should See
Local Exemption Boards
in One Industrial Lead-
ers Alumni Bulletin

OPPORTUNITY FOR SERVICE

Bulletin No. 2
Department of Technology
Clubs Associated

passage of the Conscription
is a new set of problems to
be faced, and it is believed that
and other college men can
render service in the solution of
them. One of the most impor-
tant opportunities thus offered
in connection with the Exemption
boards is the law.
The law authorizes the
establishment of local and district
boards of three or more members
to be appointed by the local
population of over 1,000 or over;
and are to pass on all claims
for exemption, excepting those
over which the District Boards are to have
jurisdiction.
The law is also authorized to
establish one or more District Boards in
each judicial district. Such
boards to have jurisdiction on ap-
plication of local Boards of
districts, and, in addition,
jurisdiction over all claims of
exemption made under the provisions
authorizing the President to
suspend persons engaged in industries,
agriculture, found to be neces-
sary to the maintenance of the military
forces, or the effective opera-
tion of the military forces, or the main-

(Continued on page 2)

EN TAKING DRILL

Companies At Work
Afternoon on Field

and sixty-six men from
the class of 1918, nearly one-third of
number enrolled, were ordered to
the beginning of Summer
drill in two infantry companies and
filled since then on Tech
drill and extended order. The
drill was done during the after-
noon between 2.00 and 5.00
day except Sunday, the
drill being devoted to inten-
sive drill and the last to a
calisthenic exercises.
The drill will soon be supplemented by
military courses in ordnance
and telegraphy and drill for men in Course
branches of military
studies are most
to them.

so conducted that each
company has an opportu-
nity to command in the rank
above that which he occu-
pies. The calisthenic
exercises are a requisite for a reserve
officer, and the system which
is found so advantageous
in military courses at the various
institutions.
done under the direction
of Captain H. F. Col-
lins, all of whom have
more years of military ex-
perience than the Tech
Corps. The calisthenic
exercises include Butt's Manual,
which has been given to
each year, is supervised
by '19, gymnasium as
well as Kanaly.

The War-Time Tech

TECHNOLOGY itself is giving remarkably effective war service
to the Country.

THE ALUMNI in large and rapidly increasing numbers are in
government or industrial work essential to war success.

THE UNDERGRADUATES are efficiently fitting themselves
for similar patriotic duty.

TECHNOLOGY WOMEN are organizing to provide for men
at the front and to co-operate with wives and mothers left
behind.

Already Institute men are in EUROPE, and Lansingh '98 is on
his way to open a Technology centre in Paris.

The thousands of Technology men and the hundreds of thou-
sands interested in the Institute should have news of all
this and should have it promptly.

THEREFORE the undersigned have co-operated to render this
news service by making THE TECH the organ of ALL
TECHNOLOGY for the period of the war.

THE WAR TECH WILL GIVE:

NEWS straight from the live Alumni centre at Washing-
ton, in the heart of things.

NEWS from the fifty local Technology Associations all over
the Country.

NEWS from the Technology centre in Paris, in touch with
all those at the front.

NEWS from the Summer Camp, from Plattsburg and from
all other training camps where Institute men may be.

NEWS of the varied activities of the Institute itself and of
its teaching staff.

NEWS TWICE A WEEK, fresh, condensed, accurate, vital
to every man and woman closely or remotely allied with
Technology.

NO TECHNOLOGY MAN CAN AFFORD NOT TO SUB-
SCRIBE.

Six months (52 issues) for \$1.50; anywhere in the United States.

For their own sakes and to stand behind the great drive to put
all the resources of Technology behind the United States
and her Allies, we urge every Institute man to subscribe.

M. I. T. ALUMNI ASSOCIATION
Francis R. Hart '89, President.
Walter Humphreys '97, Secretary.

MOBILIZATION COMMITTEE
Isaac W. Litchfield '85, Chairman.
James P. Munroe '82, Treasurer.

TECHNOLOGY CLUBS ASSOCIATED
Hollis Godfrey '98, President.
F. A. Smythe '89, Treasurer.

ASSOCIATED COMMITTEE OF WOMEN
Edith P. Cunningham (Mrs. Edward), Chairman.

THE TECH
Paul C. Leonard '17, General Manager.
Kenneth Reid '18, Editor-in-Chief.

(Present Subscribers See Notice Inside.)

TECHNOLOGY GRADUATES WORKING ON CANTONMENTS

Alumni Serving Uncle Sam in Con-
struction Work

Due to the information gathered in
the Alumni Association's war-time con-
sensus many Technology men have taken
charge of the design and construction
of the cantonments needed by the gov-
ernment to take care of the large army
provided by the conscription bill. Major
William Couper '06, Quartermaster
Officers' Reserve Corps, is Construction
Quartermaster in charge of the Colum-
bia, S. C., cantonment; while among
civilian engineers engaged for water
supply, sewage disposal and similar
work are Allen Hazen '08, at Wrights-
town, N. J.; Morris Knowles '91, at
Annapolis Junction, Md.; R. W. Pratt
'98, at Chillicothe, Ohio, and S. A.
Greeley '06, at Battle Creek, Mich. The
Washington committee engaged in
drawing up standard plans for canton-
ments and government buildings in-
cludes George W. Fuller '90, and Leon-
ard Metcalf '92.

TRAINING 107 AS FLYERS

Institute Instructing Men To
Man U. S. Airplanes

Seventeen men detailed to the Avia-
tion Section of the Signal Enlisted Re-
serve Corps arrived at the Institute
from Plattsburg last week to begin
work with the 107 men already quar-
tered in the temporary barracks in the
Morgue. This detail will be in addition
to the twenty-five men scheduled to
arrive each week from other parts of
the country. Men from all over the
United States will come in groups of
twenty-five every Monday until the total
equipment at Technology numbers
200.

The life of the aviation cadets is one
of routine. For the first four weeks
the men receive military drill from 5.30
o'clock in the morning until it is too
dark to maneuver. During the second
period of the eight weeks' stay at the

(Continued on page 4)

Uncle Sam Picks Technology as Reserve Officers' School—Present Course Needs But 500 Hours Military Work

DIPLOMA WILL CARRY COMMISSION

The War Department has authorized
courses of instruction at the Institute
for coast artillery, engineer, signal and
ordnance units of the Reserve Officers'
Training Corps. A student who has
been enrolled in these courses for four
years, and who has attended a four-
weeks' camp of instruction, will be en-
titled on graduation to a commission
as reserve officer.

This decision is reached as the result
of the recommendations of the Board
of Army Officers appointed last March.
Two of its members, Major Edwin T.
Cole, U. S. A., retired and Major Fred-
erick B. Downing, Corps of Engineers,
belong to the Institute Faculty.

The recommendations of the Board
contemplate the assignment of three
hours a week for the first two years,

and five hours a week for the last two
years, to work of a military nature.
Part of this time is represented by
studies already in the Institute curri-
culum, as freshman drill, surveying,
physics, heat engineering, electrical en-
gineering. The rest will be work along
regular military lines,—for example,
men enrolled in the Coast Artillery
Unit will be expected to devote two
hours a week for the last two years to
Coast Artillery Material and Coast Ar-
tillery Drill. The Institute courses in
connection with which this work is ar-
ranged are Courses I, II, III, VI, X, XI,
XIV and XV; but the report specifi-
cally states that other students may
take these courses and receive certifi-
cates of work done. The board further

(Continued on page 3)

WILKINS '18 CHAIRMAN JOINT COMMITTEE'S EXECUTIVE BODY

Committee of 25 Formed When U. S. Entered War to
Keep Students Posted Will Continue

"EFFICIENT SERVICE TO U. S." SLOGAN

On Friday last President MacLaurin
announced the appointments for the en-
suing year for the Executive Committee
of the Joint Committee on National
Service. Three of the undergraduate
members, E. P. Brooks, J. M. DeBell
and L. L. McGrady, have retired, by
reason of graduation from the Insti-
tute. The Committee for the year 1917-
1918 stands as follows:—

R. A. Wilkins, 1918, chairman.
Major E. T. Cole.
W. Eastman, Jr., 1918.
Professor Henry Fay
Professor E. F. Miller.
Professor C. H. Peabody.
Professor H. G. Pearson.
W. P. Ryan, 1918.
R. W. VanKirk, 1918.

Origin of the Joint Committee

The Joint Committee on National
Service was created soon after the be-
ginning of the war for the purpose of
collecting and disseminating reliable in-
formation for the student body with re-
gard to military matters, and to give
them advice concerning the perplexing
situation in which members of the un-
dergraduate body found themselves.
The committee was the result of a plan
originated by L. L. McGrady and E. P.
Brooks, and was at once given recog-
nition by Dr. MacLaurin. It consists of
twenty-five members, with Dr. Mac-
Laurin as chairman, chosen from the
undergraduate body and from the Fac-
ulty. An executive committee of four
Faculty members and four undergradu-
ates was at once appointed, the chair-
man of this committee being John M.
DeBell, president of the Senior Class.

Activity of the Committee

At the time when the committee
came into existence there was great
restlessness and uncertainty amongst
the members of all the classes. The vol-
unteer fever, the desire for expressing
patriotism in immediate action, which
was found in all colleges, was very ac-
tive at Technology.

The first duty of the Joint Com-
mittee was to reiterate the requests
made to the student body by Dr. Mac-

Laurin, and by the Preparedness Com-
mittee, not to be stampeded into hasty
action. This appeal was directed par-
ticularly to the members of the lower
classes. Speakers were obtained who ad-
dressed the Sophomores and the Ju-
niors and urged them to continue their

(Continued on page 4)

NAVAL COURSE ENDS

Intensive Work Fits Men For
Government Service

About forty-five men completed a ten
weeks' intensive course in Naval Archi-
tecture at the Institute last Saturday.
These men were ordered to report yester-
day at the Charlestown Navy Yard,
where they will take four months of
additional training, after which they
will all go immediately into government
employ with special rating.

The Naval Architectural Course at
the Institute was the culmination of a
plan of Professor C. H. Peabody, head
of the Department of Naval Architec-
ture and Marine Engineering, which
had to be developed almost upon the
spur of the moment when the abnormal
demand for naval designers came from
the government.

Under the direction of Professor C. H.
Peabody, Professor George Owen and
Evers Burtner, the men have received a
thorough course in all of the principles
of Marine Engineering and Design. Two
hours of each day have been devoted to
lectures, five have been spent in the
drafting room, and three required for
outside preparation.

The course included lectures on the
fundamental proposition of ship build-
ing, displacement and stability, the co-
efficients of safety, the theory of
launching, and questions pertaining to
power and speed of ships. Admiral D.
W. Taylor, U. S. N., under whose juris-
diction such matters as this course
come, has expressed himself as heartily
approving.

The Tech

Established 1881

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

Published bi-weekly during the college year by students of the Massachusetts Institute of Technology.

MANAGING BOARD

Paul C. Leonard, '17.....Acting General Manager
Kenneth Reid, '18.....Acting Editor-in-Chief
Donald D. Way, '19.....Managing Editor
Richard A. Wilkins, '18.....Acting Treasurer
Saxton W. Fletcher, '18.....Acting Advertising Manager
Augustus P. Farnsworth, '19.....Circulation Manager

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.; 152 Purchase Street, Boston, Mass. News Phones, Cambridge 2600, Main 3510. Business Offices, Charles River Road. Business Phone, Cambridge 2600.

Although communications may be published unsigned if so requested, the names 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.

TUESDAY, JULY 3, 1917

TECHNOLOGY ANSWERS THE CALL.

HOWEVER well ordered and smooth running may be the machinery of a great democracy, those principles of centralization, that act must call to position of responsibility the highest intellects of the country.

This war as carried on is science developed to the point of most detailed application, and, hence, calls for the scientific mind to assume control. The man who can analyze, systematize, apply himself to a problem and solve it, creating his own formulas where those be lacking, is the man that the country needs, and thus Technology finds itself suddenly the most recognized educational institution in the country, recognized by educators, by the public, and by the government as the one institution capable of solving the Nation's problems, of turning out men of the type and calibre needed.

It is as if Destiny herself had led Technology in its progress from the old, dusty school of yesterday to the great school of today, fully equipped, fully organized, splendidly housed, standing with its great doors swung full wide, through which the marshalled forces of the government pass, young men picked from the best, to be rounded into the Technology man who now stands as the highest expression of education and training.

With what pride should the hearts of Technology's sons and daughters swell as they and their college swing into the measured tread of a whole nation marching on to war, realizing that theirs is the lead, theirs the honor of being the example for all others to follow.

In time of individual trial and tribulation Technology held her own, and now in time of national trial, when all but the absolutely essential, the vitally important to national safety, and development, is being eliminated, Technology looms above all else, essential in its entirety, not one whit weakened, not in one point found wanting, the foundation and the corner-stone of national education and national service.

THE WAR TECH

IN the midst of unusual conditions, Technology and her sons are finding their places in Government service.

The problem of the undergraduate and of the alumnus is one and the same,—to serve the Nation in the most effective way.

Co-operation, the watchword of the New Technology, now the watchword of the Nation, has solved the problem.

The Alumni are interested in the work of the undergraduates. The undergraduates are interested in the work of the alumni.

All Technology men must be kept informed of the vast work as it progresses.

In order to combine the alumni news service with that of the undergraduates, we are presenting you with the War Edition of The Tech.

We are now the authorized channel for all information and news to reach Technology men.

Do your part by furnishing us with the information, we will spread it.

PASSING ON THE RUMOR

ONE of the dangers contingent upon the present state of war excitement is the tendency of people to perpetuate scraps of inaccurate and unreliable information, enlarging upon them until they become stories wild beyond the greatest fancy of their originators.

It is very human to exaggerate, so let us be on our guard against hearsay news. If we are to presume to pass on information to others, let us make sure of the source of that information and we will save much confusion and wasted worry.

Volume XXXVII wishes to announce several changes in the managing board. The installation of Paul C. Leonard, '17 as General Manager brings The Tech for the first time under the direction of an Alumnus, the Committee on Publications deeming it wise to make this innovation in view of the sudden expansion of the paper to serve as both an alumni and an undergraduate organ. K. Reid and R. A. Wilkins '18 are serving temporarily as Editor-in-chief and Treasurer, to fill vacancies left by the resignation of Alfred N. Pray and the absence of J. Meader.

40 TAKE ENGINEER EXAMS

Try for Provisional Commissions
As Second Lieutenants

Forty Technology men completed their examinations for provisional second lieutenants in the Corps of Engineers, U. S. A., last Friday. All those who have passed will be detailed at once for active duty for there is a great dearth of army engineers at the present time.

Special free courses have been given by Institute professors to cover an intensive review of all subjects necessary for examinations. Major Frederick B. Downing, who was detailed to Technology at the beginning of last year to supervise the work of the M. I. T. Reserve Officers' Training Corps, was chairman of the examining board.

ALUMNI CAN MAKE DRAFT SELECTI

(Continued from page 1)

tenance of national interest during the emergency."

It is apparent that the purposes of the Conscription Act may be wholly defeated unless the Exemption Boards are made up of citizens of the highest type, and we hope that all good citizens will interest themselves in the accomplishment of this ideal. It is also evident that the District Boards are to have an important relation to the subject of our Bulletin No. 1—the conservation of industrial personnel—as they will have exclusive jurisdiction over the exemption from draft of industrial employees whose work may in many cases be essential to the maintenance of production in plants engaged in the manufacture of munitions and similar products. Technology men should be especially interested in seeing that each such Board includes at least one industrial leader, with a thorough understanding of the relations of production and personnel.

It is suggested that at least one such man of the highest type be urged in each Federal judicial district to make application to President Wilson for appointment on his District Board; and that the Technology Preparedness Committee join with other local college organizations, and engineering and technical societies in having endorsements of such men sent to the President. The original application together with letters of endorsement should be mailed directly to the President at the White House, and a copy of the application and letters of endorsement should be mailed to the Provost Marshall General, U. S. Army, Washington, D. C.

It is of the highest importance that these boards be kept out of the hands of the politicians, and that their members shall be citizens of the highest type, some of whom, in each case, shall be qualified by training and experience to understand the problems of industrial production and personnel on which they will have to pass. Get your Committee together and make it your job to see that the right men are appointed.

A real national service will be performed if, in this way, the decisions of the District Exemption Boards can be based on a full understanding of the industrial needs of the country.

We request that you get your Committee together promptly to discuss the best means of co-operating with other local agencies in carrying out these suggestions. Please advise us promptly of the program you adopt.

TECHNOLOGY CLUBS ASSOCIATED,
Maurice R. Scharff,
Executive Secretary.

COMMITTEE ON MOBILIZATION OF
TECHNOLOGY'S RESOURCES,
I. W. Litchfield, Chairman.

TECHNOLOGY'S REAL OPPORTUNITY FOR SERVICE

Responses to our requests for the expression of technical public opinion through the Local Committees have not met our expectations. We believe that the explanation is that Technology men, like other American citizens, do not yet fully realize that we are at war.

Do you know that there is grave danger of the breaking down of some of our allies within the next six months unless we do our part in the furnishing of men and supplies?

Do you know that we cannot furnish the supplies if industry is disorganized by haphazard methods of volunteering and conscription?

Do you know that we can deliver neither men nor supplies unless there is immediate progress on the construction of ships on a program far larger and more rapid than has yet been formulated?

Do you appreciate that these things will not be accomplished except through the pressure on Washington of the influence of the intelligent public opinion, and especially of the technical

The Advantages We Offer

An efficient and courteous organization, progressive methods, large resources and three offices, conveniently located in different sections of Boston, combine to make the Old Colony Trust Company the most desirable depository in New England.

Capital and Surplus.....\$ 13,000,000

Total Deposits over..... 130,000,000

Old Colony Trust Company

52 TEMPLE PLACE 17 COURT STREET 222 BOYLSTON ST.
BOSTON

public opinion, of the country?

Do you realize the increased difficulties that will be involved in bringing the war to a successful conclusion if these things are not accomplished?

We urge you to recognize the seriousness of the situation. Call a meeting of your local Club and drive it home to your members. Tell them to go out and impress it on their friends. Reorganize your local committee, if the members will not give their time to the work. And get us results that will count in connection with Volunteer Enlistments, Selective Conscription, and Exemption Boards.

MAURICE R. SCHARFF,
Executive Secretary.

THE TECH MAIL BOX

Camp Cunningham,
Technology, Maine.
The Dusties

Among the 83 soldiers at Camp Cunningham, there are 15 who have become linked together under the significant banner, "Dusties." Needless to say, they comprise the advance guard which was sent to East Machias, detailed to build the barracks and make the camp ready for the main body of troops.

In order that everyone may know who the "Dusties" are, and what they have done, we will review their register and history.

Officially their names appear as Captain Smith, Mascot Eddie Russell, 1st Sergeant R. F. Lewis, Corporals C. L. Svenson and M. Untersee, and Privates C. P. Davis, N. D. Connors, C. Lucius Bond, R. P. Hackett, Postmaster W. H. Banks, Jr., R. W. Gleason, W. R. Mackay, F. P. Reynolds, C. E. Little and E. R. Etherington, but these titles are cast to the winds around camp, as there they are known as "Cap" Smith, Eddie, "Bob," "Swede," "Max," "Cut," "Connie," "Clint," "Bob," "Bill," "Framingham" alias "Normal School," "Poor Lady Alice" and "Old Woman Mac," "Bunnie," "Edna," and "Eric" alias "Bookie."

The "Dusties" had finished their work; the other squads had scarcely arrived before they were challenged to a ball game which is scheduled to be played the 4th of July. The "Dusties" will show up strong on the track and in the lake on that day also.

Bemis Hall is nightly surprised by a loud laughter from one corner where the "Dusties" plunk the old lady in their quiet little game of hearts. This does not mean that they are houseless. Only last Saturday night, the "Dusties" with their mascot hiked down the road and incidentally killed a large size porcupine, after which they returned to camp with quills in their shoes, hands and hats besides their pockets.

Such are the "Dusties" and their doings to the present writing. Now watch them come!

Homer F. Livermore

INCORPORATED



85 and 87 Pearl Street
BOSTON

Results of the Mellin's Food Method of Milk Modification



Joan A. Wales



Ronald J. Berce



Ronald J. Berce

"We are advertised by our loving friends"

Robert A. Boit & Co.

40 Kilby Street

Boston

INSURANCE
OF
ALL KINDS

366 DEGREES GIVEN AT WAR-TIME GRADUATION

Crowding Class Doings Into One Day, 1917 Musters Large Percentage for Commencement, Including Plattsburg Men

NO SHEEPSKINS THIS YEAR

With a greater percentage of her Seniors present than any other college will probably muster for graduation this year, the Institute held a war-time commencement in Lowell Court June 12, when 366 degrees were conferred. Technology men from Plattsburg attended the Senior festivities, graduation class day and the Alumni celebration, which were crowded into one day.

Parliament for the diplomas being unobtainable on account of the war, a small blue certificate was given each Senior instead of the usual document. After peace has been declared the 1917 men will receive their sheepskins, but for the present will have to be content with paper ones.

"This year's graduating class," said President MacLaurin in his address to the Seniors, "has had the privilege of setting in motion the machinery of the student life at the New Technology and have acquitted themselves well." But all has been overshadowed by the great incident—the War, about which President MacLaurin said:

History Repeats Itself

"It is a strange coincidence that both the old Technology and the New should have been born in the midst of a great war, the Old having received its charter in 1861, just ten days before the clouds burst in civil war. Great good came out of that terrible struggle and Technology men contributed to the good in the critical years that followed the actual conflict, and now, more than half a century later, you are to have a far greater opportunity of service. On you is the burden of this war and to the great reconstruction that will inevitably follow it. You have had the right kind of training to make you useful both in war and peace. In the classrooms and laboratories your training has been primarily scientific and the best permanent possession that you can have acquired as a result of that training is a real appreciation of the spirit and the method of science, the insistence on facts, however ugly, the need of foresight and of orderly procedure, and the insight into the vast resources of nature and the realization of the dependence of man's progress towards civil or towards good on the mastery of those forces.

Teuton Inhumanity Not Due to Science

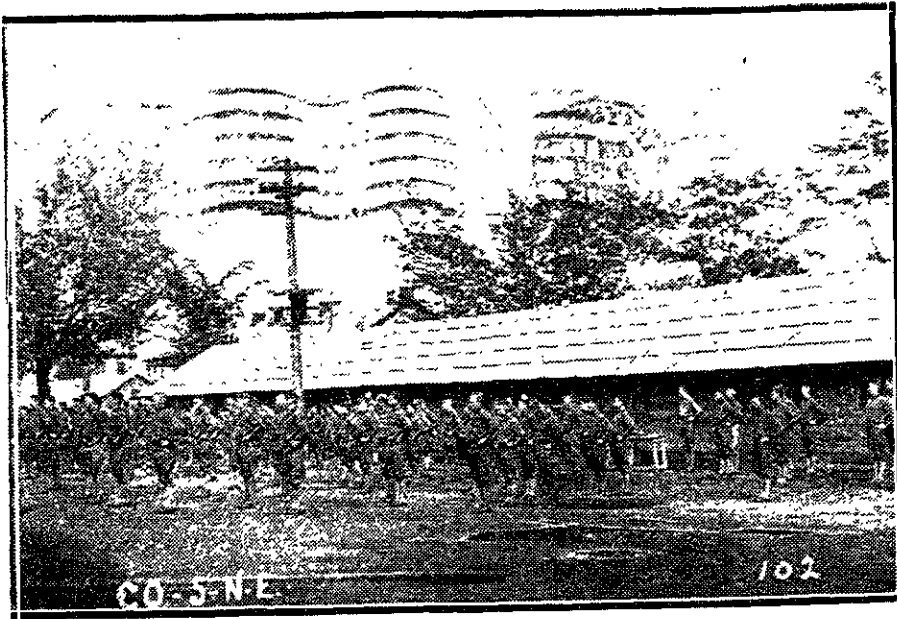
"Of this you have learned at least a part but you have learned more. You have learned from intercourse with unselfish and high-minded teachers, and possibly even more effectively because more unconsciously from association with your fellow students, the need for more than science and more than efficiency, the absolute duty of regard for other people and the willingness to serve them when you can. There is nothing unscientific in this. There is no ground for the antithesis so often set up between science and humanism. Superficial people talk today of German inhumanity in the conduct of the war as if it were due to scientific education. They even use this as an argument for the revival of the fact that there is far more study of the classics in German schools than in America. The fact is, of course, that sympathy with others, which is the basis of what we call humanity, goes far deeper than any such learning as either Greek or Chemistry. All educational systems wherever maintained must foster this sympathy and happily there is ample evidence that it is found at Technology in ample measure.

Seniors Not Slackers

"Most heartily do I congratulate the graduating class on the fact that so many of its members have throughout their career here shown a willingness to put self aside and to serve their fellows in a manner that is beyond all praise. The man with the right spirit finds for himself the opportunity for service and many such opportunities have been found in the realm of Technology during your residence here. And now comes the far greater opportunity that none can fail to see and I doubt not that many of your number are ready to give the last full measure of their devotion to the great cause. It is the cause of freedom and of humanity in which we as a nation have enlisted in a spirit of chivalry that must bring out the best that is in us. Let there be no slackness of will nor flappiness of sentimentality, but a manly devotion to high causes at whatever cost.

"Whether you go into the fight or not, whether you be active or inactive in the reconstruction that will follow

Plattsburgers Get Together



(Special to The Tech)
PLATTSBURG BARRACKS, Plattsburg, N. Y., June 9, 1917.—It was officially demonstrated here tonight that a Technology man remembers freshman drill for at least 25 years at the first dinner of the Technology Club of Plattsburg Barracks, when a call for classes produced a "rookie" who graduated in '92.

The debut of this youngest of Technology Alumni Associations was signalized by many other striking particulars. Undergraduates and prospective "degreeists" and "also rans" were not shoved back, but occupied the front tables. It was for many the first "real coffee in china cups" in four weeks and in many ways proved how great an appetite a month of army mess can produce. Naturally all were in uniform and—unnaturally—all stood at attention until the command "Company Seats" was heard. In place of the mad scramble of the customary dinner in the old Union or the Caf.

H. E. Loddell '17, as Cheer-leader and "Band-sergeant," managed to rise unassisted, stand on his chair, and lead a "regular M. I. T." with three "Plattsburgs" with a borrowed swagger stick. The enthusiasm showed the anxiety of 16 men standing before heaping plates of fried chicken and strawberry shortcake, and when they actually began consumption the noise completely suppressed the "battery" of Victrolas hired for the occasion.

Chairman Macomber in his introductory remarks referred to "this

unique dinner" and "motley assemblage" amidst applause and when he announced that the "usual speeches are to be cut out" he fully grasped the attention of all present. He called it "an informal gathering together of Tech men" and said—"If you don't know the next man's name slap him on the back and look at his tag." A voice in the corner whose possessor had evidently just been "shot" for one of the half dozen or so possible diseases warned him to be "careful of the left arms."

Mr. Macomber then spoke of the alumni work on National Defense; of the questionnaire sent out some months ago and how this form had been adopted by the government as the most complete circular of its kind. As a result of this classification over 300 Institute alumni have been called for service in their special line of training.

Brooks '17, covered the undergraduate side, producing laughter when he told how "the war struck Tech in the midst of the midyear vacation." He qualified this by saying that "it nearly knocked us out." He traced the work of the Preparedness Committee in which they consulted men like the head of the General Electric and the President of the Fore River Shipbuilding Co., etc., of the Joint Committee, particularly emphasizing the spirit of co-operation shown; and of the summer camp proposition. As Brooks had not received his degree it was thought improper to cheer for him and to allay the pen-up enthusiasm the gathering gave a "We are Happy" for "Charlie."

the war, you who go out into the world now cannot avoid contributing something either to the success or to the failure of the world. It is therefore with no ordinary emotion that we see you go, with the hope and expectation on the part of the Corporation, the Faculty, and the Alumni that you will prove worthy of the Institute, that through your graduation today, you are henceforth entitled to represent.

TO OUR PRESENT SUBSCRIBERS:

Having read the announcement on the front page, you will want to come in on the new plan, therefore:

1 Alumni subscribers, who have not yet paid, should remit one-fifty instead of one dollar, and have their subscription extended for the fifty-three issues.

2 Alumni subscribers, who have already paid one dollar, may have their subscription extended by remitting an additional fifty cents.

3 To undergraduate subscribers who are having the paper sent this summer, but who will return to school and get the paper by subscription books in the fall, THE TECH will be sent until October First, or you may extend your subscription as per the above offer to Alumni.

4 Undergraduates holding subscription books this summer, are entitled to papers until October First, at which time new subscription books for the school year will be offered for sale as usual.

5 Faculty subscribers may have their subscriptions extended under the new plan by paying the additional fifty cents. Papers will be delivered or mailed as they wish.

The subscription price is now due. Make checks payable to: THE TECH, Vol. 37. Address all communications concerning subscriptions, change of address, etc., to: Circulation Manager, The Tech, Charles River Road, Cambridge, Mass.

MASSACHUSETTS EDUCATORS CONVENE AT TECHNOLOGY

Spend Spare Time in Visiting Institute Buildings

Technology has been selected as the rendezvous for the school administrators and teachers who are now here for

a five days' conference under the direction of the Massachusetts Board of Education and the American Institute of Instruction. The spare time which the visitors have had between the numerous lectures delivered by notable educators has been employed in carefully conducted tours about the Institute buildings, through the famous mechanical, hydraulic, and chemical laboratories, the library, and other interesting points in the buildings and on the grounds.

Both the morning and afternoon of the first day were spent in discussions on educational problems by noted Massachusetts educators and a few from distant states. In the evening a dinner was held in the Caf where a discussion of the critical conditions of education which are existent at the present time was led by Frederick P. Fish, Chairman of the State Board of Education. James P. Munroe '82, Secretary to the Institute Corporation, the toastmaster of the evening, spoke about the abnormal educational conditions brought on by the war, which are a vital test for the educational systems in this country.

INSTITUTE SECOND WEST POINT

(Continued from page 1)

recommends a special option for the aviation service. The recommendations of this board have been approved by the Faculty and the War Department and are to take effect on September 1, 1917. The summer work now being done by Juniors at Cambridge has been undertaken by them in order that they may have time free next year to take the amount of work necessary in one year for them to qualify for commissions in June, 1918. The Sophomores, at Camp Cunningham, East Machias, are working to the same end, their hopes being to qualify as officers in 1919.

By this means the Institute hopes to provide the United States Government with a group of men in 1918 and 1919 who, in addition to their training as engineers, have had sufficient military training to entitle them to commissions in the Reserve Corps.

Technology will do more for her sons in service than any other college.

PROFESSOR CROSS RETIRES AFTER 46 YEARS' SERVICE

Professor Wilson Will Succeed Him as Head of Physics Department

A veteran of forty-six years' work in the Physics Department of the Institute, Charles R. Cross, Thayer Professor of Physics in charge of the department and director of the Rogers Laboratory of Physics, has retired and become Professor Emeritus. His successor will be Edwin B. Wilson, hitherto Professor of Mathematics at the Institute.

Professor Cross, who was born in Troy, N. Y., received his degree from the Institute in 1870 with the third class to graduate. He returned to college the year after his graduation as an assistant professor in physics and retained this position until 1875, when he also taught Astronomy and Descriptive Astronomy. In 1878 he became a Thayer Professor of Physics and has been a director of the Rogers Laboratory of Physics since 1886. In 1907 he was placed in charge of the entire Physics Department at the Institute.

Professor Cross is one of the foremost physicists in the country and his work is known throughout the world. He has spent much time in scientific research and has been continually called upon by firms all over the country for advice as a consulting physicist. For many years he specialized in acoustics and gave to the world much of the valuable data which is now available upon that subject.

It was due to his efforts that in the early eighties a course in Electrical Engineering was instituted in conjunction with the regular physics course and later this became a separate course which has developed so that now it is one of the largest at Technology.

Professor Cross has been for several years chairman of the Rumford Fund Committee in the American Academy of Arts and Sciences, devoted to forwarding scientific research, and is chairman of the Research Committee of the Committee of One Hundred in the American Association for the Advancement of Science. He is also a member of many noted scientific organizations both in this country and abroad.

Professor Cross, upon being interviewed by a reporter from The Tech, said: "I am leaving Technology and the department in as good condition as it has been in several years. The man who has been chosen as my successor is certainly a very able man and I look to see the department flourish under his guidance."

When asked if he had been doing any research work lately he replied: "I have had very little time of late owing to my having given so much of it to the Institute. I may do some later."

In regard to his plans for the summer he said: "I don't know what I shall do this summer. My plans are very unsettled, but I shall probably spend the greater part of the summer at my home in Brookline."

At the recent election of the faculty, Professor E. B. Wilson of the department of Mathematics, was placed in charge of the department of Physics, a position made vacant by the retirement of Professor Charles R. Cross.

Professor Wilson is a Hartford, Conn., man and has the degree of A. B. from Harvard and Ph. D. from Yale. He has also done much post graduate work abroad at the Sorbonne and the College de France. In 1900 he was made instructor of mathematics at Yale, which position he held for six years, and for the next two years, the position of associate professor. He was called to the Institute in 1907 as an associate professor and was advanced in 1911 to the rank of professor. Although officially a mathematician, Professor Wilson has made an extended study of the physical aspects of the subject and did thesis work along special lines while at Yale, where he was a student under Professor J. Willard Gibbs. He has written several text books along these lines besides doing much special investigation work in making formulas for the flow of electricity, heat and radiation.

Professor Wilson is a man of great breadth and understanding, as is shown by the fact that he was elected by the National Academy of Science for editor of its Transactions, a position which, on account of the special character of the papers and the profound nature of their contents, requires the ability of a man of his calibre.

At the Institute, there has been evidenced by official actions, an increasing desire to keep in touch with the business needs. This has been shown by the addition to the course of Chemical Engineering of the practical training during which the students travel about the country studying practical work, by co-operation in electrical methods with telephone companies, by the appointment of advisors in Naval Architecture, by the special vacation courses in the summer, by the relationships maintained with great mining interests and the efforts to keep closely in touch with the commercial world in this sub-

The Tech Caf



Open Daily and Sunday
Until Further Notice



Hotel
Lenox

An hotel which has the atmosphere of a college club.

Historic as a stopping place for University Athletic Teams.

Unusually attractive to college men—graduates or undergraduates.

Popular for its dances in the Rose Garden from 10 P. M. to 1 A. M. Saturdays 9 P. M. to 12 P. M.

L. C. Prior, Managing Director

TRY Rupert Lunch For Good, Wholesome Food

NEAR THE M. I. T. DORMS

Tel. Camb. 25277

Discount on Meal Tickets

ject. In physics, in the same way, the officials have seen the necessity of keeping abreast of the commercial developments and specialties of this subject and also strengthening it along the lines of physical and mathematical research. With its new buildings and equipment, Technology has given, at this time, the control and building up of this subject to the direction of Professor Wilson.

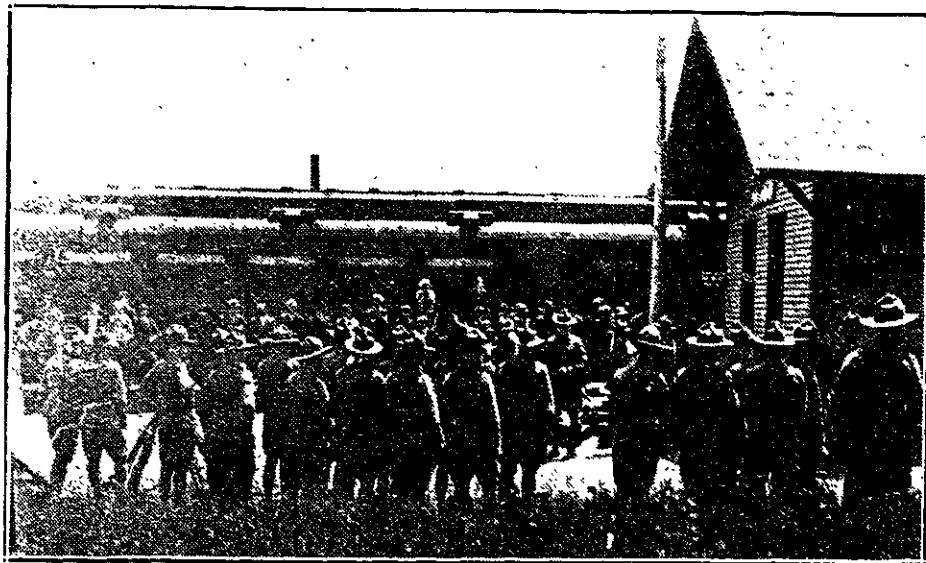
J. M. CRAFTS, INSTITUTE PAST PRESIDENT, DECEASED

Distinguished Chemist Headed Institute 1898 to 1900

Last week flags were flown at half mast in tribute to Professor Crafts. President of the Institute between the years 1898 and 1900, whose decease recently occurred.

James Mason Crafts, former President of the Institute and distinguished chemist, died two weeks ago Wednesday, word of his decease being received from his summer home in Connecticut. His death was due to heart trouble, and leaves but two former presidents of the Institute living.

Sophs Detraining At Machias



While the buildings in Cambridge are teeming this summer with students taking special courses made necessary by the declaration of war, the summer engineering camp at East Machias, Me., has become even busier than in former years. Three groups of students have already been assembled there pur-

suing some of the six special courses which are intended to satisfy needs in warfare that can be supplied by technically trained men. Work at the camp is in addition to these studies. The above photograph shows a group of Sophomores detraining at the little station at East Machias.

TECHNOLOGY MEN AT CAMP CHOOSE BRANCH OF SERVICE

PLATTSBURG, N. Y., June 30, 1917.—The first week after the reorganization of the camp into the different branches of the service found the Technology men considerably disorganized, and "the Technology Club of Plattsburg" has lost its staunchest members. One week ago today the change took place and the candidates were grouped into the different branches.

Most of the Institute men desire to enter one of the technical branches of the service, such as, the engineers, the Coast Artillery or the Field Artillery. The "Engineers" required at least two years' practical experience and an oral examination for qualification was given. However, a number of men of the 1917 class without previous experience were selected.

The Coast Artillery was also a popular branch and incidentally the three reserve officers of this branch who were stationed at Plattsburg Barracks are Technology men: Professors Perry and Green, formerly of the Electrical Engineering Department, and Clayton '17. These are all first lieutenants in the C. A. O. R. C.

Only 100 Coast Artillery men were to be selected and there were over 300 applications. When the list of successful men came out on the bulletin board many were surprised and disappointed to find that they were not included.

A rumor came out—as it always does around camp; but strange to say, this one was confirmed at headquarters—the men for this branch and the Field Artillery were picked by LOT. This was productive of much discontent. To show how it "worked out" a man who was a graduate of the Institute with three years' teaching experience was thrown down and another who left Technology a year after entrance was chosen. This is the only "kick" the Technology men have registered.

The Coast Artillery men left for Fort Monroe, Va., and the engineers for Belle Voeur, Va. The Field Artillery were to leave next week for Syracuse, N. Y., but the order has been revoked. Besides there will be nine infantry companies and two troops of cavalry in the New England or 1st training regiment. The cavalry are drilling as dismounted troops and it is a frequent joke to ask a cavalryman about his "horse . . . chestnut."

Several newspaper articles have been published—notably an editorial recently in the Boston Transcript—about the "poor conditions" here. In the belief of practically every man these are due to false information. The instruction is excellent, and the marvellous way in which cantonments and messing facilities for 5000 men were provided in less than three weeks reflects much credit on the efficiency of the Commanding Officer and his staff. The mess is "O. K."—and is so pronounced by men who have been used to the best clubs and hotels.

Every man has been assured of active duty unless he is notably deficient in personality or aptitude. Ten per cent are to be chosen as provisional second lieutenants in the regular army; about 30 per cent for the officers of the first overseas contingent of 500,000 men. Of the remaining 60 per cent about 10 per cent will be taken for aviation work in the Signal Corps and for quartermaster work. The others will be on duty with this 500,000 contingent as instructors at the concentration camps. The aviation men from this regiment are sent to the Institute for "ground school training"; the details of their work are elsewhere described.

SIXTY TAKING FOUR WEEKS' NAVAL COURSE AT INSTITUTE

Captain James P. Parker of the national naval volunteers is now in charge of the sixty men in the cadet training school for the first district at the Institute. The men who started work last Monday will receive instruction from naval officers in courses lasting four months similar to those given at Annapolis and leading to a commission as Ensign in the Naval Reserve.

The cadets are now quartered in room 2-190, where every effort is being made to imitate living conditions on ship-board. Already the quarters have been nicknamed U. S. S. Newton in honor of the great physicist's name which is inscribed on the pylon containing the section of rooms reserved for the seamen, and the Caf is known as the mess room. Instruction in navigation, charting, signalling and general tactics is being given in the class rooms in building 2, while the larger operations, including the technique of handling large guns and other cumbersome equipment, will be carried on in the mining laboratories. Provision has also been made for practicing seamanship, one cutter already being moored near the Technology landing, while it is expected that several more will be detailed to the Charles River Basin when the men commence their actual work on the water.

The cadet school was the ninth to have been started at the Institute since the entrance of the United States into the war.

Technology men have mobilized. Technology women, your turn now.

TRAINING 107 AS FLYERS

(Continued from page 1)

Institute the flyers receive instruction in radio, aerial navigation, gasoline engines, and bombing, from the regular Institute instructing staff.

The monotony of the strict military life was broken for fifteen of the men a week ago Sunday when they were entertained for luncheon and dinner by Mrs. Edward Cunningham, donor of the Sophomore Summer Camp Fund. After dinner the men heard a talk by Thomas M. Perkins, of Robesgray, Boyden and Perkins, noted Boston bankers, on his experiences in Petrograd during the Russian Revolution and the overthrow of the Duma.

Upon finishing their course at Technology, the airmen will be sent to one of the government flying schools at Mineola or Tampa, for instruction in the actual handling of planes in the air, and after receiving their pilot's licenses and commissions as First Lieutenants, will be sent to France for duty. The military staff at the Cadet School of Aeronautics is, Captain B. U. Mills, U. S. A., Commandant; Lieutenant E. J. Wesson and Lieutenant C. H. M. Roberts, U. S. A., assisted by a student group, Charles G. Miller, Arthur F. Benson and Leon L. McGrady. The Technology staff is headed by Professor C. H. Peabody, assisted by Professor R. DeC. Ward, who has been transferred for the occasion from Harvard, in meteorology, and a group of instructors and assistants, Messrs. Klemin, Fales, Carlson, Marston and Matthewson, together with Francis Victor duPont, who graduated recently.

Help by sending your name and service to the Mobilization Committee, Cambridge.

ALUMNI NOTES

Owing to the consummation of the new plan, and the publication of news regarding the war activities at the Institute in other columns, it will be unnecessary to cover these subjects in the Washington Bulletin, as it was intended and announced last week.

Personal Items. The Secretary attended a "war meeting" at the home of D. K. Bullens '09, just outside of Philadelphia, on June 23, and met among others, H. A. Terrell '06, H. L. Walker '05, E. P. Trask '09, E. C. Pierce '09, Col. D. A. Lyle '84, A. P. Brown '14, D. N. Frazier '11, H. L. Moody '07, C. F. Willard '01, and their wives.

Cantonment Construction. In referring to Technology men on cantonment construction work, we unintentionally omitted the mention of W. J. Roberts '91, who is serving as Civilian Engineer on the cantonment at American Lake, Wash.

Stone and Webster are contractors on the cantonment at Fort Sam Houston, Tex.

The Secretary met F. F. Longley '05, while visiting the cantonment site at Wrightstown, N. J., recently. Mr. Longley is engaged in engineering work there, under the direction of Allen Hazen '88. Capt. T. H. Skinner '92 R. O. T. C., is assistant to the Constructing Quartermaster at this site.

Among the assistants to Morris Knowles '91, engaged on the Annapolis Junction, Md., cantonment are A. B. Morrill '09, and F. C. Foote '16.

American University. The Secretary and I. W. Litchfield '85, visited the Engineer Officers' Training Camp at American University, Washington, recently, and met A. Macomber '07, L. E. Moore '02, A. L. Shaw '09, E. A. Ware '09, and E. P. Brooks '17. There are said to be 20 or 25 more Technology men at this camp alone, and a full list of them, with a letter about their experiences, will be published in a future issue.

Will not some Technology man in each of the training camps make up a list for his camp and send it in, with an occasional letter about their doings?

Washington Callers. Among those who have called this week have been: A. J. Ortseifen '05, interested in building wooden ships; J. A. Herlihy '11, and L. S. Baird '14, arranging to take the examination for Supply Officers in the Aviation Section of the Signal Corps. Also, James S. Brown '05, Dr. E. W. Washburn '05, R. W. M. Hard '09, M. P. Potter '00, B. P. Flint '88, A. E. Hanson '14, and H. S. Whiting '06.

Government Requirements. The expansion of the technical services of the government is beginning to develop on a large scale. During the past few days, we have been asked to assist in finding qualified men for the following services:

Chief Inspectors of Engineering Material, Aviation Service (it is expected that eventually several thousand assistant inspectors will be required); one hundred and fifty assistants in the Ordnance Department for collection, securing deliveries, and shipment of ordnance supplies; metallurgists in the Ordnance Department and the Aviation Service; physicists in the Aviation Service, and a number of special positions.

Civil Service. Full particulars can be obtained from the United States Civil Service Commission, Washington, from the nearest Civil Service Board, or from M. R. Scharff, Executive Secretary, 905 Union Trust Building, Washington D. C.

Public Health Reserve. Men engaged in sanitary work will be interested in the following resolution passed by the Senate last week and now pending in the House:—

"Resolved, . . . That for the purpose of securing a reserve for duty in the Public Health Service in time of national emergency there shall be organized under the direction of the Secretary of the Treasury, under such rules and regulations as the President shall prescribe, a reserve of the Public Health Service. The President alone shall be authorized to appoint and commission as officers in said reserve such citizens as, upon examination prescribed by the President, shall be found physically, mentally and morally qualified to hold such commissions, and said commissions shall be in force for a period of five years, unless sooner terminated in the discretion of the President, but commission in said reserve shall not exempt the holder from military or naval service. Said officers shall consist of sanitarians, senior assistant sanitarians, and assistant sanitarians, and when ordered to active duty in the service of the United States shall receive the pay, rank, allowances, and leaves of absence of surgeons, passed assistant surgeons, and assistant surgeons, respectively.

"Sec. 2. That for the purpose of carrying out the provisions of this act the

PROFESSOR MILLER BUSY

Give Institute Task of Supplying Merchant Steam Men

The task of supplying first and second engineers for the great steel merchant fleet building under Colonel Goethals has been given to the Institute by Henry Howard '85, head of the Federal Shipping Board. As its tenth school for war preparation a group of courses was started yesterday under the direction of Professor E. F. Miller, head of the Mechanical Engineering Department, for the quick training of engineers for ocean-going vessels. Similar courses will be given simultaneously at five other colleges in different parts of the country, Stevens Institute, Hoboken; Tulane University, New Orleans; University of Washington, Seattle; Armour Institute, Chicago, and Case School of Applied Science, Cleveland.

The purpose of these new schools is to prepare engineers for the merchant marine that is to be built. It is true that marine engineers do not exist in sufficient numbers for the coming ships, but on the other hand there is an abundance of men with practical experience in handling other engines, stationary and locomotive, who, knowing about steam, need only some special courses and some experience to make them competent Men who already have licenses as steam engineers of one kind or another will be given four weeks of intensive work directed particularly at the needs of marine engines. There will be eight hours of study a day, to include a good deal of laboratory work in the course. Some of the items to be considered will be valve setting, surface condensers, dry-air pumps, boilers, refrigerating machines, air compressors together with simple calculations. Some attention will be given to the strength of materials so that the engineer may be prepared to make quick, off-hand repair of breakages.

Following the studying there will be experience in the engine-rooms of coastwise steamers and the men will then be ready for well-paid positions in the merchant marine fleet, provided they pass the necessary examinations. In the matter of qualifications, the Government, while it holds to requirements of knowledge, has reduced the requirements in the way of experience, recognition being made of the technical schools, whose graduates may get licenses with but six months of actual work in the engine room.

Technology men can do more for Uncle Sam than any other body of men in the country.

sum of \$300,000 be appropriated out of any money not otherwise appropriated."

It is thought that this reserve may be drawn upon for sanitary men to be assigned to duty with the Army and Navy. Men interested can facilitate the passage of this resolution by writing to their representatives, requesting their support of Senate Joint Resolution 63.

Red Cross. The American Red Cross is seeking a number of men of the highest type to serve as Field Directors of Red Cross Work with divisions of the new National Army, and to accompany their divisions into the field. These are not technical positions; but technical training will be no disadvantage to men having the qualifications with respect to character, personality, executive ability and business experience, which are required. Among the qualifications stated in A. R. C. 171, are the following:—

- (1) They must be at least 31 years of age and preferably older.
- (2) They must give their services without compensation other than designated in (7).
- (3) They must enlist for the duration of the war, but applications for discharge or leave of absence, for good and sufficient reasons, before the conclusion of the war, will be given careful consideration; and favorable action will be recommended when the exigencies of the service permit it.
- (4) By the regulations governing the employment of the American Red Cross in time of war, approved by the Secretary of War, they are entitled to receive quarter and subsistence at Government expense, and will have accommodations in the barracks suitable to their rank.
- (5) They will be expected to keep themselves well informed as to the present and anticipated needs for the comfort, health and happiness of the men in the service.
- (6) There will be two or more Field Directors stationed at each military camp or base hospital, who will have the relative rank of Captain or Lieutenant.

The Secretary will be pleased to furnish further information on request.

A. SHUMAN & CO.

Clothiers and Outfitters

For MEN, WOMEN and CHILDREN

"MADE IN NEW ENGLAND"

Ashuman & Co.
Boston
THE SERVICE STORE.

WILKINS '18 CHAIRMAN JOINT COMMITTEE'S EXECUTIVE BODY

(Continued from page 1)

studies at the Institute, in order that they might be of use to their country as technically trained men on their graduation one or two years hence. At the same time it was desirable that members of the class about to graduate should be advised of the various opportunities for service which were immediately open to them. These tasks the Joint Committee undertook by means of bulletins which had the official sanction of Dr. MacLaurin's signature.

Meanwhile, it was desirable to devise ways by which members of the Sophomore and Junior classes could anticipate their studies of next year by means of summer courses, and thus qualify for enrolling in the military courses which the War Department was expected to recognize at the Institute. The result of much work along these lines is the present military camp for Sophomores at East Machias, Maine, called "Camp Cunningham," in recognition of the generous gift of Mrs. Edward Cunningham, which made the scheme possible, and the Junior school at Cambridge. The success of these camps and the splendid spirit shown by the students justify the Institute authorities in believing that there will be few, if any, further withdrawals from the Institute from the men in the Sophomore and Junior classes. As for the freshman class, there is every reason to believe that its membership will be practically intact next fall. It is gratifying to know that its records for scholarship in June were higher than the records of any freshman class for many years.

New Work of the Joint Committee. The Joint Committee for the summer and for the next school year has much important work before it. It plans to continue the issuing of bulletins; and the publication of The Tech twice a week during the summer will help in giving those bulletins much needed publicity. It proposes to keep a list of the military activities of all the members of the class of 1917, and of men who have been connected with the undergraduate body during the past year; it will continue to maintain its office in Room 3-203, and to answer all questions with regard to military matters. It stands ready to give its help in organizing the considerable increase in military work next fall which will go into effect as a result of the War Department's recent recognition of the Institute as a training school for reserve officers.

In the short space of two months the Joint Committee has made a place for itself in Institute life. Its success is based on a recognition of the fact that in time of stress all those devoted to the Institute desire to work shoulder to shoulder. It has furnished a remarkable example of co-operation between students and Faculty. As a Technology activity it is a striking example of what Institute resourcefulness and energy can produce in the way of an effective working body.

PROFESSOR WARREN, COURSE IV LECTURER, DIES AT HOME

Professor H. Langford Warren, dean of the Harvard University, College of Architecture, and special lecturer on design at the Institute, died last week at his home in Garden Terrace, Cambridge. Professor Warren, a member of the Harvard Faculty for twenty years, is survived by a wife, two sons and two daughters.

Technology will do more for her sons in service than any other college.