

FIELD DAY OUTCOME OF FATAL ACCIDENT

Death of a Former Technology Student in Old-time Cane Rush Causes Athletic Meet to be Instituted

17th ANNUAL EVENT TODAY

The coming of Field Day to Technology, just sixteen years ago, marked a new era in the history of the Institute. For the first time clean, manly sport replaced a cane-rush, that was little more than barbaric in its nature. As in all such changes, the events leading to the substitution of an athletic meet for the cane-rush were both sad and costly.

The last cane-rush between the freshman and Sophomore classes took place in 1900. At the end of the rush the count showed that the Class of 1904 had won, but their toll was indeed heavy. The unconscious body of Hugh Chadwick Moore '04, was found wrapped around the cane, and although he was removed immediately, all efforts to revive him were unsuccessful. By his side was Harold W. Sherrill '04, who was carried from the field suffering from a hemorrhage of both eyes and enlargement of the heart and who never entirely recovered. The rush was no different from the ones in the past. As usual the freshmen had been given possession of the cane, while they attempted to throw back the flying wedges of the second year men. The scrimmage was to stop at the end of fifteen minutes, but as in former years the sound of the pistol shot only brought on a fiercer fight than ever. It was with difficulty that the battle was brought to a close with the sad results that have been named.

Moore had spoken briefly at a class meeting held a few days before the rush, warning them that the pistol shot was the signal to fight all the harder, to make desperate attempts to throw off their opponents, and to secure the cane themselves. He acted as he had advised his class-mates to do, and threw himself into the thick of the fight as the pistol went off. Others followed him and in some way he was thrown down beneath the pile, although still retaining his hold on the cane. Those nearest him asked if he was all right, receiving an affirmative reply. It was not until the end of the struggle that his prostrate body was found.

The other victim of the struggle, Sherrill, received his injuries because of the great strain to which he was subjected at the bottom of the pile, in the prolonged holding of the breath and the external pressure of the crowd. Like Moore he fought all the harder at the sound of the pistol shot, being thrown down in the same way. He was confined to a dark room for over a fortnight and never entirely recovered.

On the third of December of the same year, the Institute Committee appointed a committee to confer with the Advisory Council on Athletics on the question of substituting an athletic meet for the cane rush. As a result, the first Field Day was held the following year, the event being won by the freshmen.

WINTER CONCERT TO BE HELD ON DECEMBER 13

The Winter Concert will be held this year in the Somerset Hotel on Dec. 13. In addition to the usual entertainment this year, C. T. Proctor will give a few productions on the xylophone.

The clubs are in better condition this fall than they have been for several years at this season, and there is a wide range of material to pick from.

Local concerts will be held this year, as usual, and the first one will be given at the Franklin Square House on Nov. 13.

M. I. T. A. A. MEETING

A meeting of the M. I. T. A. A. will be held Monday afternoon, Nov. 5, at 5.00 o'clock in room 4-132. All managers of Field Day teams are expected to be present and should bring a list of the members of their respective teams.

President Maclaurin's Field Day Message

Field Day should serve to focus the attention of every student at the Institute on the problem of his participation in manly exercises. The maintenance of a sane athletic policy here is due to the good sense of the students and the effective guidance of loyal Alumni. The conditions of today give special emphasis to two considerations: first, the need of a sound physical basis for all activity, whether that activity be directed to war-like or peaceful ends, and second, the duty of service and the subordination of selfish interests to the general good. Every Technology man will be better physically for a reasonable participation in athletic exercises and he will be better morally if he takes in the right spirit the inconveniences that come to him through the presence in our midst of so many men in the aviation schools. These are also Technology men and should be welcomed as such by those whose stay here is normally much longer. Let us treat them with all possible courtesy and consideration and, where interests appear to clash, give them the right of way and do it heartily.

Yours sincerely,
(Signed) RICHARD C. MACLAURIN.

October 31, 1917.

TO HAVE NEW UNION

Need of Lounging Room Results in Temporary Arrangement

The long-felt want of a congregating place for men at the Institute until the time when the Walker Memorial can be turned over completely to the students' use, is soon to be satisfied by having the basement of building 2 fitted up for this purpose.

Up to the present time there has been no room that could take the place of the old Union where the men were able to meet at any and all times, and where there was a certain atmosphere of comradeship that has been lacking at the new Institute because there was no such lounging room.

Bursar Ford has definitely decided that the portion of basement 2 just inside the door, shall be turned over completely for the students' use as a lounging room. The chairs, lounges, trophy cases, pictures, pennants, and viols that gave the old Union the home-like appearance that it had, will be placed in this new lounging room, and the whole arrangement will be made as attractive as possible.

It was decided that the best place to have the room was just inside the door leading to the cafeteria, so that it would be easily accessible without having to go down through the entire length of the wing.

FIELD DAY OFFICIALS

Following are the names of the men who will act as Field Day officials:

General
Inspectors: P. M. Dinkins '18, S. W. Fletcher '18, W. B. Banks, Jr., '19, G. H. Davis '19.

Timers: A. W. Rowe '01, T. P. Wright '18, G. Fleming '19.

Marshalls: Class of 1918, J. M. Avery, H. Y. Keeler, A. W. MacFarland, Marvin Pierce, J. H. Stagg; Class of 1919, M. C. Balfour, L. M. Dalton, D. O. Mayer, J. L. Riegel, D. D. Way.

Relay Race
Referee: J. A. Rockwell '96.

Judges: Lawrence Allen '07, Dean A. E. Burton, J. P. Lambirth, H. S. Ford, O. D. Burton '18, R. W. Van Kirk '18, P. W. Carr '18.

Clerks of the Course: K. Reid '18, H. H. McClintic, Jr., '17.

Tug-of-War
Referee: H. E. Worcester '97.

Football
Referee: John J. Hallahan.

Umpire: F. J. Holy.

Head Linesman: H. L. Rooney.

Linesmen: William P. Ryan '18, H. F. Young '19.

HAVE YOU EVER SUSPECTED YOU HAVE A MUSICAL SOUL?

If so, you are eligible to membership in the renowned Technique Jazz Band. You will be given your own instrument in the cafeteria in building 2. The band will form in Lowell Court for the first appearance of this body of far-famed harmony chasers. Come out. See Bulletin in building 10 for notice.

FRESHMAN TUG-OF-WAR PICTURES

Owing to the tardiness in choosing the freshman tug-of-war team, The Tech was unable to take the picture of the men who will take part on Field Day.



THE FIELD DAY CUP

The Field Day trophy, which was donated by Samuel Cabot '70 is a loving cup upon which the numerals of each winning class are engraved. At the Field Day dinner, it is passed to each man, not being permitted to touch the table until each one has drunk from it. Only four classes have had their numerals engraved upon the cup more than once, these being 1905, 1913, 1915 and 1918.

FIELD DAY TO OPEN WITH PARADE OF ALL STUDENTS

Classes Will Assemble and March to Field Headed by Band

The Field Day parade will start at 2.00 o'clock this afternoon. The Seniors are to assemble on the steps of the buildings in the Great Court, the Juniors in Dupont Court, the Sophomores in Lowell Court, and the freshmen on the steps between Dupont and Lowell Courts. The Senior Class will first march around the court, picking up the other classes in order, and the parade will then proceed to the field.

At the head of the parade will march the Technique Jazz Band, which has been practicing for the occasion under the direction of R. H. Gilbert '19.

WANDERING GREEKS

All fraternity men at the Institute who are not actively affiliated with a chapter here, are asked to leave their names at the Technique office as soon as possible.

ASSISTANT ART EDITORS CHOSEN FOR 1919 TECHNIQUE

As a result of a recent competition held by the Art Department of the 1919 Technique, Samuel A. Brunelle '19, and Franklin A. Birmingham '19, were chosen as Assistant Art Editors. These men will co-operate with A. L. Muller '19, in the work of the department for this year's Technique.

TECH NIGHT SURE TO BE BIGGEST EVENT OF ITS KIND EVER HELD

Bright Musical Comedy Causes Big Sale of Tickets— Many Mysterious "Stunts" to be Performed— Local Talent Will Appear Between Acts

MANAGEMENT WANTS NO ROWDYISM

It is expected by the management of Tech Night that tonight's performance will be one of the most successful given in years. Some eight hundred seats have already been sold to Technology men, and no doubt many more will turn up at the last minute. As before, certain provisions have been made concerning the seating of the classes and teams participating in Field Day.

The sixth, seventh and eighth rows in the orchestra have been reserved for the Sophomore teams, and the freshman participants will be seated in the first and second rows of the first balcony. The remainder of the freshman class will sit in the second balcony, where they will not be able to do any great amount of damage.

The managers of Tech Night are unusually fortunate in their selection of the play which Technology will attend tonight. "Love-of-Mike" is one of the best musical comedies produced this season. The plot is neatly worked out, picturing the adventures of a butler who attempts robbery and blackmail according to the methods laid down by popular movie actors. George Hassell, who takes the part is, without a doubt, one of the best comedians now on the stage. He is very ably supported by a cast which includes six or seven girls far above the average in both looks and acting. The singing and dancing is excellent, and is bound to get across with the audience. An account of the show would be incomplete without mention of the Prologue; a striking scene in more ways than one. This, however, must be seen to be fully appreciated, as mere words fail to do it justice.

The most important part of Tech Night, however, is the part played in the performance by the students who attend. Extensive plans have been made this year by the management concerning this feature and something new may be expected every minute. It is always customary to have cheers and songs during intermissions, and as usual cheers will be given for the Field Day teams, the classes, and for anything else the leaders happen to think of.

It is impossible, of course, to give in detail the various "stunts" which will be done, as the management is keeping quiet about the special features, but some things may be said without betraying confidence. The theatre will be decorated, so that anyone will be able to tell at a glance that Technology is in possession of the house.

It is also rumored about that a large amount of local color will be worked into the lines and songs of the play, so it will be a fine opportunity to hear all the latest ones out. Home talent will also appear, as several performances will be given by especially talented students attending the Institute. One who has seen the play ten times will find enough new to repay him for the time spent in attending this performance of some of the best professional and amateur ac-

(Continued on page 8)

CALENDAR

Friday, November 2, 1917
1.30 P. M.—Freshman-Sophomore Crew Race. Starts at Cottage Farm Bridge.
3.00 P. M.—Field Day Parade. Assembles in Great Court
Saturday, November 3, 1917
1.30 P. M.—M. E. Society trip to Boston Elevated Power Plant. Assemble in front of Co-op.
2.00 P. M.—Technology Dartmouth cross-country race at Hanover.
Sunday, November 4, 1917
4.00 P. M.—Pow-wow in Walker Memorial.

TECHNOLOGY CLUBS ABROAD

Following are the addresses of Technology Clubs abroad:
Technology Club of Paris: Technology Bureau, University Union, Royal Palace Hotel, 8 Rue de Richelieu, Paris
American University Union in Europe—London Branch: 16 Pall Mall East, S. W. 1. (Telephone Gerard 9200.)

Big Parade Starts From Great Court At 2.00 O'clock

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.

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MANAGING BOARD

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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.

FRIDAY, NOVEMBER 2, 1917

THIS IS THE DAY

TODAY we have with us the sixteenth annual Field Day of Technology, the day which means more to all the Institute than any other of the year. For at this time, the two lower classes struggle to prove their superiority, not only in the several contests engaged in on the Field, but in the equally important qualities of class and Technology spirit. The two upper classes, recalling their own past experiences on this day, vie again with each other in urging on their respective proteges. It is a day guaranteed to bring out all the youthful energy and enthusiasm which Technology men are capable of displaying at times, but which they allow to lie dormant for the greater part of the year.

As always happens on occasions of this sort, the men who receive the glory are the ones who are on the teams, while the unfortunates who were judged not quite good enough to play, run or pull, get no credit for the faithful work they did in practice. Yet it is often true that it is these latter men who really make it possible for their class to win. If there are not enough candidates to pick from there is bound to result mediocrity of performance. Let us then, while giving due praise to the actual participants, have a thought for the "scrubs" who have faithfully performed their part in upholding the honor of their class. And let the teams remember that their duty lies, not so much in winning, as in proving to the rest of the Institute that they are good clean sportsmen who can win or lose gracefully with the consciousness that they have fought hard and done their best.

TIME FOR ACTION

LAST Monday morning an automobile ran over and killed a man who was crossing Massachusetts Avenue near the "Co-op." A circumstance of this sort comes home rather sharply to the undergraduates (and even the Faculty) of the Institute. If this were the first accident which had occurred along Massachusetts Avenue near Technology, it might pass unnoticed, but the truth is that there have been many. Slighter ones, to be sure, but still all testifying to the unsafe conditions which have prevailed on this much travelled highway ever since the Institute moved to Cambridge.

Much breath has been expended in Institute Committee meetings in criticising the existing conditions, and it has there even been prophesied that sooner or later some one would be killed. It is now, even though late in the day, time for action. Cannot Cambridge protect the lives of its students and citizens by furnishing enough traffic officers to take proper care of the heavy traffic? It is distinctly up to the Institute to bring prompt pressure to bear upon those having authority.

The competition for the Business Department of The Tech closed last Wednesday, when the following men were selected to the positions of Second Assistant Advertising Managers: Richard P. Windisch '20, A. D. Harvey '21, A. W. Morse '21, L. W. Moss '21, N. F. Patton '21, and R. A. St. Laurent '21.

Tech Night will furnish the fitting conclusion to our annual celebration of Field Day and, as ever, the proverbial exuberance of youth will be in evidence. Enjoyable features of Tech Night are the cheering of the different factions and the collective singing. These are things which are looked forward to by all who purpose to attend the performance. Too often, however, there is a tendency to rowdyism exhibited by a certain few of the student body. It ought not to be necessary to warn against this, but thoughtlessness is one of the characteristics of the average student. A word from The Tech should be enough to prevent any unseemly outbursts tonight.

COMMUNICATION

October 29, 1917.

To the Editor of The Tech.

Dear Sir:—The editorial comment in The Tech as to the Advanced Battalion is not fair, or based on a knowledge of what it is desired to accomplish. Such parts of it as are worthy of consideration, relate to defects already well known, and which will be corrected as soon as practicable, but this is promised with no idea how soon this time may come.

The work I have to do is tremendous. There was first correspondence with drafted men, and application to the War Department to have them sent back. This did not succeed, but took weeks of work.

There was the long fight with the War Department, still going on, as to the organization of units of the R. O. T. C. This has been partially successful.

There was the organization of the Technology Regiment, and the organization along new lines, of the Advanced Battalion, and finally, the organization among the Sophomores of the two branches authorized of the R. O. T. C. This will have to be followed by the similar organization among the Freshmen.

Then came the matter of deciding on uniforms and making the best contracts to protect students, and the extensive shoe business; and now will come the delivery and inspection of uniforms.

Just at this time, when everything else is demanding attention, the new training camp comes up. That alone will provide more work for the next five weeks than my office ought to have, with nothing else.

A good deal of the program of instruction must depend on getting equipment, and that involved much correspondence. The ability to get instruction along certain lines, or to find time to do the work myself, also influences program making.

With all this, hundreds of hours have been devoted to personal interviews.

The Advanced Battalion was organized to teach men to be officers, and the complaint about past work was that the men did not have sufficient chance to act as officers. I promised to give them that chance, and they are having it. The criticism that they are not proficient in the duties assigned them is rather absurd, for if they were, we would have nothing to teach them. Some of them probably know the work, but are rattled through inexperience. Others may not have sufficiently prepared themselves. The first class will have ample opportunity to learn. As soon as it becomes evident that a man is willing to try and learn on the field, but not willing to prepare himself by outside study, he will cease to have further chance, but until this fact becomes certain, he will get the benefit of the doubt.

If we were trying to prepare a model battalion, we would pick out the best men for officers and make them permanent. As we are trying to educate the maximum number of men in the duties of officers and non-commissioned officers, the excellence of the drill of the companies is of secondary importance. The privates in ranks furnish the material for the practice of other men, and in turn will have their chance to command.

The lack of uniformity will, as soon as possible, be corrected. The matter of counts to a movement is not a matter of drill regulations and must be decided in some cases arbitrarily, where the lack of uniformity is apparent.

The infantry work for the present will consist of work of squad, platoon and company, and every man must prepare himself for such duties as may be assigned him, as his performance each time is a matter of record.

Other work will have to be arranged or at the time according to equipment, supplies, etc., available.

This is by no means an apology. The Advance Battalion, as at present conducted, is doing just what it was organized for, and that is to so train its members that in Training Camps, National Army, or wherever they go, they can make good at once, and it is doing just that. Minor matters caused by extreme rush under War conditions, cannot be subject to criticism with any degree of fairness.

I shall not offer any further explanations of the work, but will conduct it as far as humanly possible in twenty-four-hour days, according to the best of my ability and training. But I will be its commanding officer as I stated in the beginning. The other system has been tried in the Russian Army and has not been a distinct success.

Very respectfully,
EDWIN T. COLE,
Major, U. S. Army.

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FIELD DAY RULES

The following are the rules governing Field Day:
 Football will count four points; relay, three points, and tug-o'-war, two points.
 Events will be called as follows:
 Tug-of-War (first trial) 2.30 p. m.
 Football (first and second quarters) 2.40 p. m.
 Relay Race 3.15 p. m.
 Tug-of-War (second trial) 3.25 p. m.
 Football (third and fourth quarters) 3.30 p. m.
 Tug-of-War (third trial if necessary) 4.05 p. m.
 Teams must be on the field five minutes before time designated.

Substitutes

The names of substitutes eligible for numerals (Football 5, Relay 2, Tug-of-War 2) must be given to the chairman of the Advisory Council on the field, not later than 2 p. m. of Field Day.

General

Any direct interference by any coach or spectator may render the side assisted liable to disqualification by the referee, and his judgment shall be final. One coach for each team is allowed for the Tug-of-War event.

The management of the games and all matters connected with the same is vested in the Advisory Council and may be delegated to any sub-committee that it may appoint.

Necessary accessories for the events will be provided by the Advisory Council, and all officials shall be appointed by the undergraduate members and chairman of the same.

CHINESE CLUB TO HOLD INITIATION TOMORROW

The Chinese Club will hold the second meeting of the season tomorrow when several new members including some Chinese girls of Boston will be initiated. This club has been organized about four years and has at present forty members. The club plans to hold meetings every two or three weeks; the first one of this season having been held two weeks ago. The officers are: Y. C. Tu '18, president; T. C. Yeh '19, vice-president; T. F. Wei '20, secretary, and C. Y. Chen '18, treasurer.

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Send today for our instructive book, "The Care and Feeding of Infants" also a Free Trial Bottle of Mellin's Food
 Mellin's Food Company, Boston, Mass.

UNCLE SAM CELEBRATES FIELD DAY BY POSTAL INNOVATION

Even Uncle Sam realizes the great importance of Field Day for he has inaugurated a new set of postal rates which take effect today. Hereafter all first class matter sent outside the Boston district will cost three cents. Postal cards will require two cents postage.

INSTITUTE AERO CLUB HEARS WELL KNOWN FRENCH ARMY AVIATION EXPERT

Lieutenant Andre Morize Explains Details of Aeronautical Duties in War Service Abroad

Dwelling especially upon the value of the aviator to present day military operations, Lieutenant Andre Morize of the French Army gave an interesting lecture last Tuesday night before the members of the Aero Club and their guests which included the Army and Navy Aeronautical Schools, the Mechanical Engineering Society, and the Student Branch of A. I. E. E. Lieutenant Morize also showed a number of slides depicting life in the trenches and exhibited a collection of weapons used in trench warfare.

In speaking of the service of the airplane, he said that the infantry was, of course, blind by itself, but the photographic work of the aviators provides it with up-to-the-minute pictorial information.

In preparing for an attack, the aviator is of greatest service in keeping up communication with the artillery. This would be impracticable were it not for the aviation corps and the success of an assault would depend more upon luck than it now does. The airplane is equipped with wireless to send messages to the artillery and it receives messages from the infantry for transmission to the big guns. This communicating is kept up by a simple but effective system. A certain geometric pattern, depending on the rank of the commanding officer, is cut out of white cloth and is laid on the ground with another rectangular strip of cloth, seven feet by one and a half. The various combinations of these two pieces spell out different messages. Fireworks of several shades and designs are also used.

A very important function of the observing airplanes is to note the disposition of the enemy reserves and the possibility of a counter attack by the latter. Another great service that they render is to bring assurance that the enemy resistance has been swept away by the artillery bombardment and that the infantry may proceed with comparative safety. The lack of this information in the earlier part of the war was responsible for great losses of life.

The description of trench life was based almost wholly upon the slides, a remarkable feature of which was the clearness and distinctness of detail. Nearly every view was a "close-up" and told better than words could do, how the soldiers lived and fought. Trenches winding through woods and over fields and roads were the first to be shown. Next came a view of a German first line trench after it had been taken by the French. Almost every vestige of defense was wiped out by the preliminary bombardment and nothing except shell torn ground could be seen.

Lieut. Morize made the interesting disclosure that one of the problems of trench construction was the apparently

simple one of transporting the boards to line the sides of the trenches. This, he said, had to be done from boards which were distant four or five miles from the first line, and often the planks were so heavy that it required the strength of three or four men to carry them. The zigzagging of these communicating trenches also made the transportation of the wounded a pressing question. In fact, before an attack, they often had to make special trenches for the use of the stretcher-bearers.

Sand-bags were another apparently small matter which had become one of the problems of the war, on account of their enormous expense. Lieut. Morize stated that their cost is so great that one command station entailed the expenditure of \$150,000. Slides were next shown to illustrate the conditions brought about by gas warfare. Poilus were seen wearing the familiar gas-mask and the man stationed to watch for a coming gas attack was shown with his mask on and his hand resting on a klaxon ready to give the warning. This warning is sounded several times a day for the purpose of testing the ability of the men to protect themselves against the poisonous fumes.

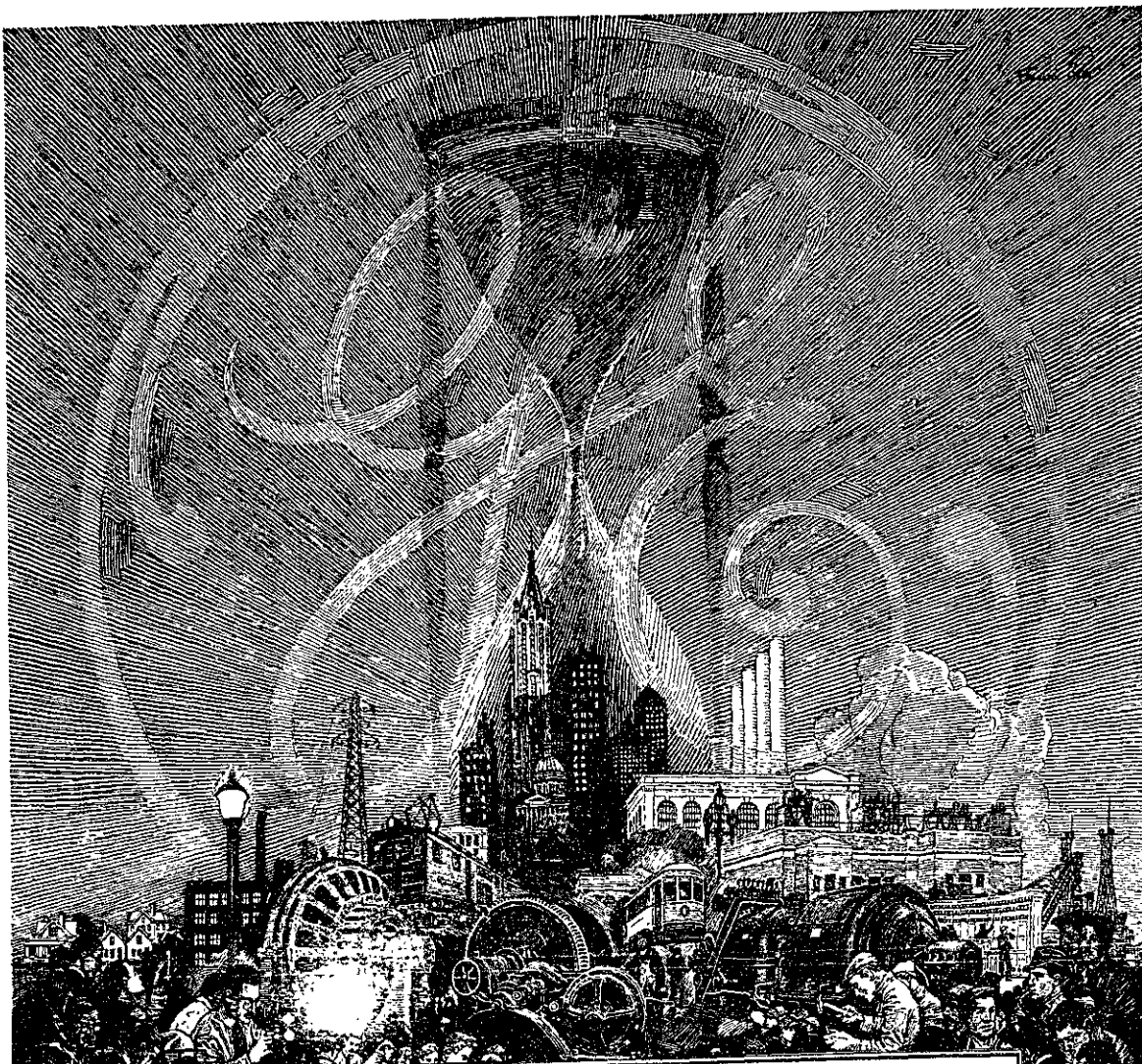
Lieut. Morize's last slide was a picture of several soldiers carrying water to the first line from a filtering station. This question of water supply is in certain regions one of pressing importance. In the Vosges and in Alsace-Lorraine, there is a sufficient supply of pure water, but in the low country to the north, where most of the fighting takes place, great care has to be taken in order to insure the right kind of drinking water.

In order to better explain different weapons that the infantryman uses in the trenches, Lieut. Morize passed a number of them around the audience. These are of two kinds, those with a curved trajectory to use to reach the bottom of the enemy's trench and those with a flat trajectory for use in the open.

The first class is further divided into two different kinds. One is the hand grenade and here again conditions require another subdivision. The grenade that is used in the attack consists of a tin jacketed object into which is fitted an ignition plug. This weapon is thrown about twenty yards ahead of the advancing line and sends up a great quantity of smoke which hides the attackers. It is very noisy. When it bursts there are only a few fragments and these are not very deadly.

Of quite a different description is the grenade which is used for defensive purposes. This has a cast iron jacket whose splinters, when it shatters, inflict great injury. It is thrown from the trench and has a range of a hundred yards.

(Continued on page 5)



ACHIEVEMENT

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By the achievements which this company has already recorded may best be judged the greater ends its future shall attain, the deeper mysteries it yet shall solve in electrifying more and more of the world's work.

GENERAL ELECTRIC COMPANY

FRESHMAN FOOTBALL TEAM IN GOOD TRIM

Squad is Handicapped by Loss of Injured Crack Players—Men Are Lighter Than Sophomores But Are Depending on Speed

ARE CONFIDENT OF VICTORY

The Class of 1921 will send out an eleven today that will depend upon lightness and speed to overcome the superior weight of its opponents. Forward passes and end runs will probably be features of the game while line plunges and tackle plays will demand the services of those who are stars at these features. The confidence that the eleven has in itself was shown in a statement made by the captain shortly before the game.

"There'll be nothing to it but 1921," said J. Louis Hurley, '21, the former West Roxbury High star, who has been elected captain. "Our men are in fine shape today and we all know we're bound to win." Besides Hurley, those in charge on the freshman side are Woods, the manager and Gleason, the coach. For a time Frank R. Whelton, a mainstay of the Boston English High eleven, acted as assistant coach, being prevented from practicing by a broken shoulder.

The lineup shows that the team possesses a number of good men. While the players have not been definitely decided upon at this writing, it is probable that the lineup will be as follows: r. e. McGill, Barker; r. t., O'Hearn, Kittredge; r. g. Young, Morrison; c. Merrill, Howard; l. g. Waterman, Bachman; l. t. Beattie Dites; l. e. Wood, Lyanders; q. b. Whelton, Tucker; f. b. Murphy, Blood; l. h. b. Hurley; r. h. b. Northrop, Chaplin. All these men have done fine work lately.

Hurley has been running rings around the opposing players in practice and Whelton has been living up to his reputation he gained as quarterback on the English High team. Murphy excels at line plunging while Waterman is probably best on end run plays. O'Hearn, last year's Brookline High captain, and Kittredge are especially good at tackle play. The rest of the men are in as good a condition as their practice can make them.

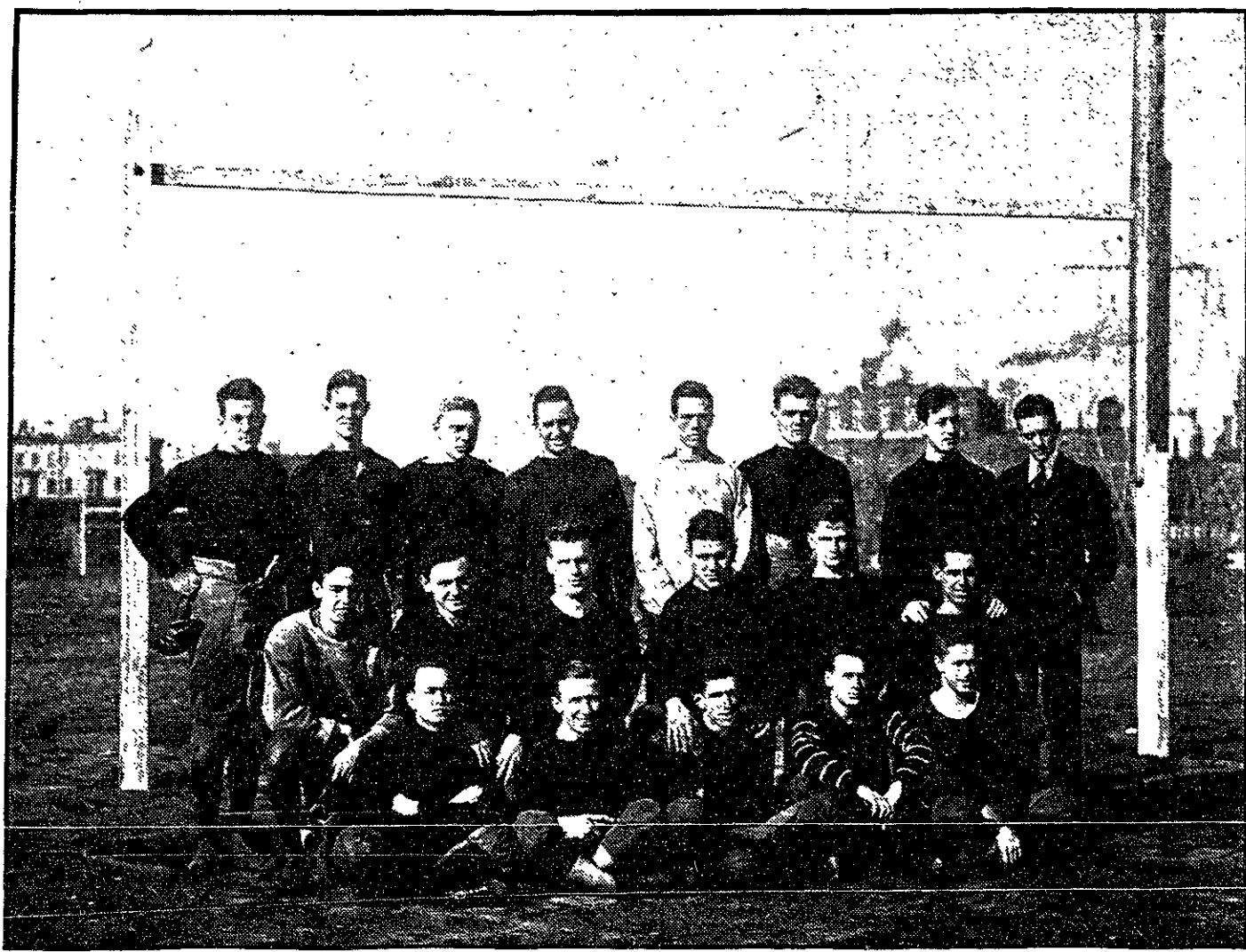
The team seems to have been greatly handicapped all through its practice by injuries to some of its best men. To begin with Frank R. Whelton, the English High star, broke his shoulder and that made a vacancy in the quarterback position which was hard to fill with an equally capable man. It was at first feared that Whelton would have to remain out of the Field Day contest but he risked playing in Monday's scrimmage. The injury was found not to affect him in any way and his services were then assured for the big game. But now two others are out. Dites has a broken hand and Morrison has a broken wrist. It is problematical whether either can appear on the field today.

While the men of the Class of 1921 displayed very little real form until last Monday, their scrimmage on that day with Cambridge Latin showed them up in a much better light. The reason they had previously played so poorly was that many of their men possessed no previous experience in the Harvard system used at the Institute. Having to get accustomed to a new line-up, they were at a disadvantage from the start and in their first scrimmage with Cambridge Latin High they played very poorly. Their next game was with the fast Manchester, N. H. eleven, by whom they were defeated with a score of 47-0.

They exhibited much better form here in spite of the bad score, the reason for which was the tactics that the New Hampshire team has so successfully used against all comers in New England. In fact when it is taken into consideration that Manchester High has defeated some other schools by scores such as 87-0 and 99-0 and has an average score of about 60-0 the quality of its victory over the 1921 team speaks better for the latter.

Coach Gleason's idea in putting his team up against the Manchester aggregation was to see how they would act against a champion eleven composed almost entirely of veterans. That they were able to hold Manchester down to the second smallest score she has rolled up showed that there was good material present.

The second scrimmage with Cambridge Latin took place Monday and was the deciding factor in instilling confidence into the hearts of the first-year men. Whelton was back in his old place as quarter-back and with the improved support of the team he was able to baffle the efforts of the Latin eleven. A



1921 FOOTBALL TEAM

scrimmage with Rindge Technical School followed and this team also had to give way before the superior Technology men. All in all, the day showed what wonders a little practice can bring about.

The work of the remainder of the week has shown that the Class of 1921 can rest its hopes for a victory on the speed and experience of Hurley and Whelton and the line-plunging ability of Murphy backed by the co-operation of the others.

MECHANICAL ENGINEERS TO VISIT POWER STATION

The members of the Mechanical Engineering Society will take a trip to the power station of the Boston Elevated Co., in South Boston, tomorrow afternoon. The start will be made at 1.30 sharp from the Cooperative Society. This trip will be of special interest to the Seniors because of the excellent power plant design afforded by that station. A. Saunders '18 will be the personal conductor.

On Wednesday, Nov. 7, the society will hold a smoker, the place of meeting of which will be definitely announced later. Mr. Carstarphen of the American Wire and Steel Co., Pittsburg, Pa., will speak on aerial tramways. He is responsible for all tramways constructed by his company, and should on that account give an interesting and varied talk. A series of stereopticon views will illustrate the general features of the several classes of tramways, from the single cable reversible to the double cable reversible, radial cableways, dock hoists, and finally the Trenton-Bleichert system.

Among the views to be shown are those of three tramways which represent the height of engineering in their separate directions. The first of these, an aerial tramway in Utah which carries 285 tons per hour, is the greatest one which has ever been built. The second is a lumber carrier, over five miles long, which crosses the summit of a mountain range in California. The last view shows a salt tramway, thirteen miles long, which tops a mountain over one and a half miles in elevation.

DORMITORY STUDENTS TO BE ASSESSED TAX OF ONE DOLLAR

The dormitory committee decided at its last meeting to put a tax of one dollar on all dormitory students to help defray the expenses of smokers and social events. Last year a collection was made before or after each entertainment but, as this scheme has proved to be unsatisfactory, the present action was taken.

The committee also voted that hereafter no more expressmen or peddlers will be allowed in the dormitories, as money, articles of clothing and even room furnishings had been missed on several occasions. All the students are asked to help stop these malicious acts, and if possible to apprehend the law-breakers.

SOPHOMORE R. O. T. C. BEGINS DRILL AT SOUTH ARMORY

Coast Artillery and Signal Corps Are Divisions of Battalion

The Sophomore R. O. T. C. began its drill yesterday. Work was immediately taken up as Major Cole does not wish to lose any time. The Coast Artillery Corps will meet hereafter in the South

SOPHOMORE FOOTBALL

Fumbling is Biggest Chance For Defeat—Has Heaviest Team

The Sophomore football team seems to have an advantage over the freshman machine. Their line is much heavier than that of their opponents, which will make it difficult for the freshmen to break through. The backfields average practically the same.

It is hard to judge either by its past performance, since both have played but one game. The Sophomores were defeated by Concord with a score of 6-0. Both teams have some fairly fast men, and each depends a great deal on speed, but in Dana and Skinner the Sophomores have two exceptionally speedy players.

Judging from the game with Concord, the main drawback experienced by the Sophomores was fumbling the ball. This has been overcome in a large measure by the constant practice of the last few days in passing the ball and punting and catching. This fault is probably the only thing that is in the freshmen's favor.

The team averages about 160 pounds, with quite a few men weighing in the neighborhood of 180 pounds and only one man on the squad under 146. This is a fairly heavy team and its coach predicts a closely contested game with a one-sided advantage to the heavier team in case of wet weather.

Considering the fact that they are up against a heavier line than their own, the freshmen's hope will depend to a great extent in trick plays. In fact, football-camouflage may win the game, and this seems to be the only means of winning for the first year men; but the Sophomores are by no means entirely unprepared for such tactics.

PREVIOUS RECORDS

1901-'04 vs. '05; won by '05, 6 to 3.
1902-'05 vs. '06; won by '05, 7 to 2.
1903-'06 vs. '07; won by '06, 9 to 0.
1904-'07 vs. '08; won by '07, 5½ to 3½.
1905-'08 vs. '09; won by '08, 5 to 4.
1906-'09 vs. '10; won by '09, 5 to 4.
1907-'10 vs. '11; won by '10, 9 to 0.
1908-'11 vs. '12; won by '12, 6 to 3.
1909-'12 vs. '13; won by '13, 6 to 3.
1910-'13 vs. '14; won by '13, 9 to 0.
1911-'14 vs. '15; won by '15, 6 to 3.
1912-'15 vs. '16; won by '15, 9 to 0.
1913-'16 vs. '17; won by '16, 5 to 4.
1914-'17 vs. '18; won by '18, 6 to 3.
1915-'18 vs. '19; won by '18, 9 to 0.

Armory on Irvington street adjacent to the New Haven R. R. tracks. The Signal Corps will meet on the field at the Institute.

The Coast Artillery has been divided into two sections. The first will drill on Mondays, Tuesdays and Fridays at 4.15. The second on Tuesdays, Thursdays and Fridays at the same hour.

Those men who have not been assigned to either group are expected to report to room 3-205 immediately.

NOTICE

Owing to Field Day there will be no classes today after 12.00 o'clock.

SHIU TAO TAI HAS NOT BEEN HEARD FROM FOR TWO YEARS

The following quaintly worded appeal should claim the attention of every Technology man who can be of any assistance in learning the whereabouts of Shiu-Tao Tai, whose father has not heard from him in two years. Tai, who graduated with the Class of 1916, was a member of the Chinese Club and of the Cosmopolitan Club. For some unknown reason his picture did not appear in the portfolio section of Technique 1917. Hunan, China, July 30, 1917.

"Dear Sir:—
"Your favour of the 14th of March to my son, Shiu-Tao Tai, was shown me about three months ago. I regret very much for not having answered your kind letter before now, but I am sorry to inform you that he has not yet come home. I have not heard from him for nearly two years and do not even know where he lives now. Some of his schoolmates told me that after graduating he had gone to work in a certain factory in America, and others said he had left America for home last winter. I cannot determine whether he is still in America or not. I am very anxious to know he is now. Please kindly inquire for me if possible his present whereabouts and much oblige. Your kind information is anxiously awaited."

Anyone who has any information concerning Tai should communicate immediately with the Managing Editor, The Tech, Massachusetts Avenue, Cambridge, Mass.

FIRST POW-WOW TO BE HELD IN WALKER MEMORIAL

Captain Donald McRae, C. S. A. will be the speaker at the first Walker Memorial "Pow Wow" to be held on Sunday, November 11, at 4.00 o'clock. He will talk on "Trench Raids," a subject in which he is well versed, because of his recent experience on the European battle front.

Captain McRae served in the Philippines with the American Army, studied three years at West Point, and a year and a half at the Institute, and then entered the Canadian Army, in which he received a Major's commission. As he longed for active service, he left the Canadian Army and entered the British Army, again being commissioned Major. In order to serve in the trenches, he resigned this commission and became a Lieutenant at the front, where he saw nine months of service as a "raid officer," taking part in a number of engagements, the most important of which was the attack on Vimy Ridge. Captain McRae was awarded the French Legion of Honor Cross and was five times recommended for the British Military Cross, which he received in London, while recovering from a hand-grenade wound. After serving several months as an instructor in a British training camp, he returned to America and entered the National Army. At present he is an instructor at Plattsburg with the rank of Captain.

"Pow Wows" will be held every Sunday afternoon in the Walker Memorial. Refreshments will be served, and either a prominent speaker, or a well known musical organization will entertain those who come. All Technology students, Alumni, and their friends are invited.

RELAY TEAMS REPORTED TO BE EVENLY MATCHED

Six Out of Fourteen Men on Sophomore Team Ran Last Year—Part of Freshman Squad Had Previous Training

CLOSE RACE IS ANTICIPATED

The relay squads of both the freshman and the Sophomore classes have been training daily during the past two weeks and, as a consequence, are drilled to the limit and anxiously awaiting this afternoon's contest. Both sides are confident of victory, the freshmen from their ability and the Sophomores from their experience.

Out of the fourteen men on the Sophomore team, but six ran in last year's race. Ash, Bradley, Downey, Knight, Ormon and Wilson are veterans, but the rest of the men composing the team, Bossert, Bridkert, Farrer, Matthews, Mills, Whitten, Shea and A. Wilson, also promise to do good work.

The freshman squad, while handicapped through inexperience in Field Day work, has a large amount of excellent material on which to build its hopes of victory. Bawden, Pridmore, Scott and Sheldon, all former preparatory school stars, have secured a berth on the team. Bawden comes from Chauncey Hall and last year held the quarter mile school boy championship of the United States. Pridmore ran on the St. Albans team which captured the championship at the Penn Relays two years ago. Scott prepared at the Noble and Greenough School and comes to the squad with a reputation of being a very fast man. M. F. Sheldon, who was elected captain of the team, comes from Shattuck and in addition to being a fast 220 man, he also excels in the hurdles and the pole vault.

The other members of the freshman team are: Burekett, Conant, Cowie, Evans, Guffey, Juned, Painter, Poole, Clark and Kirkpatrick. The relay will count three points towards the winning score of the afternoon. Twelve men will run for each team, each man running 220 yards and the total aggregating one mile and a half.

TENTATIVE LINE-UPS OF FIELD DAY TEAMS

The tentative line-ups for the Field Day teams are as follows:

FOOTBALL	
1920	1921
Left End	Wood
J. W. MacDonald	Lyanders
Left Tackle	Beattie
R. H. Gee	Dites
Left Guard	Waterman
R. E. Davis	Bachman
Centre	Merrill
R. P. Abercrombie	Howard
Right Guard	Young
J. E. Buckley	Morrison
Right Tackle	O'Hearn
B. F. Casey, Capt.	Kittredge
Right End	McGill
N. G. Abbot	Barker
Quarter Back	Whelton
N. P. Dana	Tucker
Right Half Back	Northrop
C. C. Bray	Chaplin
Full Back	Murphy
R. T. Pender	Blood
Left Half Back	Hurley, Capt.
R. L. Skinner	
1920 Substitutes	
F. L. Bradley, T. Hughes, E. F. Badger,	
H. K. Kratz, P. B. Sommerby	
M. H. Taylor	
(The line-up of the freshman team had not been decided when The Tech went to press.)	

FOUNTAIN PEN LOST

Lost on Tuesday, Oct. 30, somewhere about the Institute, a red safety Waterman's fountain pen. Will finder please return same to W. L. Winant at The Tech office.

NOTICE

Two cuff buttons found after Show Smoker in Walker Memorial on Oct. 28. Apply to L. Winant at Tech Office.



1921 RELAY TEAM

INSTITUTE ALUMNUS IN ENGINEER CORPS TELLS OF WORK ABROAD

Is Optimistic in Spite of Numerous Hardships—Says Tommies Believe Victory is Near

The following letters from C. W. Loomis '16, are a continuation of some previously published in The Tech. Loomis is a sergeant in the Railway Section of the Engineer Corps in France and his experiences are typical of those encountered by most of the Technology men in service abroad.

August 28, 1917.

Our rules on letter writing are changing almost daily, fortunately the changes are all for the better. At first we were restricted to one a week, then to two a week, and now as many as we want to write, although we are asked to be as reasonable as possible both in number and length, as the time consumed in censoring them (the company officers have to do it) is no small item. We are still in the same camp we struck after we left the coast and we continue to drill a little and loaf a great deal, but I imagine it is a matter of days only before we get to work.

My intensive course in French has died a slow death; so far as any chance to practice it is concerned I might as well be in the plains of Arizona. We haven't seen a Frenchman for a week and when we do they talk to us in English. We have nothing to read, but little chance to see the papers, and a none too interesting crowd to talk to, except for the Tommies. They at least have something new to offer, tales from the trenches, etc.

We have had a slight taste of the famous mud. Two days of rain, fairly close together, left our camp in a doleful shape. The soil is almost all clay and once it gets wet it is terrible. Together with the cold weather, it has been a little tough for some of the boys, but most of us have managed to get along fairly well.

If one is to believe the "Tommies" the affair is nearly over, but I'm afraid they are too optimistic. They tell of capturing Germans less than seventeen years old and say that the heart is out of the Kaiser's troops, but the advance

goes no faster and the prospects of an early peace look no brighter here than they did in the States.

August 30, 1917.

I've just finished my weekly bath, five minutes exactly, under a stream of water hardly large enough to recognize as such. They march the company down at stated times and send us through on schedule, twenty-four at a time, five minutes to undress, five minutes in the bath, and five minutes more in which to dress again. It sounds a good deal worse than it really is, however, for once you get used to it you can get quite a satisfactory bath in five minutes, using every second of it. The chief trouble is the week's interval between baths.

We are still in the same camp, and up to our ankles in red clay mud. It manages to rain at least part of every day, very much like England, and the result is rather a dismal looking sight. Our ideas of "Sunny France" are, to say the least, not flattering.

I'm thanking my lucky stars more and more every day that I am able to see the amusing side of our life here. The boys who are taking everything to heart are having a terrible time of it, when if their senses of humor could only get the upper hand, they would find life quite worth living. Of course it is all grim and serious enough, if one is to get down to fundamentals, but since we have to live the life we might as well get what amusement we can out of it. If you could see Dick and myself enjoying our morning wash, one canteen full of water for the two of us, one holding the canteen while the other washes, or watch Raef eat his meals with but little evidence of his extreme aristocracy still evident! These are but a few of the incidents that keep us from realizing that it is a grim and none too pleasant task on which we are engaged. In lots of ways, it is after all quite good fun and we are not so much to be pitied as one would at first imagine.

PROCEEDS FROM TECH SHOW TO GO TO FRANCE

Largest Activity at Technology Began as Minstrel Show—Positions Open in All Departments by Competition

PLOTS FOR PLAY BADLY NEEDED

The Tech Show, which was first produced in 1898 in the form of a minstrel show, has gradually grown until the present time, when it is the largest activity at the Institute. Its original purpose of raising funds for the support of athletics has been retained up to this year when the compulsory student tax was instituted to cover these expenses, so that now the show management is intending to turn over its funds to the Technology Club of Paris to assist in war work abroad.

The show is entirely an undergraduate production. Technology men write the book, lyrics and music. They take the leading parts as well as those of chorus girls and members of the ballet. Institute men manage the production, make the bookings, and handle the money. The only outside talent that is

employed is that offered by the ballet coach, the professional stage coach, the leader of the orchestra, and costumers. A great deal of the work in preparing costumes is done by the co-eds at the Institute.

The comedy is produced each year during Junior week, and during that time, all men in the show, whether in the cast, ballet, or business departments, go on the trips that usually include Smith College, and either Malden, Sonerville, or Providence. There is always at least one performance given in Boston.

The production of the Show is under the direction of two departments. The Stage Manager, who has two assistants, one a Sophomore and the other a freshman, has charge of the purchasing of costumes and providing the stage properties. The Stage Director, who also has assistants, has charge of the technical end of the production, being interested primarily in the rehearsals and the acting of the players. The Publicity Manager has one Sophomore Assistant, and two freshmen.

The business department has charge of the entire production of the souvenir program which requires the work of a whole department in itself. The treasurer has to keep track of all of the show's finances and in the course of the year he must handle about twelve thousand dollars.

These positions are open to all Institute men on the basis of competitions which are so run that those with the most ability obtain them. Announcements will be made in the near future concerning competitions in the various departments, and an ample opportunity will be given each man to determine just which department he is best qualified to serve in.

Very few books have been handed in for consideration so the show management has extended the time, and has asked that every one who is interested, hand in an outline of a plot which he believes to be suited to an Institute musical comedy. The plot need not be worked up in detail at the present time, but merely a suggestion is all that is necessary. Later these will be gone over and the best ones will be developed so that a final choice can be made. The only requirement is that the plot be based upon something distinctly local in its nature so that the production will be strictly a Technology performance.



1920 TUG OF WAR

THE TECH HAS A RECORD OF 750 TECHNOLOGY MEN IN WAR SERVICE

Have We Your Name or Those of Your Friends?—Cooperate by Sending Them in at Once

We are indebted to Professor Charles M. Spofford, head of the department of Civil and Sanitary Engineering, for a large number of the names given below, especially those of the men who took courses I, XI or XV.

Class of 1873

H. L. RIPLEY, U. S. Cavalry.

Class of 1892

A. J. OBER, Major, Engr. Div., O. R.

Class of 1895

T. H. WIGGIN, Captain, E. O. R. C.

Class of 1896

T. W. BAILEY, 1st Lieut., E. O. R. C.
R. E. BAKENHUS, C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.

Class of 1897

A. L. PARSONS, C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.

Class of 1898

G. R. WADSWORTH, Avia. Sect., Nav. Aircraft Factory, Philadelphia.

Class of 1899

J. H. RICHARDSON, Captain in E. O. R. C. Stationed at Training Camp at Belvoir, Va.

Class of 1900

F. H. COOK, C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.
R. SUTER, American University, Washington.

C. D. THURBER, C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.

Class of 1901

R. WHITMAN, C. E., U. S. N., U. S. Nav. Academy, Annapolis, Md.
L. P. WOOD, Capt., E. O. R. C.

Class of 1902

L. E. MOORE, Capt., E. O. R. C., in France.

Class of 1903

H. S. BAKER, Major.
PAUL HANSEN, Captain, in France.
F. A. HILL has received his commission as Ensign in the U. S. N. from the Naval Cadet School at the Institute.

Class of 1904

R. K. HALE, Lieut. Col.

Class of 1905

H. R. GABRIEL, Co. 3, Fort Leavenworth, Kan.
E. M. GRAHAM, Co. 3, Fort Leavenworth, Kan.

Class of 1907

J. MATHER, in U. S. Coast Artillery.

Class of 1908

A. S. DOUGLASS, Capt., U. S. R., Insp. Sect., Gun Div., Ord. Dept., N. Y.
JOHN MATHER, Lieut., U. S. A., A. G. O. Washington, D. C.

J. T. TOBIN, I. C. C. Val. E. Dist., 18th and Penna. Aves., Washington, D. C.

Class of 1909

H. W. DUN, JR., American University, Washington.
P. H. LAZENBY, Capt., 2d Canadian Pioneers, Allied Forces.

M. R. SCHARFF, Lieut., Eng. Corps.
A. L. SHAW, Capt., 301st Engrs., Camp Devens, Ayer, Mass.

E. A. WARE, 1st Lieut., E. O. R. C.

Class of 1910

W. C. ARKELL, 1st Lieut., O. O. R. C.
M. S. CHAPIN, Lieut., U. S. R., Fin. Sect., Gun Div., Ord. Dept., Washington, D. C.

S. K. COOEN, 1st Lieut., E. O. R. C.
E. J. W. RAGSDALE, Capt. U. S. A., Design Sect., Trench Warfare, Gun Div., Ord. Dept., Washington, D. C.

J. J. TOBIN, Constructing Quartermaster's Dept.

Class of 1911

H. E. BABBITT, Capt., Co. 7, Fort Leavenworth, Kan.

G. C. GEORGE, 1st Lieut., Amer. Univ., Washington, D. C.

GEORGE T. PALMER, M. O. T. C., Camp Greenleaf, Fort Oglethorpe, Ga.

P. A. RIDEOUT, 1st Cadet Corps.

C. H. SUTHERLAND, 1st Lieut., 8th Engrs. Train, Fort Bliss, Texas.

A. W. UNDERHILL, Drafted but passed exams for Eng. Corps.

H. D. WILLIAMS, in U. S. R. Eng. Corps.

R. P. WILLIAMS, in the Q. M. C., Camp Devens.

Class of 1912

R. AYRES, C. A. C., Fort Winfield Scott.

R. T. BAILEY, Lieut., U. S. R., Sanitary Div., Med. Corps, Washington, D. C.

H. S. BENSON, Lieut., U. S. R., Ord. Dept.

H. F. CLARK, Co. 2, Fort Leavenworth, Kan.

P. DREWSON is in the 2d R. O. T. C., Fort Meyer, Va.

H. F. FERGUSON, 1st Lieut., Co. 7, Fort Leavenworth, Kan.

E. C. HOLBROOK, 1st Lieut., American University, Washington, D. C.

G. B. HOWARD, 1st Lieut., 7th Regt., Reserve Engrs., Atlanta, Ga.

F. H. KINGSBURY, 1st Lieut., E. O. R. C.

W. H. LANGE, Amer. Univ., Washington, D. C.

W. M. RUBY, Lieut. U. S. R., Ord. Dept., Frankford Arsenal.

G. S. SAWYER, Co. B, 301st Inf., Camp Devens, Ayer, Mass.

H. K. SMOOT has received his commission as Ensign in the U. S. N. from the Naval Cadet School.

D. A. TOMLINSON, C. A. C., Fort Monroe, Va.

A. W. YEREAUCE, 2d Lieut., 305th Engrs., Plattsburg.

Class of 1913

R. A. ALLTON, Capt., Artillery, O. R. C.

V. V. BALLARD, 18th Engrs., Amer. Univ., Washington, D. C.

M. FONT, 2d Lieut., Infantry, San Juan, P. R.

E. H. GAGE, 2d Lieut., E. O. R. C.

E. C. GERE, Lieut., Troop F. 2d U. S. Cav., Fort Ethan Allen, Vt.

J. C. GOFF, Master Engineer, 15th Railway Engrs., France.

M. H. HARRINGTON, Co. M, 302d Inf., Camp Devens, Ayer.

E. L. MACDONALD, Sergt., 1st Engrs., U. S. N. R.

W. R. MATTSO, 1st Lieut., Mass. Engrs.

A. A. MUTERSBARG, 1st Lieut., Co. 6, Fort Leavenworth.

W. P. MUTHER, Aviation Corps.

J. J. STRACHAN, C. E., U. S. N., Bureau of Yards and Docks, Washington, D. C.

Class of 1914

F. L. AHERN, 1st Lieut., E. O. R. C.

E. P. ALEXANDER, 1st Lieut., Co. 7, Fort Leavenworth, Kansas.

G. A. BEACH, Amer. Exped. Force, Ambulance Sec. Now in Aviation Service in France.

H. G. BORDEN, Capt., U. S. A. Engineers.

E. W. BOWLER, 2d Lieut., Canal Zone.

D. G. CROWELL, Lieut. C. A. C.

T. DICKINSON, 2d Lieut., Camp Greene, Charlotte, N. C.

L. B. DUFF, 1st Lieut., Sanitary Corps, U. S. A.

H. V. FAY, 2d Lieut., U. S. A. Engineers.

E. C. GERE, 2d Lieut., 2d Cav., U. S. R., Camp Devens, Ayer, Mass.

C. W. HALE, Lieut., U. S. R., Ord. Depot, Camp Cody, Deming, N. M.

J. G. KELLY, Lieut., Co. C, 10th Engrs. (Forestry), France.

A. S. MILLIKEN, 2d Lieut., E. O. R. C.

E. L. OSBORNE, Capt., 7th Engrs., Fort Leavenworth.

A. L. PEASLEE, C. E., U. S. N., Bureau of Yards and Docks, Wash.

T. J. SHACK, C. E., U. S. N., Bureau of Yards and Docks, Wash.

(Continued on page 6)

AERO CLUB HEARS AVIATOR

(Continued from page 3)

Lieut. Morize declared that if a company is provided with from twelve to twenty expert bombers, they can set up an almost impassable barrage.

The second type of grenade is the rifle grenade. This is an ingenious combination of the two which permits the latter to attain an effective range of 200 yards. The projectile resembles the ordinary defensive grenade except that it has a slightly tapering hole passing through the center. It is inserted into a blunderbuss fitting over the muzzle of a rifle with the larger end of the hole down. A regulation cartridge is fired from the rifle. This passes along the hole in the grenade and in doing so presses against a spring arranged to detonate a fulminating cap. The powder in the grenade being thus ignited, propulsive force is obtained and both together are projected outwards. A good rifle grenade shooter can fire twenty to twenty-two shots per minute.

The straight fire weapons consist of machine guns and of machine rifles. The French use the Hotchkiss in the former department, but they have an extremely light and useful rifle in the latter. Lieut. Morize mounted one of them on a lecture table and showed how easy it is to operate and take care of it. It requires the services of only three men. One man carries and fires the gun while the other two carry the ammunition, which consists of semi-circular clips of twenty cartridges each.

DARTMOUTH-TECHNOLOGY RACE

To Run on Difficult Cross Country Course at Hanover

Technology will meet Dartmouth in a cross country race tomorrow afternoon at Hanover. Although the Institute runners defeated Harvard in a closely contested race last Saturday with the absence from the team of Halfacre '18, who was, at the time, in no condition to run, tomorrow's contest will prove infinitely more difficult even should Halfacre be returned to the squad.

The Dartmouth cross-country course is one of the hardest in the country, made so by the rugged topography of the New Hampshire hill lands. In this respect the Green runners should have the advantage, for the Technology cross-country work, with the exception of Saturday afternoons, is limited to level running on the field. Tomorrow will be the first time that the Cardinal and Grey has met Dartmouth over the latter's course since 1912, when the Institute participated in the first of the New England Intercollegiate Cross-country Championships.

The contest is scheduled for 2.00 o'clock. Seven men from each side will enter, the first five to finish for either side will score.

The men who will run for the Institute are Captain Herzog '18, McCarten '19, Dorr '20, Carpenter '21, Owens '20, Hanley '18, and either Stone '21, or Halfacre '18.

TECHNOLOGY MEN IN SERVICE

(Continued from page 5)

L. W. SNOW, 1st Lieut., Ord. Dept.
 F. W. WILLIAMS, in the 2d R. O.
 T. C. C. A. C., Plattsburg, N. Y.
Class of 1915
 A. K. ATKINS, Lieut., U. S. R., Yaphank, L. I., N. Y.
 E. D. BASCOM, Plattsburg.
 A. H. BOND, C. E., U. S. N., Bureau of Yards and Docks, Washington.
 W. T. JENNINGS, 2d Lieut., O. R. C., Camp Lewis, American Lake, Wash.
 G. M. KEITH, 2d Lieut., 301st Engrs., Camp Devens, Ayer, Mass.
 H. L. KING, 2d Lieut., E. O. R. C.
 H. NIEMANN, C. E., U. S. N., Bureau of Yards and Docks, Wash.
 R. L. SIDELINGER, in the Medical Corps.
 W. H. SMITH, C. E., U. S. N., Bureau of Yards and Docks, Wash.
 F. F. WILLIAMS, 2d Lieut., R. O. T. C., C. A. C., Plattsburg, N. Y.
Class of 1916
 R. ALFARO-MORAN, Engineer Corps.
 C. T. BARNARD, Lieut., U. S. R.
 H. R. BENNETT, Cadet, Squadron B, Wright Branch Depot.
 W. H. BLANK, Battery A, 301st Reg., Lieut. Field Art., Camp Devens.
 A. BRESTH, Plattsburg.
 C. L. BROAS, 1st Lieut., 3rd Reg. Engineers, Philippines.
 F. C. BRYANT, 1st Lieut., U. S. Engrs., France.
 J. A. BURBANK, Ensign, U. S. N.
 G. D. CAMP, 1st Lieut., Co. 2, Fort Leavenworth.
 C. COCHRANE, in mosquito fleet.
 C. J. DAVIS, JR., 2d Lieut., Amer. University, Washington.
 P. H. DUFF, 2d Lieut., C. A. C. Promoted to 1st Lieut., U. S. A.
 F. C. FOOTE, Amer. Univ., Wash.
 H. J. GILKEY, 3rd Field Art., Fort Leavenworth.
 L. E. KNOWLTON, Capt., 316th Inf., Camp Meade, Md.
 A. C. LIEBER, JR., 2d Lieut., Amer. Univ., Washington.
 T. W. LITTLE, 1st Lieut., O. O. R. C.
 W. LOHMEYER, JR., 2d Lieut., U. S. A. Engrs.
 R. MILLIS, 2d Lieut., 30th Engrs., Columbia, S. C.
 H. B. PICKERING, C. A. C., Fort Monroe, Va.
 G. M. STEESE, Camp Lewis, American Lake, Wash.
 A. K. STEWART, C. A. C., Fortress Monroe, Va.
 W. S. STEWART, C. A. C., Fortress Monroe, Va.
 C. R. TUTEIN, Sec. Groupe Americaine, Convois Automobiles, T. M. U. 526, Peleton C. Par B. C. M., Paris.
 J. B. WELLS, 1st Lieut., O. O. R. C.
Class of 1917
 J. W. ANDERSON, 1st Lieut., C. A. C., Fort Monroe, Va.
 C. E. ATKINSON, 1st Lieut., C. A. C., Fort Monroe, Va.
 J. E. BABBITT, 1st Lieut., C. A. C., Fort Monroe, Va.
 D. E. BELL, 2d Lieut., Inf., O. R. C.
 E. P. BROOKS, 2d Lieut., E. O. R. C.
 PAUL BURLESON, 2d Lieut., U. S. N. Left on transport for France, Oct. 18, 1917.
 P. J. CIANCIOIA, drafted into National Army.
 W. A. CLARK, 2d Lieut., U. S. A.
 C. COCHRANE, Machinist's Mate, Div. 2, Sec. 2, Commonwealth Pier, South Boston, Mass.
 H. W. COLLINS, 2d Lieut., U. S. A.
 S. K. COOPER has received a commission as Ensign in the U. S. N. from the Cadet Naval School at the Institute.
 F. S. CONATY, 2d Lieut., 3rd Field Art., Co. K, Fort Leavenworth.
 J. M. DEBELL will be stationed at Fort Leavenworth, Kansas, after Nov. 15, 1917. In training as provisional 2d Lieut., Field Art.
 A. D. DICKSON, 1st Lieut., C. A. C., Fort Monroe, Va.
 J. W. DOON, 2d Lieut., Artillery, O. R. C.
 T. E. HANNAH, 2d Lieut., C. A. C., Fort Monroe, Va.
 F. C. HARLOW, Auditing Dept., Camp Devens, Ayer.
 F. B. HASTIE, 2d Lieut., U. S. A. Engrs.
 E. R. HATTEN has received a commission as Ensign in U. S. N. from the Cadet Naval School at the Institute.
 A. D. HILLER, private in Depot Brigade, Co. 3, Camp Devens.
 G. D. KITTREDGE, 1st Lieut., C. A. C., Fort Monroe, Va.
 S. L. KUXN, 2d Lieut., U. S. A. Engrs.
 H. J. McDONALD, 2d Lieut., U. S. A. Engrs.
 J. G. MACDOUGAL, reported being commissioned 1st Lieut.
 W. L. MEDDING, 2d Lieut., U. S. A. Engrs.
 T. K. MELOY, qualified as provisional 2d Lieut., Eng. Corps, Reg. Army. He is now at the officers' training camp at Fort Meyer, Va.
 A. E. MOODY, Lieut., C. A. C., Fort Redman, New Bedford, Mass.
 G. A. NELSON, 2d Lieut., C. A. C., Fort Monroe, Va.
 O. R. PETERSON, 2d Lieut., U. S. A.
 E. H. RAYMOND, 1st Lieut., C. A. C., Fort Monroe, Va.

E. D. REYNOLDS, bacteriologist, Red Cross San. Unit No. 4. Address: 316 Cotton Avenue, Macon, Ga.
 J. C. RICHARDSON, Radio Div., U. S. N. Address: 80 Washington Street, Leominster, Mass.
 F. C. ROGERS, 2d Lieut., U. S. A.
 H. L. ROGERS, Co. I, R. O. T. C., Madison Barracks, N. Y.
 T. W. RYAN, JR., 2d Lieut., E. O. R. C.
 T. SAVILLE, C. A. C., Fort Monroe, Va.
 E. G. SENTER, JR., 1st Lieut., E. O. R. C., Camp Stewart, Fort Bliss, Tex.
 E. SPENCER, Capt., U. S. R., Camp Devens, Mass. Ammunition Train Dept.
 W. C. SVAIN, 1st Lieut., 7th Co., C. A. C., Fort Monroe, Va.
 F. E. THOMAS, 3rd Battery, R. O. T. C., Fort Niagara, N. Y.
 J. M. TODD has received a commission as Ensign in the U. S. N. from the Cadet Naval School at the Institute.
 N. E. TOURTELLOTE, reported promoted 1st Lieut., C. A. C.
Class of 1918
 C. T. BARNARD, Lieut., U. S. R., Exped. Force, France.
 A. E. BURKE, Private, Battery B, Light Field Art., Camp Devens.
 E. J. CAMERON, U. S. Base Hosp. No. 5, France.
 J. W. DAMON, Corporal, Co. B, 101st Engrs., U. S. Exped. Force, France.
 H. R. PINKERTON, U. S. Base Hosp. No. 5, France.
 E. ROGAL, st Lieut., Aviation Sect., U. S. R.
Class of 1919
 R. S. HUNT, 102d Field Art. Band. Now in France. Enlisted in May, 1917.
 E. L. SACHE, Address: care of Disbursing Officer, Charlestown Navy Yard, Mass.
 C. A. SMYTH, studying at Columbia University to be machinist's mate. Stationed on training ship, 96th St., N. Y.
Class of 1920
 F. S. CARPENTER, at Naval Aviation School, Technology.
 H. S. HALLEY, Convois Auto. Par. B. C. M., Paris.
 A. S. MYERS, on board U. S. S. Granite State. Address: 96th Street Pier, New York City, or 129 Wallace Avenue, Mt. Vernon, N. Y.

Technology Men in National Service

Will you assist The Tech in keeping in touch with Technology men in national service, either in a military or industrial capacity, by sending in the name, address, military rank, etc., of such men? A complete card index is being kept at The Tech office and accurate information is urgently needed to keep these files up to date.
 Appeals for information of this kind are coming from the Technology Club of Paris, Alumni Associations all over the world, the Alumni office at the Institute, the Technology Christian Association, heads of the various departments at Technology who are endeavoring to keep in touch with men who have taken their courses, and from numerous individuals.
 The Alumni office intends to publish a pamphlet containing the names of all Technology men in service, and it must have the cooperation of all graduates and undergraduates to assure its success. Do not abbreviate too much in sending such data, but be explicit enough to insure correctness of detail.
 Address information of this character to the Managing Editor, The Tech, Massachusetts avenue, Cambridge, Mass.



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TECHNIQUE 1919

Seniors to Make Appointments For Portfolio Photos

Although there have been rumors to the contrary, all Seniors who, according to the Institute catalog, are either classified or unclassified members of the Class of 1918, are eligible to have their photograph and record appear in the Portfolio Section of Technique 1919.
 Arrangements have been made with the Notman Photograph Company to take the formal pictures of the Seniors. The hours from 1.00 to 2.30 daily have been reserved for the Senior appointments, but by special arrangement with the photographer sittings may be had at other times.

In order that the pictures may appear in Technique, it will be necessary to have the photographs in the hands of the engraver earlier this year than heretofore; therefore December 1 has been set as the last day for which appointments may be made.

Appointments may be made with the photographer by reserving hours with R. P. Hackett, '19, Portfolio Editor, who will be in the Technique Office, second floor of the Activities Building opposite the Co-op, from 8.45 to 9.00 daily except Wednesday, and Wednesday from 12.00 to 1.00.

When the proofs of the formal pictures have been received by the subject, they should be returned as soon as possible to the photographer.

D. Oscar Mayer, Editor-in-Chief, Monday, Wednesday and Friday 4.00 to 6.00 p. m.; Tuesday and Thursday 8.50 to 10.00 a. m.
 John L. Riegel, Business Manager, Monday and Wednesday 9.00 to 10.00 a. m.; Tuesday and Thursday 10.00 to 11.00 a. m.; Friday and Saturday 11.00 to 12.00 a. m.
 James W. Reis, Treasurer, Monday and Wednesday 4.00 to 5.00 p. m.
 Robert P. Hackett, Portfolio Editor, daily except Wednesday 8.45 to 9.00 a. m.; Wednesday 12.00 to 1.00 p. m.
 Marshall C. Balfour, Athletics Editor, Wednesday 1.00 to 2.00 p. m.
 F. W. Barney, Faculty Editor, Tuesday and Thursday 4.00 to 5.00 p. m.
 Cutter P. Davis, Statistician, Saturday 12.00 to 1.00 p. m.
 Oswald Cammann, Photograph Editor, Thursday 1.00 to 2.00 p. m.; Friday 4.00 to 5.00 p. m.
 George H. Wiswall, Societies Editor, Friday 1.00 to 2.00 p. m.
 Adolph L. Muller, Art Editor, daily in 43A Rogers, 4.00 to 5.00 p. m.
 David C. Sanford, Grind Editor, daily in 43A Rogers, 4.00 to 5.00 p. m.



1920 FOOTBALL TEAM

CREW RACE

To Start From Cottage Farm Bridge at 1.30 O'clock

The second annual Field Day crew race between the Class of 1920 and the Class of 1921 will be held this afternoon promptly at 1.30 o'clock over the course between Cottage Farm Bridge and the Institute. Because of the interest shown by the freshmen, there will be three eights in the race, two 1921 crews and the 1920 crew.

The start of the race will be at the Cottage Farm Bridge. The crews will row along the Cambridge side of the Charles, through the third and fourth arches (from the Cambridge side) of the Harvard Bridge, to the finish in front of the eastern end of the Institute, a distance of about three-quarters of a mile. The officials, A. W. Stevens, H. E. Worcester and R. W. Van Kirk, will follow the race in the motorboat to officiate both at start and finish.

Although the crew race will not count in the final Field Day score, it will be none the less important on this account and it promises to be one of the most successful events of the day because of the keen interest shown by both crews in their work.

Mr. A. W. Stevens, of the Boston Athletic Association, has continued to devote his time to the Technology crews, and with such a man for a coach there certainly should be even greater interest in crew work than there now is. Practice has been held daily at the B. A. Boathouse. The work has been entirely in the shells, Coach Stevens accompanying the boats in another shell.

American University Union in Europe Opens New Branch Office in London For College Men

The anticipated presence in London of an unusual number of university men, either passing through or on leave from the front, has suggested the need of some common rendezvous where notification of their presence in London can be registered and meetings can be arranged with friends who may be there at the same time.
 Arrangements have therefore been made by members, resident in London, of the alumni of various colleges to establish a meeting place for American college men when in England.
 These headquarters will be known as the "American University Union in Europe—London Branch," and will be for the use of alumni of all universities and colleges in the United States.
 Through the courtesy of the London office of the Farmers' Loan and Trust Co. of New York, rooms in their buildings at 16 Pall Mall East, S. W. 1, near Cockspur street and Haymarket, S. W. (telephone, Gerard 9200), have been given over for this purpose and are being adequately furnished.
 American papers and periodicals will be found there, and proper facilities, afforded for registration, forwarding mail, letter writing, etc.

NOTICES

TECHNIQUE 1919—Men who can draw and desire to make headings or cartoons for Technique 1919 see A. L. Mueller any day at 4.30 o'clock in Rogers 43-A.

FACULTY NOTICE—Copies of student list to be published in the Directory of Staff and Students are posted on the Bulletin Board at the information office and on the boards at rooms 3-170 and 4-170. Students are asked to leave memoranda of corrections or additions not later than Nov. 3 at the information office, room 10-100.

FACULTY NOTICE—Fourth year students have been notified in regard to their deficiencies below the fourth year. Anyone who expects to be a candidate for graduation in June, 1918, who has not received such notice should consult Professor Merrill at the earliest opportunity.

FACULTY NOTICE—Mr. F. H. Fay will speak to the class in Report Writing, on Friday, Nov. 2, at 11.00 o'clock, in room 2-190. He will describe the methods used in preparing reports by the firm of Fay, Spofford and Thorndike.

GAS ENGINES—The course in Gas Engines given by the Aero Club will start Monday at 4.00 o'clock in room 3-270. If enough men report, a second class will be held Tuesday at 4.00 o'clock in the same room, if it is available. The course on airplanes will start the following week.

ELECTRICALS—Through the courtesy of the Mechanical Engineering Society the members of the Student branch A. I. E. E. have been invited to the trip to the "O" St. station of the Boston Elevated, Saturday, Nov. 3. Those desiring to go must sign up immediately on the slip at the office 10-203. The party will meet outside the Cooperative at 1.30 tomorrow.

RESEARCH DIVISION LOOKS INTO STREET RAILWAY SYSTEMS

The latest reports of the Electrical Research Division of the Institute concern itself with street railway affairs, and takes up the basic questions of the nickel fare, length of haul, zone system, and other similar features in a comprehensive discussion. It predicts the passing of the flat rate and the coming of a fare based on the length of haul. It appears that the greater the density of the traffic, the lower the investment charges and operating costs per passenger.

Another important factor is rate of fare, for it is true that an increase in rate discourages traffic. Still, a flat rate for long and short hauls is not business-like, while the three-cent fare, although having some advantages, would complicate the collecting and auditing. A uniform fare through a great railway system puts a comparatively higher rate on short rides for the benefit of those who take long rides. While it may seem that rush hour traffic is a benefit to the railways, it must be remembered that the cars return practically empty.

RELAY TEAMS

Order of Running	
1920	1921
Knight	Poole
Whitten	Burckett
Ash	Conant
Matthews	Painter
Farrer	Cowie
Bradley	Junod
Wilson, I. H.	Gulley
Mills	Evans
Brickert	Scott, P.
Ormon	Pridmore
Bossert	Bawden
Downey	Sheldon
(Captain)	(Captain)
Substitutes	
Shea	Clark
Wilson, G. A.	Kirkpatrick

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M. I. T. WAR SERVICE AUXILIARY

(Formerly Friends of Technology)
To the Editor of The Tech:
The Headquarters of the Auxiliary are now established in the Rogers Building, 491 Boylston Street. Here some one will always be found who can give information in regard to the general scope of the Auxiliary. Plans for the winter are well under way, and various committees have been formed for the purpose of helping the M. I. T. Committee for National Service to keep in touch with all Technology men in the service of the Government here or abroad and to render any possible assistance either to the men who are absent from home on Federal or State business or to their families.

During the summer the Auxiliary was in constant communication with the Technology Club of Paris, now part of the larger movement known as the American University Union in Europe. Too much cannot be said in recognition of the way in which our representative, Van Rensselaer Lansingh ('98), succeeded in carrying out in the Club the object of the founders of the Union who sought "to meet the needs of American university and college men who are in Europe for military or other service in the cause of the Allies."

On October 1, a Workroom was opened at the Rogers Building, where supplies of various kinds are made and assembled. Here are welcomed all who are in any way affiliated with Technology, and the success of this venture depends upon the ready response of Technology men and women to this opportunity for co-operation.

During these early days of organization we have been greatly stimulated by the advice and counsel of Mr. James P. Munroe, the Chairman of the M. I. T. Committee for National Service, and it is our hope that we may truly reinforce the undertakings of that group of Technology men, who have entrusted to us the special task of reaching out to the men in service and of enlisting the interest of their families in this work.

(Signed) EDITH P. CUNNINGHAM.
October 30, 1917.

TECHNOLOGY CLUB OF PHILADELPHIA

The Technology Club of Philadelphia will hold an informal dinner at 6.30 and a mass meeting at 8.15 p. m., November 7, at the club house, 1317 Spruce street. Mr. Joseph Hays, typographic expert, will address the club on "Printing: Its Art and Science." At a meeting to be held in the near future, Dr. Hollis Godfrey '98, will speak on the work of the National Council of Defense, of which he is chairman.



1920 RELAY TEAM

Summary of the Developments of Technology's Activities in Military and Industrial Service

INSTITUTE ACTIVITIES

1. At the moment war was declared President MacLaurin offered to the U. S. Government the facilities of the Institute, faculty and laboratories, realizing that the use of the latter by a force familiar with them would be of greatest advantage.
2. For eighteen months before the declaration of war there was at the Institute an Engineering Corps of undergraduates and instructors, giving time to the study of military engineering.
3. When war was declared the Institute Committee appointed a student committee to consider the situation and advise the students. This committee reported that undergraduates had better "sit tight," and stated that on graduation they would be worth more to the government. Seniors were advised to seek places where technical men would be needed.
4. On declaration of war the entire group of students in Naval Architecture and some of the faculty went into the employ of the Government.
5. The faculty of the Institute voted to grant degrees to Seniors who were in good standing, who went into military service or allied industries, without requiring the completion of their studies.
6. The faculty volunteered gratuitous assistance to any Seniors wishing to take military examinations by establishing "cram courses," leading up to the examinations.
7. The Institute gave to a Massachusetts Committee the use of its laboratories for training Marine Engineers. This work was replaced later by the schools directed by Professor Miller.
8. Intensive courses were established in Naval Architecture, open to Seniors, or others properly qualified, to furnish needed draughtsmen for Navy yards and ship building yards. All these men, about fifty in number, went to Charlestown in July.
9. The Army Aeronautical School was established with a capacity of three hundred.
10. The Sophomores organized a special military camp, accommodating about two hundred men, at East Machias, Me., lasting for twelve weeks.
11. The Juniors organized a military camp at Cambridge, with students in uniform, taking military studies and in addition, those anticipating the Senior year, so that they might sooner be ready for service to the country. About two hundred enrolled.
12. For the U. S. Shipping Board, Professor A. E. Burton organized thirty schools for deck officers of the new merchant marine, these schools being in ports on all coasts of the country. About five hundred men have attended these schools in sections, each section being allotted a certain length of time.
13. Cadet School for U. S. Naval Reserves housed at the Institute. About one hundred and fifty men have attended.
14. For the U. S. Shipping Board, Professor E. F. Miller organized eight schools in principal ports where an engineering school was located, to educate marine engineers for the new merchant marine.
15. Advance battalion of upperclassmen was organized and is being put into uniform. Over four hundred men will take regular military drill and exercises with this battalion.
16. Freshman battalion put into uniform, which the authorities have ordered to be worn all day on drill days, and at other times if desired by the students.
17. Four year military option established, in accordance with plans formulated just after war was declared.

ALUMNI ACTIVITIES

18. The Who's Who of Technology brains, a questionnaire addressed to all graduates asking what they have done, what they are able to do and what they will be willing to do. This placed 5000 names of competent engineers at the Government's call. From this has come the U. S. Public Service Reserve, an organization financed privately but nominally under the Department of Labor.
 19. The Washington Technology office, in touch with government bureaus.
 20. The Paris Bureau, which was the foundation on which the existing University Bureau was established.
 21. The Alumnae Organization, which has mapped out a program of helpfulness among the families of Technology men who go abroad, and has been the starting point of a number of different movements.
 22. The Technology group which left for France June 25, 1917.
 23. The Alumnae War Service Auxiliary, financed by Mrs. Edward Cunningham, for every kind of war service.
 24. The Tech, the students' newspaper, has been enlarged and its scope broadened to publish news of the various Technology war activities.
- And during this time all the regular functions of the school have been continued, it has opened with a registration about ten per cent. below the normal, without counting the Government schools, and continues the academic and technical instruction for the Lowell School for industrial foremen.

OFFICIAL FROM THE M. I. T. Committee for National Service

RAYMOND W. FERRIS, Chairman

WASHINGTON BUREAU
908 Union Trust Building
JOHN M. DeBELL '17 in Charge

A direct means of communication between the Technology and the National Government. If there is anything you wish to know in Washington, write to the Technology Bureau.

Visitors at Washington Office
William J. Orchard '11, has been in Washington and has had considerable difficulty and embarrassment in dodging a commission. He feels he is of much more value in his present position which is concerned with furnishing

the Government with water-sterilizing devices and equipment.

Harold W. Beers '06, Vice-President of the Southern Ferro-Concrete Construction Company of Atlanta, Ga., reports that he is just about finishing up the cantonment construction job on which he has been engaged, and is now seeking more worlds to conquer.

Herbert A. Terrell '06, President of the Philadelphia Technology Club, called in the absence of the secretary, leaving his card.

Joseph A. Aaron '11, is now located in Washington, having a civil appointment in the Production Branch of the Gun Division, Ordnance Department.

Construction Men Wanted

Special orders have come through in the last day or two in one of the governmental departments calling for the immediate commissioning of a considerable number of first-class construction men. Men commissioned in accordance with these special orders will undoubtedly see foreign service at a very early

(Continued on page 8)

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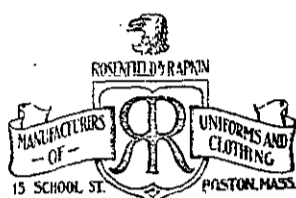
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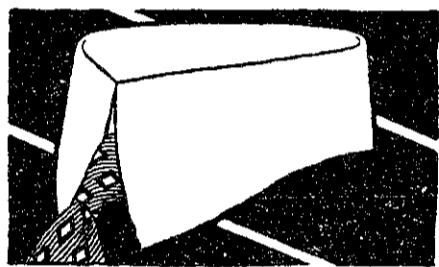
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TECH NIGHT AT YE WILBUR

(Continued from page 1)

tors seen on the stage. It is the one chance of a lifetime to see such an exhibition.

Another point which must be emphasized concerns the behavior during the show. In past years, there have been occasions when good behavior has not been adhered to; as a result there was difficulty experienced in obtaining a theatre for tonight. The management has given the proprietors of Ye Wilbur every assurance that the fellows will conduct themselves in a proper manner. There will be some outsiders in the theatre, and rough behavior will hurt the name of the Institute in a way nothing else could.

Finally the management asks that every man, who can possibly come, will do so. If any men have neglected to get seats it may be possible for them to obtain same at the box-office of Ye Wilbur. Remember: Ye Wilbur, at 8.15, for the Love-of-Mike!

WASHINGTON BULLETIN

(Continued from page 7)

date. The Washington office will give prompt attention to any inquiries from men interested in this subject. This should be a rare opportunity for some of the young fellows who know the construction game and are just "iteling" for an opportunity to get quickly into service abroad.

Water Supply Men

One or two good Water Supply Engineers are needed immediately for service abroad. Anyone interested in this line of service should communicate with this office promptly because it is expected that the vacancies will be filled in a very few days.

Motor Truck Experts

A number of men are being taken on at present for service both in this country and abroad (particularly abroad) who are familiar with the mechanics of automobiles and trucks, and who are specially qualified to supervise the maintenance and upkeep of motor vehicles in the field. Men under this classification will receive commissions.

Example of Contradictory Information in Washington

A number of the Army departments are daily commissioning men with specific qualifications as they are required, and yet we find the following report of sweeping limitations imposed by the Chief of Staff. We quote from the Army and Navy Journal of October 20:

"The Chief of Staff has instructed the heads of the staff corps bureaus and departments to discontinue forthwith the commissioning of civilians in their respective Reserve organizations unless there is immediate need of the services of the applicant. These instructions were based on the belief that, in certain Reserve Corps, the number of men holding commissions already is so large that no normal demand will ever result in the call to active duty of the latest commissioned officers.

"General Bliss at the same time called for detailed statement as to the strength of the Officers' Reserve Corps of the Medical Department, Signal Corps and Quartermaster Corps, with the number of men in each grade not yet called to active duty, and for an estimate of the number of those whose services probably will be needed within the next few months. The effect of these orders will be to hold up a number of commissions in the Staff Corps' Reserves. It may also affect, temporarily, scores of commissions in the Aviation Section, S. C., which have been prepared for issuance to graduates of the ground and flying schools. Eventually, however, all these men will be commissioned, the need for their services being indisputable."

Kiln-Drying Airplane Woods

The Forest Service, Department of Agriculture, authorizes the following general but rather interesting information:

"When the United States entered the war the need for wood to build airplanes quickly created a difficult problem. Most of the air-seasoned wood available had been bought for airplanes for the allied nations abroad. Thorough air seasoning of such stock requires from one to three years, according to the size and kind of wood. Kiln-dried stock under the methods ordinarily used has frequently proved unsatisfactory and for that reason airplane manufacturers have been reluctant to use it. If the needs of the fighting forces were to be met adequately and without prolonged delay, it was essential that methods of conditioning should be available in which full confidence could be placed.

Experiments at Laboratory

Long before this situation developed the forest products laboratory of the Forest Service, at Madison, Wis., had been making a scientific study of the drying of wood, and had developed a

method of drying which has been very successful with all the woods tried. Several kilns have been built at the laboratory for experimental purposes and a number of demonstrations made in commercial kilns. Ash and spruce are the woods most in demand for airplane construction, and anticipating the present situation the Forest Service secured a shipment of partially air-seasoned ash and spruce plank for preliminary tests. This material was kiln dried without injury. Later thoroughly green Sitka spruce, white ash (northern and southern), white oak, Douglas fir, western white pine, and mahogany were secured in the log for testing. The spruce and ash logs were cut up and the green material from each species divided into three matched groups. One group of each species was tested green, another has been set aside to be tested when it has air-dried, and the third group was kiln-dried, trying several methods, and then tested.

No Loss in Kiln-Dried Spruce

Only the results of tests on the spruce have so far been analyzed. Comparison with standard tests which had already been made shows that Sitka spruce can be kiln-dried from the green conditions with no more, perhaps less, injury to its mechanical properties than by air seasoning. Definite specifications have been prepared for kiln-drying spruce green from the saw for airplane construction and, if rigidly enforced, they will insure kiln-dried stock of this species equal to air-dried stock.

A preliminary study of propeller construction has shown the need of such information on propeller woods. The testing of the ash and other species now on hand, which include several propeller woods, is being pushed as rapidly as possible, and there seems reason to expect as favorable results as with the spruce.

There is a demand for a few men having special knowledge of kiln drying processes. Any civil or mechanical engineer with three or four years' experience along these lines should communicate with the Washington office stating his qualifications.

MORE VOLUNTEERS FOR AIR SERVICE WANTED

Observers: It is planned to recruit 30 observers each month until further notice. The first group are being assigned to active duty about November 1. They will be sent for preliminary training at the University of Texas, Austin, and for the flying and observing instruction to Fort Sill, Oklahoma. Observers will be instructed in radio telegraphy, machine guns, map making and reading, in addition to a certain amount of military drill and paper work.

The physical requirements are the same as for fliers, except that the equilibrium tests are omitted.

It is required that candidates for this position shall have at least a high school education.

Airplane Pilots: The number of these men required is unlimited.

The physical examination will be very strict, particularly as to eyes, ears and heart.

A high school education, or its equivalent, in the opinion of the Examining Board, is required.

Candidates for this position will receive their ground training at the School of Military Aeronautics, Massachusetts Institute of Technology. Upon the completion of this training they will be sent to a flying school, to learn the practical operation of airplanes. This instruction may be either in the United States or in the territory of one of its allies. Besides flying instruction, pilots must also take courses in radio telegraphy, machine guns, map making and reading, and construction of airplanes and motors.

Balloon Pilots: Fifty balloon pilots are desired at once.

The physical examination will be the same as for airplane pilots, except that the equilibrium tests will be omitted.

A course in the construction of balloons and in operation of spherical balloons will be given either at St. Louis or at a school soon to be established in New England. Instruction in kite balloons, such as are used on the battle fronts, will be given at Omaha. Balloon pilots will also be instructed in map making, observation and telephone work. The balloon course occupies about two or three months.

General Information: Candidates for the air service will be enlisted as privates first class in the Aviation Section, Signal Enlisted Reserve Corps during their training and will be paid at the rate of \$100 per month, plus 60 cents per day commutation of rations. Their transportation from their homes to the place of instruction will be paid by the Government. If a man fails in the school he will be discharged back to his civilian status.

Men are expected to provide their own uniforms.

At the completion of their training, they will be recommended either as first or second lieutenants, according to the grade of their work while in school.

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