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The Tech

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NAVAL AVIATORS HOLD INTERFLIGHT CONTEST

A Large Majority of Aviation Students Take Part in Last American University Union Tech Field Wednesday

440 MEN ENTER CHARIOT RACE

Few men enrolled in the Technology Naval Aviation School failed to take part in the athletic carnival at Tech Field, Cambridge, yesterday afternoon. In one event, the chariot race, 440 men competed. It proved to be the best contest of the day. All four companies were represented, each by 110 men, and company 28, which captured the most points in the team competion, won easily with the other companies closely bunched.

Company 28 scored 27 points; company 25, 17; company 26, 14; company 27, 13. There were eight preliminary heats in the 100-yard dash, which was won by Dick Keeler, the old Wesleyan sprinter. He defeated, among others, Frank J. Shea, the Intercollegiate quarter-miler, and Carl R. Erdman, Jr., Intercollegiate hurdle champion, in 10 4-5 seconds. All the men wore tennis shoes.

One hundred-yard dash—Won by R. Keeler, company 25; second, F. J. Shea, company 28; third, C. R. Erdman, Jr., company 28. Time—10 4-5s.

Shoe race—Won by Hartman, company 28; second, Crocker, company 26; third, Parker, company 27.

Tug-of-war, 75 men on a team—Company 28 defeated company 25, time 22s; company 26 defeated company 27, time 35s; final heat, company 28 defeated company 26, time 45s.

Three-legged race—Won by Moulton and Carr, company 27; second, K. G. Chetlain and A. L. Chetlain, company 27; third, Cook and Dempsey, company 27.

Centipede race—Won by company 26 A (Gabeline, Prince, Geiger, Regden, Tingley, Hough, Sawyer, Murray, Strawn cox.); second, company 26 B (Hetyel, McNabb, Stevens, Twitchell, Dodge, Nolan, Steffens, Dianne, Heym, cox.); third, company 25 (Birchbeck, Mills, Hill, Grimes, Decker, Marshall, Diamond, Harmon, DeCastro, cox.).

Chariot race—Won by company 28; second company 25; third, company 27.

Fifty-yard swim—Won by R. Keeler, company 25; second, Pentz, company 28; third, Boyd, company 27. Time—10s.

Relay swim—Won by company 28 (Farley, Childers, Pentz, Brenham); second, company 25 (Guthz, Gray, Livingston, Orr); third, company 27 (Stewart, Gillett, Burgess, Cole). Time—3m. 7s.

MORE OFFICERS NEEDED

Secretary of War Baker stated on Aug. 12 that the Department had under consideration new rules regarding the admission of students to the Artillery officers' training schools and admitted that the need for officers in that branch of the Service was such as to render some action necessary at an early date. The need for officers in other branches of the Service is also becoming noticeable, but the difficulty of obtaining them is greater in the Artillery and in the Corps of Engineers. The rapid expansion of the Corps of Engineers has called to the Service large numbers of men of the college bred type who are making good in the inteisive training given them at Camp A. A. Humphreys, while the Artillery schools are not so well filled. It is not unlikely that an order will be issued which will, to some extent, modify the recently issued restrictive order and will only apply to those branches of the Service where conditions justify its modification. The training schools for Infantry officers have met the requirements of the present time most satisfactorily, and as such schools are now being held in France as well as in this country there is little chance of these schools being opened to civilians other than those who have had training in colleges or military schools.

All Students Over Eighteen Are to Be Voluntarily Inducted Into the S. A. T. C.

TELEGRAM TO THAT EFFECT RECEIVED FROM DR. MACLAURIN

THE TECH is in receipt of the following telegram, relative to the new Students' Army Training Corps, sent on August 22nd by the Committee on Education and Special Training of which President Richard C. Maclaurin of Technology is the Chairman. The text of the communication follows:

"Students over eighteen will enter Students' Army Training Corps after registration date under amended selective act. Enter by individual voluntary induction—not enlistment. This change in view of probable reduction of draft age to eighteen and probable registration about September 10th. Change in draft involving call of men eighteen to twenty-one earlier than previously estimated will require readjustment of military training plan and academic work. Regulations and suggestions sent soon as practicable. Except for changes necessitated by new legislation corps will be organized as already outlined. Uniforms, ordnance and other supplies will be issued by committee direct. Requisitions not needed and must not be sent."

J. P. MUNROE '82 NOMINATED TO FEDERAL EDUCATIONAL BOARD

Washington, Aug. 22—James P. Munroe, President of the Munroe Felt and Paper Company, of Boston, was nominated by President Wilson today to be a member of the Federal Board of Vocational Education.

Mr. Munroe was graduated from the Institute with the Class of 1882, in the Mining Engineering and Metallurgy Course. While a student at Technology he was prominent in undergraduate affairs, and he has ever since kept in close touch with the doings of the Institute. He is now the Secretary of the Corporation.

LT. WASGATT '19 ALIVE

Technology Student Believed Killed Now Reported As Injured

The news has been received from Washington by Ex-Mayor Herbert P. Wasgatt of Hancock street, Everett, Mass., that his son, First Lieutenant Harold C. Wasgatt, was not killed in France, but was wounded to a degree as yet undetermined.

The original report of his death last month is now stated by Adjutant-General McCain to have been a mistake.

Lieutenant Wasgatt, a member of the Institute Class of 1919, was mentioned in the casualty list of August 1st, as having died of wounds. He was a member of the machine gun company, 59th Regulars.

Wasgatt was a member of the Everett High School football team which claimed the championship of the country in 1915, after defeating Oak Park High School, Chicago. He entered Technology in 1915, registering in the Chemical Engineering course. At the close of his freshman year he went to the officers' training camp at Plattsburg, and the following fall he returned to school. After war was declared in 1917 he again went to Plattsburg, where he received his commission as first lieutenant.

Lieutenant Wasgatt is twenty-two years old. He is a member of the Kappa Sigma fraternity.

ASKS ALL NEWSPAPERS TO PRINT DAILY NOTICE FOR MEN OF AGE SINCE JUNE 5

The following request has been made by the Office of the Provost General:

The newspapers of the country can aid the Government considerably if they will make a practice of publishing daily between now and August 24th, in conspicuous manner, the following "box" calling the attention of the young men in their respective communities to the registration August 24th:

"ALL MALE PERSONS WHO HAVE REACHED THEIR TWENTY - FIRST BIRTHDAY SINCE JUNE 5, 1918, AND ON OR BEFORE AUGUST 24, 1918, MUST REGISTER ON AUGUST 24, 1918.

"THESE MEN SHOULD CONSULT WITH LOCAL DRAFT BOARDS AS TO HOW AND WHERE THEY SHOULD REGISTER."

It is apprehended that unless some such distinctive method of advertising the August 24th registration is adopted it will be lost sight of amid the publicity that will attend consideration by Congress of the new draft-age law and preparation by this office for the registration next month of those who will be included under the new age limits.

AMERICANS BUILD HUGE FRENCH FREEZING PLANT

A recent issue of Le Matin, the Parisian newspaper, gives an interesting example of characteristic American energy and speed. In a certain spot in central France where last December stood a thick forest there has sprung up, under the hands of American engineers and workmen a huge meat-refrigerating plant. The encampment, which has for its special object the provisioning of American soldiers in France, covers a space of 10,000 acres. The refrigerating plant hold 10,400.000 pounds of meat, which is equivalent to 15,000 cattle weighing on the average 700 pounds apiece. It produces 500 tons of ice per day in excess of that used at the plant, which is used in the transportation of meat in the refrigerator cars and also for the conservation of other perishable foodstuffs, especially margarin.

DELTA KAPPA EPSILON HAS A NEW CLUBROOM IN PARIS

The Delta Kappa Epsilon fraternity has just opened a clubroom and headquarters at the Grand Hotel, Paris, for the benefit of fraternity members who may be in Europe. A branch has also been established in London. Headquarters is in charge of James Anderson Hawes, general fraternity secretary.

At a largely attended meeting of D.K.E. in Paris, D. E. H. Lines, a prominent Paris resident, was chosen as president of the organzaton there; Elmer E. Roberts, correspondent of the Associated Press, Paris Bureau, was chosen vice president, and an executive committee of Paris residents and army officers were eselected.

The Paris and London organizations expect to keep in close touch with nearly 3000 American and Canadian members who are now over there in the army and navy. Mr. Hawes, the director, is also chairman of the War Service Committee of the Inter-Fraternity Conference, and for the past year has had charge of the recruiting efforts of the American college fraternities.

GUATEMALA RELIEF WORK

Institute Men Serve Well After the Ravages of Earthquakes

One of the most interesting of American achievements and one whose details remain hidden in official records, is the rescue of the earthquake-levelled city of Guatemala from the famine and pestilence which would a short half-century ago have followed infallibily in the wake of the disaster. The splendid results redound to the credit of the Red Cross, which was instantly active, but four Americans in its service, gathered at the spot as soon as it was humanly possible, were the mainspring that set in motion the local forces that have saved the stricken city from impending doom. Stuart of Boston, O'Connor of Chicago, Struse of New York and Tolman of West Virginia, are names that Guatemala has inscribed on its roll of highest honor, the first and last mentioned being well known in Boston, where at Technology they received the engineering instruction that made their work of salvation possible.

Quake Three Blocks Long

Picture a country where the ground rose and fell like a great wave of the sea, with a crest a foot high and a

(Continued on page 4)

TWO DINNERS FEATURE ACTIVITIES OF BUREAU

Technology Paris Bureau of American Univertity Union Writes News of Its Doings to THE TECH

G. C. GIBBS '00 IS NOW DIRECTOR

THE TECH is in receipt of a letter from George C. Gibbs '00, director of the Technology Bureau of the American University Union in Europe, describing several dinners and fetes which have been held among the many Technology Alumni in and about Paris. The text part of the letter is as follows:

Tech Dinner June 1

"On June 1st we had a Tech dinner for the boys, which was also complementary to Mr. Lansingh, before his departure for the States. This was the first dinner that I had taken care of as Director. Mr. George Mower '81, was arranged with by Mr. Lansingh, some time ago to act as Chairman to select sepeakers. Mr. J. Erskine of the University of Columbia was the speaker at that dinner. He has been associated with the Foyer du Soldat and is now the Chairman of the Educational Campaign of the Y. M. C. A. He spoke to us in a most interesting way on the subject of the various difficulties between the nations, France and America, and how necessary it was that when the Americans leave France they shall take away the good-will of the French, as well as carrying away with them a right impression of France and her people.

"The following men were present:—W. R. Lansingh '98, E. G. Taylor '13, Samuel Chamberlain '18, E. B. Peck '14, E. W. Woodward '17, Neal E. Tourtelotte 17, G. H. Mower '81, H. E. Stump '10, R. W. Hall '18, H. P. Gray '16, Donald D. Warner '18, Roswell Barratt '14, Winfred B. Smith 17, Frederick B. Smith, Jr., '18, Douglas R. Buchanan '18, Richard H. Ranger '11, E. W. Curtin 17, D. R. Dixon '14, Louis H. Zeppler '15, William E. Lucas, Jr., '14, G. C. Gibbs 00.

"Mr. Lansingh was presented with a gift from the Tech men which he appreciated very much. Samuel Chamberlain furnished music on the piano after dinner.

Tech Dinner July 13

"The second Tech dinner for the boys under my direction was held on July 13th, Saturday night. This dinner was even more successful than the previous dinner. Thirty-one boys were here and we all had a fine time. Our guests were Professor Dugald C. Jackson '85, now Major in the Engineers, Major J. P. Jackson, his brother, formerly head of the Engineering Department of Pennsylvania State University, later head of the Board of Labor and Industry in the State of Pennsylvania and at present at the head of the Labor Board connected with the Army. Also, Major Williford of West Point, later special student at Tech. All three made addresses at the dinner. Major Williford spoke particularly of the work of the Tech men and especially of their ability. He said that when he had difficult work to be done, he always found a Tech man to do it.

"Lieutenant W. C. Short '14, furnished music on the piano after dinner.

"The Director mentioned the loss to Technology of H. C. Coburn '98, affectionately known as 'Pa Coburn,' and all those present have signed their names on the memorial which will be forwarded to Mr. Walter Humphreys.

"The following men were present:—Harold B. Davis '12, H. C. Mabbitt '12, E. C. Lowe '05, C. H. Carpenter '12, L. L. layton '17, William Hall '80, F. N. Breed '12, E. H. Sargent '07, R. H. Lord '11, Forrest Williford '17, Percy Rideout '11, J. P. Ferrall '16, Henry A. Babcock '12, Gordon W. White '14, E. W. Woodward '17, William C. Short '14, C. A. Coleman '16, H. Kennery '05,

(Continued on page 3)

The Tech

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

IN CHARGE THIS ISSUE

Henry L. R. Kurth '21 ..... Night Editor

SATURDAY, AUGUST 24, 1918

THE FOURTH LIBERTY LOAN

THE campaign for the Fourth Liberty Loan will begin September 28th and will close October 19th. The result of the loan will be watched with keen interest in Europe, not only by our associates in the war against the Teutonic powers, but by our enemies. It will be regarded by them as a measure of the American people's support of the war.

The Germans know full well the tremendous weight and significance of popular support of the war, of the people at home backing up the Army in the field. As the loan succeeds our enemies will sorrow; as it falls short they will rejoice. Every dollar subscribed will help and encourage the American soldiers and hurt and depress the enemies of America.

The loan will be a test of the loyalty and willingness of the people of the United States to make sacrifices, compared with the willingness of our soldiers to do their part. There must be and will be no failure by the people to measure up to the courage and devotion of our men in Europe. Many of them have given up their lives: shall we at home withhold our money? Shall we spare our dollars while they spare not their very lives?

WARTIME TECHNOLOGY

A YEAR ago last April, when America entered the war, the enrollment here had just reached a new high water mark. We had at that time about two thousand students in all. Last April after a year of enlistments and draft, Technology still retained seventy-five per cent of her top-notch mark, not counting government students, thus out-distancing practically every college in the country except women's colleges, and those in which co-education plays a very large part.

Next spring, however, the prospects of having a large civilian enrollment, are slim indeed, and it is extremely likely that Technology will come down to the level of the other coleges in respect to per cent of anti-bellum registration. We do not believe that a thousand men will be registered here next spring in the regular courses, due in the most part to the act that the present Senior class will be graduated by February at least and the junior freshmen class, which was intended to balance the Seniors, while a small class at the start, has been very largely depleted by enlistments. In addition to this the roll of honor in the Junior and Sophomore classes is already long, many have been registered in the last draft, and nothing can be predicted at this time of the effectiveness of the Student Army Training Corps in retaining these drafted men in school here.

On the other hand, we do not believe that Technology will ever approach the condition of the colleges in England with their score of men or so. There is no reason why the entering classes should be much smaller than formerly, because these men are in general too young to be affected by the draft, and once in school, everything will be done to keep them here. Then, too, enlistments are stopped entirely and it depends entirely upon government policy whether the men stay in school, or enter the army. Personally we believe they will stay in school.

Nevertheless, we might say that Technology as a school was never so large as it is today in the midst of a war. There are, at present, eleven government schools here, one of which, the school for Naval Aviation, enrolls and houses alone more men, 2200 of them, than the entire fifteen regular courses together ever enrolled at any point in their career.

PERSONALS

Howard F. McMillin '21, with the aid of his father, Frank B. McMillin, has shown his tact and ability in the War Savings Pledge Campaign, conducted in his home state of Ohio, by having the district of which his father is chairman, collect the record amount per capita of any county in the United States. He was complimented upon his work by the following letter received from the Ohio State Director of the Campaign:

Chairman,
Morrow County War Savings Committee,
Mt. Gilead, Ohio.

Dear Sir:—

With your sale of $33,547 last week you have the proud satisfaction that you lead not only all the counties in Ohio in per capita sales, but every county in the United States as well.

Your per capita is now in excess of Ashland county, which you know holds the unique distinction of being the first county of all America to sell its quota.

This is a marked tribute not only to the great organizing genius of yourself and associates, but we repeat again what we have stated many times, that the citizens of Morow county not only realize that in the purchase of War Savings Stamps they are giving expression not alone to their noble, patriotic purpose to help America, but at the same time are showing a most magnificent investing discrimination.

With kind regards, I am,
Very truly yours,
H. P. Wolfe, State Director.

Sergeant Horatio Nelson Keene '17 is in the Gas Service, U. S. A. P. O. 717, France. A letter was received from Keene, written on May 31 from Tours. He states that he saw Sidney S. Batchelder '17 in London and that he was the only one of the fellows that he had thus far met. Keene spent three months in factories in England and during the previous month had just made up a mnemonic classification for all gas service supplies so that he has had a chance to use some of the material presented in Course XV. From what Keene wrote it is possible that we shall see him in a different branch of the Service before long.

Keene attended the Hyde Park High

SERGT. H. G. KEENE '17

School preparatory to entering the course in Enginering Administration at the Institute with the Class of 1917. He was Assistant Business Manager of the Tech Show, a member of the News Board of THE TECH and Circulation Manager of the Technology Monthly. He was a member of the Mechanical Engineering Society, the Electrical Engineering Society, the Wireless Society and of Corporation XV.

According to information received from the Tech Bureau in Paris that section of the American University Union has recently received a visit from two Technology graduates who are connected with the British Army. **Captain A. E. Gerald Collins '14** stayed with the Bureau for a week, enjoying all the privileges of the Bureau for that time, and then left for the front, where he is to go on active duty. **1st Lieutenant M. C. Kinney '11,** who is a member of the Royal Flying Corps, B. E. F., had two weeks leave which he spent for the most part at the Bureau. The Bureau found a quiet pension for him and he came in regularly to visit.

Another very frequent visitor to the Technology Bureau of late is **Donald E. Woodbridge '16,** who is now stationed in Paris, and comes in nightly for his mail and to see whoever may drop in.

Another addition to the list of Technology graduates who are doing industrial work for the Government is **Frank B. Perry,** a graduate of the Class of 1898 in the Mechanical Engineering Course. Perry is undertaking a series of high contracts for various branches of the service in his new workshops in Newton Centre, Mass., where he is constructing a practice signal set. This set is of his own design, being known as the "Radio Blinker," and is being used with great success in the many Government Aviation and Radio Schools, especially at the Technology Naval Aviation School.

John F. Fitzgerald, captain-elect of Detroit University's 1918 eleven, will take the final examinations previous to entering the Technology Marine Aviation School.

As a student at Holyoke high school Fitzgerald played fullback of the eleven and was selected to fill that position on the All-Connecticut Valley team for four consecutive years.

After completing his high school course he attended St. Ambrose College, Davenport, Ia., for two years and played fullback on the college team.

He then was transferred to the University of Detroit and filled the fullback position on the team all last season. Chicago sporting writers picked him as All-Western fullback.

The Technology Naval Aviation School probably will have a football eleven this Autumn and when the candidates are called out one will be **Joe Kendrick,** last Fall captain of the Fordham eleven. A few years ago Kendrick was one of the most conspicuous pigskin chasers playing for High School of Commerce and doing his school and himself proud.

At Commerce he played football for three years. He is a versatile athlete, but is keen for football. Around Fields Corner, where he resides, they think pretty well of him and he used to perform very well at various athletic functions in his home district.

Had he returned to Fordham this Fall he would have again led the eleven, but he wants to go in for the bigger game—getting the Huns. Joe is a son of Peter M. Kendrick, for many years affiliated with the fire alarm branch of the Fire Department, and lives at 19 Vinson street, Dorchester, Mass.

ARMY NEEDS SURVEYING TOOLS

The war department announces that surveying instruments, especially plane tables and alidades, are needed for war work. It is thought a great many patriotic citizens will be willing to offer their instruments to the government at reasonable prices.

Persons making such offers should state the kind, type and catalogue number of maker, original cost, year purchased and present condition of instruments.

Communications should be addressed to the department engineer, 25 Huntington avenue, Boston, and should state the lowest cash price for the instrument delivered to the department engineer.

Navy Needs Sextants

Comdr. C. P. Eaton, U. S. N., retired, in charge of the Branch Hydrographic Office at New York, call attention to the fact that the Navy is still in urgent need of sextants, either new or used. Any person having one or more of these instruments is requested to bring them to the Branch Hydrographic Office, 78-80 Broad street, New York City, where they will be inspected as to their fitness for use and an appraised value placed on them. Sextants with ivory scales, or those needing more than minor repairs or adjustments, are not desirable for Navy use. Payment will be made to the owners of the instruments accepted.

STANDARDIZED GUNS HELP ARMY

The ordnance department has pointed out that while 28 different models of pistols and revolvers, requiring cartridges of four different sizes, are in use in the German army, according to the army "Verordnungsblatt," the American troops have one model pistol and one model revolver, both shooting the same caliber ammunition. This standardization is declared to give the Americans an advantage in this regard.

The United States also has standardized its rifle. Both the model 1917 and the Springfield shoot the same calibre ammunition. Army, navy and marine corps use the same rifles, revolvers and pistols.

The following pistols and revolvers are used by the Germans. Pistols model '08 (normal model and long models); Mauser pistols (9mm. and 7.63 mm., with or without an aiming butt end); Bayard pistols (9 mm. large and small, and 7.65 mm.); Browning pistols (9 mm. large and small, with or without an aiming butt end); Walther pistols (9 mm. and 7.65 m.m.); Pieper pistols (9 mm. and 7.65 m.m.); Jaeger Dreyse, Ment. Sauer, Meszrt (2 models), Langenhahan, Frommer-Stop and Beholla pistols (all of 7.65 mm.); a pistol from Liege (6.35 mm.), and revolvers, models 79 and 83.

A country worth fighting for is a country worth saving for. Buy Thrift Stamps.

FIRM OF TECHNOLOGY MEN IS BUILDING GIGANTIC WAREHOUSE FOR GOVERNMENT

The War Department has announced that the estimated cost of storage warehouses and other construction already erected or in course of building to facilitate the speedy handling of materials at storage points for the use of the Army is $218,000,000. When the structures are completed they will provide 33,800,000 square feet of warehouse space, additional wharves and piers and improve harbor depths at various points in the United States.

Construction is now under way at Boston, Brooklyn, Chicago, St. Louis, Schenectady, New Cumberland, New Orleans, Columbus, Charleston, Norfolk, Philadelphia, Newport News and Little Rock. Warehouses have been completed at Philadelphia, Pittsburgh, Baltimore, Hoboken, Jeffersonville, Port Newark, Americus, San Antonio, Dayton, Richmond, Chicago and Middletown, Pa.

Storage for Guns

Four million square feet of warehouse space has been provided for the storage of ordnance supplies, ammunition and guns. Fitted into the ordnance warehouse space are seventy-five miles of trackage and 9000 lineal feet of dock and wharf frontage. Besides this barracks for 20,000 men in the ordnance service have been provided.

The largest of the warehouse projects is now being constructed at Brooklyn, N. Y. It is estimated that, when completed, it will cost approximately $40,000,000 and provide 3,850,000 square feet of storage space. There are two great buildings, one of nine stories. Building "A" is 200 feet by 980 feet and has twenty-seven elevators, each with a capacity of 10,000 pounds. Building "B" is 200 by 980 feet and has thirty-six elevators, each with a capacity of 10,000 pounds. Both buildings are of re-enforced concrete and steel construction. There will be three piers 150 by 1257 feet and one pier measuring seventy by 1300 feet.

Five slips will be provided, three of which will be 250 feet by 1300 feet, one 145 feet by 1300 feet and one 185 by 1300 feet. The main dock between building "A" and piers will be 260 by 1300 feet. The three main piers will be connected to building "B" by bridges at the second-story level. These terminals are to be served by railroad yards accommodating 1480 cars. The estimated date of completion is July 1, 1919, although half of the warehouse space and one slip and pier will be ready for operation Oct. 15, 1918. The work was started May 17, 1918.

Technologians Build Warehouse

Technology is again proving of great value to the Governmnt in that three of the prominent Alumni of the Institute are engineering the construction of the second largest Army warehouse which is now being erected along the ship channel adjacent to the L Street Bridge, South Boston.

Boston has long been handicapped by a lack of shipping facilities, and since the war started, her docks have proved to be even more inadequate to handle the immense amount of transportation made necessary. Boston is nearer to the ports of Northern Europe than New York by some 200 miles, and yet New England has been compelled to ship much of her supplies and all her troops from ports further south.

It was with a view towards bettering Boston's shipping conditions that the firm of Fay ('93), Spofford ('93), and Thorndike ('95), acting under Government requests, submitted three plans to Washington authorities, all of which involved the use of State land in the South Boston section.

Plans Approved

A conference of less than two hours between State and Washington officials sufficed to approve the purchase of this land from the State. The entire tract, comprising about 1,250.000 feet of improved land, and a similar area of flats along the channel, was purchased for the sum of $1.300,000. The State, however, reserved the option on the purchase of the developed land, should the Government deide to sell at the end of the war.

Fay, Spofford and Thorndike are now working day and night on the design for the plant, which is to be completed inside of a year, in fact, the engineers figure that there is a possibility of completing it inside of nine months. Furthermore, the building is being erected one unit at a time, so that one-third of it may be ready for business this summer.

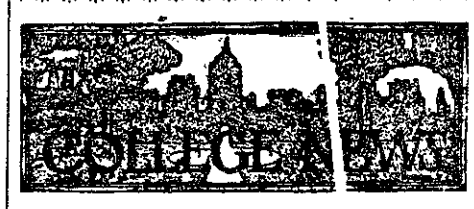
The warehouse, which was started last April, is to be built of reenforced concrete, 2400 feet long and several hundred feet in width; no less than three hundred carloads of steel, a forty-mile long train of sand, and an eighty-mile long train of crushed stone will be required to complete this enormous structure, while the barrels of cement if placed on end would reach from Boston nearly to New York. The steel required to reenforce the cement, if laid end to end, would nearly bridge the Atlantic Ocean.

Ships Loaded Simultaneously

In order that the ships lying at the pier may be loaded simultaneously, an abundant supply of equipment will be provided to make the work move rapidly. The travelling cranes will have a total capacity of 24,000 tons; two of them will be able to lift sixty tons each, while the others will equal twenty tons each. The tractors and their trailer cars, which will carry the masses of tonnage from the storehouses to the ships' sides will equal the cranes in capacity, and the elevator-service within the warehouse will match the tractors in size and ability for service. The tractors will number thirty-six and will draw one hundred and fifty trailers, while the elevators will number between thirty-five and forty, and will cost $1.-500,000. The scales will be able to weigh collectively four hundred tons; four of these will be able to weigh a freight car and its load, while two others will be of a size suitable for auto trucks. In order to facilitate the loading of the ships, chutes will be provided whereby great quantities may be slid from the upper stories into the ships' holds without waiting for the slower elevator service.

The warehouse with its sixty acres of floor space, will be large enough to act as a reservoir for all the supplies to be sent abroad from New England in two months, and will thus hold the cargoes of some sixty ships at one time.

Even if the Government decides to sell the plant after the end of the war its commercial usefulness will not be impaired, and by the aid of such a commercial asset Boston should regain her place as one of the great shipping centers of the Atlantic seaboard.



COLUMBIA UNIVERSITY—An effort is being made to have many prominent English professors who may be released by Cambridge and Oxford because of the war, to give courses next spring in the Columbia University School, according to an announcement by Professor James C. Egbert, director of the Department of Extension Teaching. These courses would be open to the public.

HARVARD ENSIGN SCHOOL—Members of the fifth term class at the Officers' Material School of the Frst Naval District at Harvard reported this morning to Lieutenant Chester L. Dane, the commanding officer, and after registering were sent to the Holyoke House to make ready the quarters they are to occupy during the first two of their four months' sojourn in Cambridge. More than 160 men are to take the course, and they were formed into three battalions this afternoon. Temporary appointments of cadets' officers will be made by Commander Dane. Officers for the fourth term cadets will also be appointed this week, the choice being made on the basis of recent examinations.

MIDDLEBURY COLLEGE—The Spanish school, a department of the summer session of Middlebury College, has just closed its session. Under the direction of Professor Moreno-Lacalle of Annapolis, a large enthusiastic body of students has enjoyed for six weeks an atmosphere as nearly Spanish as could be reproduced in this country. Courses in Spanish and South American realia have been given by Professor Jose Martel of Annapolis and by the distinguished Mexican diplomat, Balbino Davalos, while lectures on Spanish literature and life have been contributed by all the members of the faculty. Songs have been sung and games played. Castilian has been the language both of the classroom and of every-day conservation. The crowning incident of the social life of the session was the presentation of the three-act comedy, "Castillos de Torresnobles," written by Miss Carolina Marcial Dorado and produced under her direction by a group of students.

BOSTON UNIVERSITY—Everett W. Lord, dean of the College of Business Administration at Boston University, has been appointed by the Secretary of Labor to succeed William A. Gaston as State director of employment and director of public service reserve for Massachusetts. Mr. Lord takes office at once.

The College of Business Administration was organized by Mr. Lord five years ago and he has been able to build it up to 2000 students. For two years he was secretary of the National Child Labor Commission and at the Jamestown Exposition in 1917 he was awarded a gold medal for his work in relation to child labor and for his paper and essays prepared on the subject.

In 1902 President Roosevelt appointed him to be assistant commissioner of education at Porto Rico and he spent six years there having charge of the reorganization of the public school system.

This summer Mr. Lord has been a member of the executive committee of the National Council of Education, which has been organizing a students' army training corps. He was born in Ellsworth, Me., and was graduated from Boston University in the class of 1900. He lately moved to Newbury street from Jamaica Plain.

CLARK COLLEGE—In order to increase the range of its usefulness during the war Clark College plans to offer, so long as the war lasts, a number of special war time courses, and will receive into these courses, and into such of its regular courses as may be necessary, any young men of good character who are high school graduates, or have equivalent preparation, and who, in the judgment of the committee on admissions, will be likely to profit by such admission.

These wartime courses are designed to give to those who plan to enter officers' training schools for the artillery, aviation, the sanitary corps and other technical branches of war service the necessary foundations in science and general education. They will thus bear the same relation to the technical military schools that "premedical" courses bear to the medical schools, or general college training to the law schools.

For the duration of the war Clark College will receive two sorts of students. Those entering for the war-time courses (war-time special students) and those entering for the usual college degree. For the former the requirements for admission wil be good moral character, high school graduation or its equivalent and an affirmative judgment on the part of the committee of admissions that the applicant is likely to profit by college opportunities. For the latter the conditions of admission and graduation will remain in every respect as they have been.

Owing to the numerous applications for radio in war service the **Eastern Radio Institute** is commanding serious attention these days. Since the United States has been fighting for democracy this institute has given radio instruction to more than 1000 men who are identified in government service where radio can be used to advantage.

In the telegraph department, which prepares men and women for commercial, railroad, brokage and government services, women will especially find this work particularly attractive. If a woman takes up this work it not only pays her a splendid salary but at the same time she is performing a very meritorious act, inasmuch as she is releasing a man for service.

This department at the institute is ideally equipped with the latest type of apparatus, consisting of specially constructed tables with portable and extension arm resonators, making it possible to copy the traffic on typewriters as used by the Western Union Telegraph Company. The students, moreover, are taught the use of the vibroplex sender now being used by every first-class telegrapher throughout the country.

The **Boston School of Telegraphy**, has just completed its 18th year, one of the most successful years in the history of the institution. It prepared over 1000 young men in the draft age for the army, navy and merchant marine and graduated over 400 young women in commercial and railroad telegraphy. The courses offered in radio, in code or theory take from two weeks to four months. All young men of the draft age wishing to take up radio or telegraphy are welcome at the office and full information will be given regarding the branch of service they are interested in. The commercial courses offered to young women take from four to six months. The government controls all telegraph lines, and offers positions to young women formerly held by men. All women wishing to take this course are asked to enroll on or before the fall term date, Sept. 10, taking advantage of the summer rate of tuition.

Mr. L. L. Connor, who has been superintendent of the school for the past seven years, has been called into the government service, but he will act as director of education. Mr. Griffen, who has been connected with the school for the past 10 years, will act as superintendent. Mr. Batchelder, who was assistant superintendent, is now in the government service, but he will give his spare time to advising the radio department. The success in the past has exceeded expectations and it is predicted that the present year will be productive of more and better work than ever before.

TECHNOLOGY BUREAU DINNERS

(Continued from page 1)

Harold P. Gray '16, Donald Des Granges '14, Joseph N. Paul 13, O. G. Norton '15, G. C. Gibbs '00.

July 14 Reception

"The 14th of July was a great fete day in France. On that day the Union gave a reception in the afternon to the members of the French Home Committee and others at the Union. The French Homes Committee represents any of the families of Paris who open their homes and offer their hospitality to American Officers in Paris and especially those who frequent the Union. On that day the Manager of the Hotel furnished music consisting of the famous Jazz Band from the Casino de Paris and also refreshments for the guests and the men of the University Union and many others from outside.

Tech Bureau Gives Good Service

"The boys are very pleased to have their mail sent directly from the States to the Tech Bureau as they are constantly changing their addresses and they realize that here is a fixed place to hold their mail until they communicate with us here, instead of having it follow them from one station to another.

"We make a great many purchases for the boys in town, anything from shoulder bars to eye glasses. We also take care of their bank accounts and the Tech Bureau is a great help for temporary financial difficulties."

GUATEMALA RELIEF WORK

(Continued from page 1)

width of three city blocks. As this ran across the city observers saw the houses in rows tumbling down, one after another, like the child's blocks, 'dobies, substantial brick structures, stone schools, churches and hospitals and public edifices. There were smaller shocks that completed the ruin, with little tremblings running through the intervening months, and this in an important city, comparable in size with Cambridge, Mass. Everything in the way of public works was ruined, water mains were broken, and sewers disarranged. Then, not least in the problem, there was lack of leadership in co-ordinated effort at relief.

The loss of life was not great, a couple of hundred in all, but the people of the city were rendered homeless and were driven away from those places that were familiar to them. They huddled hastily in spots outside the city where there was room, and waited for whatever help might be sent their way.

Guatemala has had no real census and vital statistics are an unknown quantity. The population of the state is approximately four millions, and in the city there are about one hundred and twenty thousand, with three-fifths of them Indians. The population is composite; Indians; natives who are a mixture of Spanish, Indian and negro; the upper classes, who are generally Spanish, and there are several thousand Germans. It is interesting in the light of the commercial ubiquity of this people to know that the electric light and telephone systems are German-owned.

Guatemala's Rescuer a Technologian

Edward Stuart, Boston born and educated, has been telling to his friends and to the students of the Institute the story of the relief work. He has had a remarkable training in sanitation leading up to just such demands as those of Guatemala. A graduate of Technology in the Class of 1910 in sanitary courses, he undertook work of that nature in Brazil, and a couple of years later became a member of the staff of the Health Department of Pennsylvania. He then returned to Boston to enter the newly established Technology-Harvard School of Public Health. At the end of his studies there came the call from Siberia for volunteers to fight the typhus fever plague in that country, and to this extraordinary work he went in the company taken by Dr. R. P. Strong. It was a Red Cross expedition of mercy in which there were joined the representatives of England, France, Belgium, Russia, Holland, Italy, Switzerland and the United States. The story of the enormous success of the mission is already well known in Boston, a unique example of combating a pandemic plague of enormous preportions. After the return of Dr. Strong the direction of the combined work fell upon Mr. Stuart. Under the guns of the Austrian army the Serbians were forced to retreat into Albania, and Stuart went with them, and thence into Greece to Salonica. He then returned to his duties again with the Pennsylvania State Board.

Mayo Tolman, '13, the other sanitary engineer at Guatemala, was connected first with the Maryland Health Department and went later to that of West Virginia. Here in the Cabin Creek flood of a couple of years ago he proved his resources in an emergency. The rush of waters had been enormous and the valley needing relief was piled high with debris. It was so difficult of passage that beasts of burden could not be used. Vaccines, supplies and camping outfits were "toted" by the devoted rescuers, who were successful in preventing typhoid and those other maladies that follow in the wake of such disasters. Both the American engineers at Guatemala, therefore, were graduates of the school of experience.

The two other members of the Red Cross relief party were Dr. A. N. Struse, who was medical director, and J. J. O'Connor, from the Red Cross of Chicago, who attended to the relief work. Dr. Struse was resident in Guatemala, being chief of the Rockefeller work in that city.

Call From Central America

The big shock that levelled the city of Guatemala came at Christmas, 1917; there was a second one of importance on January 3, 1918, and a third eleven days later. The party from the United States was assembled, collected its materials and landed in Guatemala on January 23rd, which was quick work that took every advantage of existing circumstances. Meanwhile the United States Government had sent to the scene a fast Naval vessel carrying 4000 tents, while the Red Cross ordered in Panama a bountiful supply of provisions, more, it proved, than were really needed, but it was an error on the safe side, and readily to be converted into cash on the spot. This surplus provided for the construction of some of the new hospitals. There was also on the spot a committee of citizens, with an extraordinarily long list of honorary officials, committee heads and sub-committee men, but till the arrival of the Americans, it was in doubt as to the precise direction in which to bend its efforts. ?.

The conditions that Stuart describes make it a marvel that there were not serious outbreaks of disease. The houses were destroyed and the people were living in camps hastily constructed out of whatever of the debris could be put to this use. Shacks had been set up in whatever spaces seemed to be safe from further disturbances, and here the modern corragated iron and the antique tile ran a close race for temporary roof covering. The houses were all gone, whether of the adobe type or the imposing structures of masonry. Even churches and public buildings were utterly destroyed, a type of the ruin wrought being shown by the remains of the Church of St. Sebastian, and the new Normal Art School. Here it is interesting to note that wood and reinforced concrete stood the strain of the earthquake, facts of value to those building in districts subject to earthquake shocks.

At its best the old water supply of Guatemala City was not calculated to awaken the enthusiasm of the sanitary engineer. There were picturesque features in the great arched aqueducts extending across the country, built after Roman models by the old Spaniards and rejoicing in the musical appellations Pinula and Misco. Great sections of the masonry of the arches were thrown to the ground and the supplies in consequence no longer flowed to the city. Another spring, the Acatan supply, collecting the waters of half a dozen small streams, led across a deep gully, where it was broken, while the fourth, the Minas, although piped into the city, was much disturbed by the quake.

It was therefore a city of one hundred thousand practically without water. When the relief party arrived there was no opportunity for the people to bathe, or to wash clothing, and domestic water was very scarce.

Naturally this was one of the first duties of the new comers, to attend to the water supply. Wooden flumes were constructed to repair the aqueducts and the reversed siphon in the Acatan supply was mended. Manwhile Stuart recommended to President Manuel Estrad Cabrera that pipe be ordered from New York, and on the next steamer there came five miles of spiral steel water pipe, the joints of which could be quickly bolted together. This was laid on the ground through the street and furnished at frequent intervals with outlets for the public supply.

Reservoirs for Swimming Tanks

But there remained one other drawback to the supply of domestic water, the difficulty in preventing pollution. The aqueduct formed an ideal bathing place for the natives, and on any evening they could be found refreshing themselves in its cooling flow, while about the Acatan reservoir there were favorite laundry spots, and it was impossible in the time to undertake to re-educate the people. The Red Cross, therefore, furnished two chlorination plants, and the sterilizing material now on hand will serve to keep these waters free of pathogenic bacteria for a full year to come.

One of the important things was the establishment of camps with the tents that were sent by the United States Government. The erection of such a camp, with the work so laid out that it is within the capabilities of the laborer to be secured in Guatemala, was indeed quite a trick. It is thus described by Mr. Stuart in one of his letters before returning: "This morning I undertook a humdinger of a job—the erection of four hundred tents on the Campo del Marte for the Guatemalan Government. It is no little task to erect even one, and I have to lay out the whole camp with streets, cook stoves, latrines and police tents, and then trench the whole thing. I hope to get it done in two weeks, as I have the gangs pretty well organized. First I go a head with the transit and gang and set the corner stakes for every tent; then a second gang comes along with a long rope in which I have tied properly spaced knots. They carry this around the four corner stakes and drive a pin in each knot. They are followed by a gang with strings for the diagonals and crowbar with which to make a small hole, four inchs deep and five in diameter for the center pole. Following are the men to open and set the tents."

In this same order of simplicity was arranged the trenching of the tents to avoid surface flow into them in case of storms, the building of the latrines, bath-houses, and washhouses and garbage boxes, following which was the installation of the water system for the camp.

No Forgetting Red Tape

Such a camp with its environment is indeed picturesque, and in these places were housed temporarily the great mass of the homeless. Six thousand refugees settled about the executive offices of the party and formed one of the truly perplexing problems, for it was a delicate matter to determine where charity must end and self-help begin. Of course, much labor was needed, and for this many Indians were requisitioned. These people are a small race, not above five feet in height, fairly good workers, but irregular in the supply. As in similar furnishings of people by governments elsewhere, there was endless red tape, and this proved to be a difficulty in securing supplies, which were to be had on application to one or another of the government departments.

Even in May, five months after the first shock, the camp about headquarters was increasing despite the measures that had been taken to discourage the people from coming. In April it had been announced that the camp would be closed, and it was somewhat diminished by the middle of the month. Later the families were studied by volunteers from the American women and four or five hundred families were moved to a camp elsewhere where they would be obliged to care for themseles. Then it was announed that no more food would be given out, and other families moved away, while a final investigation showed that four or five hundred groups were really destitute. These, of course, it was necessary to care for through the regular charity channels of the city, and in the end the camp was closed.

First Need, a Hospital

The City of Guatemala had had a fine municipal hospital which was laid in ruins by the quake and its equipment ruined. But when the Americans arrived, they found the workers doing the best they could under the circumstances. There was no laboratory, no operating room, and operations were conducted in the open air with the risk of infection that goes with the dust of a city. Transportation was scarce and mothers resorted to aboriginal carrying methods in getting their babies to its ministrations. One of the pressing needs therefore was the construction of a hospital and this was carried to completion. It was not so imposing a structure as the one destroyed, an establishment of five hundred beds, but it is serving well its purpose with wards, operating room, laboratory and maternity department.

Meanwhile there was the impending fear of some outbreak of one of the real scourges. Smallpox and typhoid would be looked for under such circumstances, and, in Guatemala, typhus. The outfit from New York included big supplies of vaccines, and inoculation was practiced on a large scale through the local physicians with whom Dr. Struse, being resident, was in touch. Practically the whole city was vaccinated and with the improved water supply there was no outbreak of either typhoid or smallpox. Typhus being present in various portions of Guatemala, it constituted a real menace in view of so many people with limited idas of cleanliness brought into such close quarters.

Typhus did develop, but with his experience Mr. Stuart was instantly alert, and through the local physicians by standardized technique prevented its spread. The patient was isolated, his clothing thoroughly disinfected, and the building in which he was found was burned. Of course, his companions in his home or hut were included in the medical treatment.

The Shadow of Yellow Fever

Guatemala has one other epidemic malady—yellow fever—to which the visit of this party has called attention. Any focus here is of much more consequence than Americans are wont to realize, in fact, the section has not been listed as one with the disease well established. There is a strip of the Pacific Coast within the State that is infected and there was some fear that in the disturbed state of affairs the malady might creep over into the plains east of the mountain ranges. The weather proved, howver, to be so cool that the mosquito gained no foothold. The West Coast region is not potentially of great danger to the United States, for it is three weeks to San Francisco, during which time the disease if on shipboard would have manifested itself and would be cared for in quarantine. The east coas is very much nearer to important gulf ports of this country and an outbreak of yellow fever in eastern Guatemala would cause the inconveniences of constant quarantine of all vessels from its ports. At all events the matter is now likely to be looked into thoroughy, for the observations of this party will result in the study of the section by the United States Public Health Service.

This really ends the sanitary story of Guatemala. There were public dinners to the American company and manifestations of appreciation on the part of the populace, who from time to time secured a Marimba band and gave the physicians and engineers a serenade. And then there were vacation trips into the interior of a remarkable country, so little given to important movements of population that the crowd was needed to give the Ford a hand over some bit of country where the trail had lost itself in the tumbled hillside. Then there were a few picturesque trips by way of change of scene, past villages of straw immune of the most violent of land disturbances, to the quiet lakes nestled in the heart of the mighty range, whose volcanic cones stand the silent testimony of tremendous upheavals whose puny modern imitation deal to us from time to time devastation and death.

ELECTRIC DIVER DESIGNED TO RAISE SUNKEN VESSELS

An electrically driven diving machine designed to make possible the recovery of steel vessels sunk by German submarines, was recently given a successful private test in Long Island Sound.

The machine, which carries a crew of two men, is equipped with propellers capable of driving it directly to the side of a submerged vessel, to which it clings by means of magnets. Power is generated on a surface barge and transmitted by cable. A rivetting attachment is intended to fasten pontoons to the vessel.

Become a stockholder in the United States—buy war-savings stamps.