

RUSSIA IS LAND OF BIG OPPORTUNITIES

American Red Cross Mission Reports That New Republic Urgently Needs American Capital and Enterprise

ENGINEERING PROBLEMS

The visit of the American Red Cross Mission to Russia during the past summer for the purpose of investigating the actual conditions prevailing in that country and remedying them as far as possible has done much in correcting vague and uncertain opinions prevalent throughout the United States as to the real state of affairs existing there and incidentally has thrown a great deal of light upon the opportunity afforded the American engineers for service after the conclusion of the war. The trip as is generally well known was made at the request of President Wilson and on the behalf of the American Red Cross, being financed, however, by William B. Thompson, one of the big business men of the country, as well as director of the United States Federal Reserve Bank of New York.

The Mission was comprised of twenty-nine men, each an expert in his respective profession, and of these two were given the commission of lieutenant-colonel, twelve that of major, six that of captain, six that of lieutenant, the remaining three being orderlies. Among the majors were Henry J. Horn, member of the Corporation of the Institute, and an expert in railroad transportation; and George C. Whipple, Professor of Sanitary Engineering at Harvard and Technology, and especially assigned to problems of military sanitation.

Upon arriving in Petrograd the Mission immediately started upon the work before it. After an extended tour of inspection of the hospitals, storehouses, workshops, laboratories, and relief stations of various kinds, the work of organization was undertaken, and in short time the system for distributing the several carloads of supplies brought along by the Mission and the many others that were to follow shortly was brought to a high state of efficiency. These supplies did not anticipate every need, so it has been arranged to send supplies at regular intervals. One member of the Mission states "Russia needs many things besides those supplies which it would be in the province of the American Red Cross to send. She needs money, but she also needs shoes and clothing; she needs manufactured articles of many kinds, tools, machinery, engines and automobiles; she needs all sorts of merchandise which the peasants can use or buy. With no supplies to purchase, no vodka to buy, with the rouble depreciated in value, the peasants prefer to hold their grain, preferring it to money, and this is one reason why food is scarce in the big cities. The big cities have nothing to give in return. Russia as a whole has food enough for the present. The stimulus for distribution and the means for distribution must be provided."

That there is a great need for technically trained men was ascertained by the mission on its journey through Siberia. The Trans-Siberian railroad is a good example of this need for American system and organization. It is approximately fifty-five hundred miles long, is substantially built, and has a double track for about one-third of the distance. The railroad stations are substantial and neat. The grades are heavy in places, the rails light, the driving wheels of the wood-burning locomotive small, the sidings infrequent and the operating sections small. Consequently, the speeds are low, station stops long, and the locomotives used are small. The present tonnage is far below normal, and therefore freight has piled up in Vladivostok to a great extent. It is said that, with changes in operation which can be easily made, the capacity of the road can be increased a third. But more rolling stock and more sidings, and ultimately a double track, are greatly needed. The engi-

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WOMEN'S LEAGUE FOR CONSERVATION OF PLATINUM

Mrs. Spear is Chairman of Council.

The following is an extract from a circular letter issued by the Women's National League for the Conservation of Platinum, of which Mrs. Elwood B. Spear is chairman:

"This League asks for no dues. Its object is to lay before American women facts regarding the nation's need of platinum both for the prosecution of the war and for national welfare in times of peace.

"The Government is sorely in need of platinum to make the nitric and sulphuric acids necessary for the production of explosives. Our industries are suffering from a shortage of this metal in their control laboratories, in the manufacture of sulphuric and nitric acids, dyes, fertilizers, etc. Our educational institutions cannot afford to pay the exorbitant price for the platinum essential to train men for the industries.

"While our Government, our industries and our educators are working under this handicap over fifty per cent of our supply has been used in jewelry.

"The women of America have it in their power to alleviate in a very large degree this deplorable condition.

"We ask your co-operation in presenting the fact to women that it is injurious to our nation's welfare to buy platinum jewelry. Our Government must have this metal to carry on the war; our chemists require it to supply our needs."

NEW FRESHMAN CLASS

Applicants Number 107 and Will Greatly Tax Institute

At the present moment Technology as a patriotic work for the benefit of the country, is undertaking the experiment, unique in schools of its class, of admitting in the middle of the school year a new group of freshmen, and these without examination requiring merely the certificates of the high or preparatory schools from which the young men are to come. The class thus matriculated will be an object of the greatest interest to educators, first on account of the high standards of Technology, which it is usually agreed gives the young men in their regular courses as much as they care to do. These junior freshmen are expected to overtake their fellows who entered in September last by means of continuous study from Feb. 5, the opening day of the second term through the summer vacation and then with only two weeks' recess to continue the work of the Sophomore year. For the students it means practically four years work in three; for the faculty a rearrangement of the schedules so that this large number of men of studies out of the regular order may be cared for; and for the country it means more than one hundred picked men following technical courses who will be able three years hence to take up the professional engineering work for which the country stands in such urgent need. For the Institute it means another prompt and well-considered method of aiding the Government added to the score and more other plans that have already been established.

Professor Allyn L. Miller has received numerous applications, many of which it has been necessary to reject, for the Institute has room only for a given number of students, and the seven schools that it is now maintaining within its walls for the U. S. Government number nearly seven hundred men, besides the regular classes. An eighth school for the teaching of radio-engineering is to be established at the beginning of the second term and this will serve to make even more busy the various laboratories. The number set for the new freshmen was about one hundred and today they number about one hundred and ten.

The entering class gathers its members from all the New England States five outside New England and one foreign country and represent more than sixty municipalities and seventy schools, high and preparatory. Massachusetts leads as might naturally be

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RELAY TEAMS IN GOOD SHAPE FOR B.A.A. MEET

Men Have Been Working Despite the Poor Weather Conditions and Make Fine Impressions in Final Speed Trials

FRESHMEN TO MEET HOLY CROSS

The fact that most undergraduates like to enjoy life away from the Institute and at other things during the vacation period has not in the least altered the determination with which the two relay teams which are to represent the Institute in the B. A. A. meet this coming Saturday have stuck to their practice. With the exception of one man who is suffering from a cold everyone has reported regularly for the work. Even the cold, snow and heavy winds has had no perceptible effect toward lessening the ardor of preparation.

Coach Kanaly put the men through the final time trials a few days ago and was very well impressed with the form shown by all the speedsters. He is looking forward to teams which should run close to the record of the best turned out by the Institute in the past.

The return of J. Downey '20 to the track had done much to strengthen the short team in which each man does 300 yards. Downey had an application for naval aviation accepted some time ago and withdrew from track work in order to devote more time to his studies. He won the 100-yard dash in the Boston Interscholastic meets while attending English High School and last Summer repeated the feat in the Connecticut State championships.

Palmer Scott '21 proved himself one of the fastest men in the Institute in the past Fall, and has a number of records to his credit. T. W. Bossert '20 won the 220-yard dash in the interclass meet in the Fall and J. M. Avery '18 is a man who has been running at the Institute for the last three years.

The long team, where each man goes 780 yards, is booked to meet the Dartmouth runners. This team is the same which ran second to Cornell in the two mile relay of the Eastern Interscholastic meet last year, except for one exception. McMahon who ran in the Eastern meet is out of it and his place will be filled by Garvin Bowden '21.

G. F. Halfacre '19 is expected to give a good account of himself against Dartmouth. He was the first Technology man to cross the tape in the intercollegiate meet at Van Courtland Park last Fall. H. A. Herzog '19 was Captain of last year's relay team and proved himself a winner in most of the runs which that team entered.

The freshman team has not yet been announced as several of the men are out of town who are booked for places. As both Bowden and Scott are freshmen it is possible that Coach Kanaly will run them with the freshmen as well as the other relays, and if so they should form the nucleus for a speedy four. If the team is made up without these men the most likely quartet is Juneau, Pridmore, Connant and Bardes. The first year men are scheduled to meet the Holy Cross freshmen.

M. J. COLE '09 ENGAGED

Mr. and Mrs. George M. Heath of Lowell, announce the engagement of their daughter Carol to Mr. Marcus Johnson Cole, M. I. T. '09, the son of Mrs. Harriet Cole

The following telegram was rushed from the Washington office of the M. I. T. Committee for National Service marked "Publish without fail": "... Men having railroad experience in location, maintenance, or operation, communicate with Washington office at once. State experience, age, draft status, etc. Men having commissions but still in active duty most wanted although others will be considered. R. W. Ferris, Secretary."

MR. M. E. FITZGERALD TO ADDRESS CATHOLIC CLUB WEDNESDAY

Final Arrangements For Dance to be Made at Meeting in Caf

The next meeting of the M. I. T. Catholic Club will be held on Wednesday, February 6, at 6.00 o'clock in the Caf. Mr. M. E. Fitzgerald, superintendent of schools in Cambridge, has been secured as speaker of the evening and it is hoped by the officers of the club that he will be accorded just as cordial a reception by Technology as he was accorded by the Radcliffe Catholic Club, which organization he addressed last month. Aside from Mr. Fitzgerald's ability as a speaker and the instructive and interesting message which he brings, the fact that this is the last meeting before the dance should cause a great many interested in that social affair to attend. All final arrangements for the dance will be made at this meeting. Judging from the sale of tickets during the past few days it is expected that there will be a large attendance at the informal dance, which is scheduled to be given in the Walker Memorial on Saturday, Feb. 9, at 8.00 o'clock. Tickets may be obtained from any member of the Club and are to be had at the price of \$1.10 per couple.

A last opportunity to get their names in the Technique will be afforded the members at the meeting on Wednesday as it is impossible to add any names after this meeting as it causes needless confusion and it is thought that sufficient opportunity has already been given everyone. A buffet lunch will be served previous to the meeting.

SWIMMING TEAM

Promises to Uphold Record of Past Three Years

Technology's record of a defeatless three years in swimming has been kept spotless so far this season and the outlook is promising for another year to add to the record. It is generally conceded that the hardest opponent was downed when Pennsylvania was beaten, but the meet with Yale on Monday, Feb. 4, will be hotly contested for Yale also defeated Penn, although by only two points. The next meet with the Naval Academy at Annapolis should result in a victory for Technology. The last two weeks of the season, with Amherst and Wesleyan, should be easy victories.

The men on the team have shown up a great deal better than was expected. The only place which shows signs of weakness is the relay team. But points enough to win a meet can be counted on outside of the relay. Capt. Untersee is living up to all expectations by winning both the fifty and the hundred yard dashes and he is also the mainstay of the relay. Greene is making fast time in the two-twenty and can be counted on for a first place, while Bolan is always close behind him. Walse is not showing up as well this year as he did last season, but he is still good enough to take first place in the plunge at most meets. Another weak spot in the team is in the diving, but considerable improvement has been made along that line since the last meet and a better showing will be made against the Naval Academy.

Men are still needed, however, according to Captain Untersee. The season is only half over and there are plenty of chances for men who have done something in the swimming line to make good on the team. The relay team has already been strengthened by the addition of Trowbridge, but it needs still more speed. The defeat at the hands of Brown was the first that the relay team has suffered for several years. Undergraduates and especially freshmen are urged to report to Captain Untersee for more men are needed and the material is there.

UNANIMOUSLY APPROVE OF GIVING TECH SHOW

Alumni Council Votes in Favor of Further Continuation of Tech Show and Athletics—All-Technology Meeting Canceled

WASHINGTON OFFICE CLOSED

The Alumni Council of the Institute at its last meeting settled three items of interest to both alumni and undergraduates. It decided that it will be inexpedient to hold the proposed All-Technology meeting in Philadelphia, that student athletics as they are maintained are well worth while, and it approved of the existing plans for the Tech Show in Junior Week.

Concerning the meeting in Philadelphia, which was planned for the Easter season, although the arrangements had been fairly well formulated by the local committee it seemed to them in view of the congestion that is to be found on the routes to Washington, that the assembling of so large a number of persons might be an unnecessary obstruction. After considerable discussion, in which it was shown that a number of important engineering societies had foregone their big meetings for patriotic reasons, it was voted to omit the meeting.

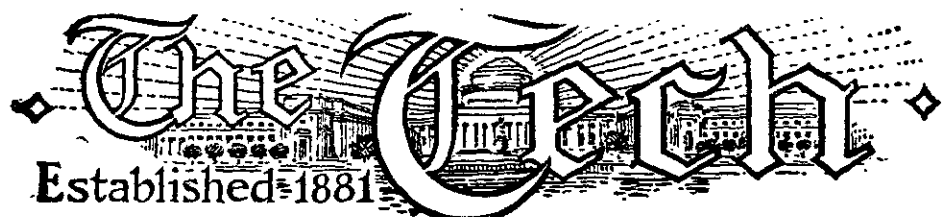
Dr. A. W. Rowe '01 testified to the very important place that athletics as they exist at Technology have in the work of speeding-up. At the present time there is more and more effort devoted to close and intensive work in the class room and laboratories, and athletics are capable of balancing this by furnishing exercise to many men. Athletics have persisted at the Institute in reasonably normal elements, it being understood that no attempt was made with the big games that are featured at other institutions of learning. It has therefore not been necessary to discontinue any of these and with some economies the financing will not prove a difficult task.

With reference to the Tech Show, it was stated that already the machinery is in order, a complicated organization, which would be lost if the show were discontinued. This would be undesirable since this entertainment is an important function of student life at the Institute, and is well developed, the book and music having already been prepared. Some modifications have been already instituted by the managers; there will be much less expense this year for scenery and costumes, and it is proposed to give the profits to the Technology Office in Paris, where the money will be a benefit to Institute men in service abroad. There had come up the usual question this year as to whether matters not absolutely necessary should still be maintained, and it was decided by the students to refer this particular item to the alumni. The council voted unanimously to approve the Tech Show under the modified conditions.

It was announced at the meeting that the decision to close the M. I. T. Washington office had been reached. This office in the early days of the war proved to be of enormous advantage in the confusion existing in Washington, as a means of directing Institute men to the places and the men that they were seeking. Under the order which has been evolved out of the previous confusion, the Government is attending very well to the matters wherein the office was of value, and its real field therefore is gone. There is a Washington Technology Association, but it does not require a permanent office for its work, the one just closing being of the nature of emergency first aid to strangers in Washington. Many hundreds of graduates have had the advantage of its information and not a few of the 3,800 men who are in service or in industries allied to the war were started in the right direction by it.

LIEUT. W. B. STRONG '17 TO MARRY

The engagement of Miss Barbara Steele, the only daughter of Mr. and Mrs. George F. Steele of 1056 Beacon street, to Lieutenant Walter B. Strong, M. I. T. '17, has been announced. Lieutenant Strong, whose home is in Goshen, N. Y., is stationed at Fortress Monroe.



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IN CHARGE THIS ISSUE

G. R. Steininger '21 M. M. Bauer '21

FRIDAY, FEBRUARY 1, 1918

THE FUEL SHORTAGE AT HOME

THE first indications of a coal shortage at the Institute are at hand. For several days the heat has been turned off in the drafting and recitation rooms and in the laboratories, and from now on the dormitories will be without heat from eleven o'clock each night until seven the next morning. Just enough heat is being circulated through the buildings to keep the pipes and chemicals from freezing.

In some cases light and heat have necessarily been refused and it may be only a question of time when more drastic action will be imperative. We have been singularly fortunate in having our buildings heated as they have been in the past and we should bear the inconvenience of less light and heat without a whimper. The action of some who have vacated rooms and left the light and heat on is inexcusable, and certainly gives grounds for criticism of the brand of patriotism which they are exhibiting. But even this action becomes less reprehensible when we consider what some of the disgruntled ones have done. The thermostats have been tampered with by a few who selfishly want more than their share of heat. That any Technology man should be guilty of such action is, to say the least, deplorable.

Not one of us can afford to give the slightest grounds for criticism of our patriotism and it is very much up to us to endure the inconvenience of less light and heat. The curtailment was absolutely necessary, we must conserve our now meager fuel supply. Conservation is the order of the times. Are we going to be slackers and growlers because the Institute authorities are doing their duty in conserving our fuel?

"OVER THERE"

THE following extract from an editorial in the Boston Transcript gives the college papers another incentive to redouble their efforts of supplying live news of their colleges:

From an officer on active service with the American Expeditionary Force has come to his New England home a letter from which the following extracts are taken:

"So far we have been able to keep in touch with what was going on, as we see the New York Herald (Paris edition), London Mail and French papers every day. How things will be at the front I don't know, so keep on giving me the dope, but the things I really would like to see are newspaper clippings about my friends, etc. B's wedding and engagement, for example, was excellent dope. The social news in the Paris Herald and the pictorial pages would also be very interesting. Home news! home news!! home news!!! That's the real, real stuff. We are always crazy to know what friends and acquaintances are up to. To see something in a paper tucked away in a corner about a college friend or Plattsburger—that sort of stuff is what I long for. I suppose that is why we all read the arrivals in Paris in the Herald, just so we can say, "Hey, Charlie, Bill Jones has arrived over here," or "Lieutenant Bill Smith—wonder if that's the chap I knew at college. How did he manage to get his stripes or bars." We just love to be able to do that.

ST. LOUIS ALUMNI MEET

The following was received from Mr. Benjamin F. Thomas, J., secretary of the St. Louis Society of M. I. T.:

"A meeting of the M. I. T. Alumni in St. Louis was held at dinner at the Statler Hotel to meet Professor Allen, on January 26. After the dinner Prof. Allen told of the vast amount of work that is being done in connection with the war by the Institute and by so many Tech men; of President MacLaurin and his work of organization and administration; of Dean Burton and Professor Miller in their efforts to man the ships of our great fleet of merchantmen with capable and efficient officers; of the great number of "dollar-a-year" men in Washington who are assisting and leading the Government in so many different occupations; of the vast number of Tech men in the National Service in other ways; of the men in the Army and Navy and in Civil life; of the work of the women of Technology of assisting our men in France and at home; and of so many other things that it would be out of the question to mention them all. It required nearly two hours for Professor Allen to mention only a part of this great work and every minute of the time was entertaining and instructive, but the ruling of the Uel Administrator for Missouri had to be obeyed and we had to bring the meeting to a close at ten o'clock. Truly, the Tech Alumni of St. Louis never spent a more enjoyable evening together.

"We were very fortunate in having with us at the dinner Brig-General W. H. Bixby of the class of 1870, now head of the Mississippi River Commission at St. Louis, and Professor Chas. E. Locke '96, who came down from Rolla, Mo., to attend the meeting.

"There was a total attendance of seventeen at the dinner, and all expressed the desire that these visitors from the Institute would come oftener and stay longer."

C. W. PIKE '89 APPOINTED MAJOR OF ORDNANCE

Clayton Warren Pike '89 has been appointed to the Ordnance Department with the rank of major and will be assigned to immediate service. He is well known in Boston and other parts of the country as an electrical engineer.

Mr. Pike was born in Fryeburg, Me., in 1866, and graduated from the Institute in 1889. He gained experience as an electrical engineer with the Merimac Company of Lowell, the Queen Company and Faulkenburg Company of Philadelphia, and was instructor of electrical engineering at the University of Pennsylvania from 1890 to 1892. In 1900 he became vice-president of the Keller-Pike Company of Philadelphia as well as Chief of the Philadelphia Electrical Bureau.

He is a member of many professional societies and joint author of Roper's Engineer's Handbook. He also is author of "Questions and Answers for Engineers." Mr. Pike is now living in Philadelphia and is married.

WINTER COLDEST KNOWN IN YEARS

All records for severe weather have been shattered by the winter thus far. December and January together were the coldest pair of months in the history of the weather bureau, established in 1871. The unseasonable cold weather really began in November, the last six days of which were very cold. As the year turned a record-breaking minimum of 14 degrees below was reached.

NEW FRESHMAN CLASS

(Continued from page 1)

expected, with ninety men from thirty-five cities and forty schools; other New England States send fourteen men, while outside places furnish the rest.

Newburyport leads the procession with nine students for the new freshmen courses, New Bedford comes second with five, Brookline, Malden, Milford, Gloucester and the schools of Groton, Mount Hermon and Williston tie at four each, while Lynn, Natick, Cambridge and Watertown have three each. The coming to the Institute of men from the three preparatory schools named above is rather unusual, since their graduates are supposedly in line for academic rather than technical courses. New Jersey and Pennsylvania have sent many questionings, but the preparedness of the young men made the selection limited to three in the former and four in the latter. There is one each from Cincinnati, El Paso and Russia, the latter an American who has passed his life abroad.

In Boston, the English High School is represented by six students, the Dorchester High, by four and other schools by four more.

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RUSSIAN OPPORTUNITIES

(Continued from page 1)

neers of the Stevens commission are now hard at work on this problem.

Many other points of interest to engineers were included in the itinerary of the tour. In Petrograd it was found that the old sand filter of the water supply from the Neva had become outgrown and had been converted into an improvised mechanical filter, using bleaching powder and electrolyzed salt as a disinfectant. A new mechanical filter of German make, which involved the use of ozone, was in operation. This is perhaps the largest ozone plant in use, i. e., thirteen and one-half million gallons a day. It has proved to be very expensive, and is likely to be abandoned. In Petrograd it was found that the sewers do not receive the solid fecal wastes. These are screened from the house drains at each house, collected in night soil carts, and carried to barges which dump them far down the river, or to a receiving station where they are again screened through Reinsch Wurl screens and the solids burned in the adjoining refuse incinerator. The liquid portion of the house sewage flows to the sewers and is discharged through long outfall sewers, the storm overflow going to the canals.

"At Moscow another point of interest to all sanitary engineers was found. This was a sewage experiment station, one of the largest in the world, in which the latest methods of disposal, including activated sludge, are being studied by an able and enthusiastic engineering chemist, Dr. Serge Stroginov.

"In China the Mission was greatly impressed with the importance of the flood problem. It towers above all the other engineering needs of China.

The opportunity for engineering work of many kinds in all these countries are tremendous.

That Russia and Siberia both possess unlimited resources which as yet have not been fully developed and which offer very promising opportunities to every American engineer, as well as great pecuniary rewards is the opinion expressed by every member of the Mission.

Professor C. Whipple, president of the Boston Society of Civil Engineers and a member of the Mission, states in his report to the Society:

"Looking ahead, we see in this great land a wonderful opportunity for America and American engineers to aid in the development of natural resources and the advancement of civilization of the world. The journey back and forth

across Siberia cannot fail to be a revelation and an inspiration to any American who has constructive imagination. The vacant plains have a soil rich enough to supply grain for the world; the virgin forests of splendid timber cover tens of thousands of square miles; the mineral resources are almost untouched. Siberia, once regarded as a land of exiles, will some day become filled with prosperous farmers; cities will spring up on the great rivers; there will be railroads and water power and manufacturing; and there will be schools and universities, and all that makes for a high civilization. Even in European Russia there are great natural resources undeveloped fertile land, and coal and oil and mineral wealth. Nowhere in the world will there be greater opportunities for the young men of America than in Russia.

"At the present time, the young men of America do not know Russia. During the last few years their eyes have been turned towards South America, and they have taken to the study of Spanish as a preparation for future commercial enterprises. In the same way they should prepare themselves for commercial enterprises in Russia by the study of the Russian language. It is true that this language is more difficult to an American youth than is Spanish, and the college men of America are not prone to choose a difficult subject when there are easier ones to be had; but, if the difficulties in Russian intercourse are greater, the prizes are also greater.

"In order that America may help Russia in the right way, our universities should strengthen their Slavic departments. Students should be encouraged to study the Russian language. Russia should be studied not only for its literature and its history, but for its economic possibilities. I should like to see a well-endowed chair of Russian economics in Harvard University. Such a chair would greatly stimulate the study of the Russian language. There should be an interchange of university professors between America and Russia. Provision should be made by the Russian Government for scholarships to be given to the young men and women of Russia in American colleges. There is also much for American students to learn in Russia.

"Russia needs practical, technical education. In her existing Germanized universities and technical schools, theory is carried to absurd limits, the applied sciences are neglected, the laboratory method of instruction is not used. England and America should immediately take up this problem of technical education in Russia. Good text-books on technical subjects are lacking. These must be supplied by us. Many of our text-books might well be translated into Russian, for their students are ignorant of American progress. We should arrange to have more daily news, more magazines, more technical journals and reports scattered through the country. Russia needs laboratories of all kinds—chemical, mechanical, electrical, mining. Russia needs better medical courses. Sanitation in Russia is at a low ebb. Few cities have public water supplies and sewers. Most of all, perhaps, Russia will need teachers for her elementary and secondary schools. It may be necessary for America to help in this field also.

"The present physical needs of Russia are likewise great. She needs tools of all kinds, especially farming tools, and factories for making tools; she needs the basic industries of steel making, steel working, she needs locomotives, cars and equipment for her railways; she needs the chemical industries; she needs manufactured articles of all kinds, boots and shoes, clothing.

"Russia needs capital and financial assistance. She must have outside aid to develop her natural resources.

"All these things America can give. But America must not do as Germany has done. German development always placed Germany first. America must place Russia, not America, first. Reasonable profits in Russian investments can and ought to be expected. With a liberal Russia and a stable government, Russian investments will be safe. Between Russia and America there is ample opportunity for profitable trade, profitable on both sides; ample opportunity for unselfish and rewarding service in many directions; ample opportunity for America to give the world a demonstration of that international good-will which must be the safeguard of the world against a repetition of the present awful war."

C. E. A. Winslow, who graduated from the Institute with the class of '98 in Course VII, and who at present is Professor of Public Health at Yale, was also a member of the Mission. As an aid to all engineering students interested in Russia and the opportunities offered there he has contributed the following comment, which gives much valuable information:

"The commercial expansion of the United States has two more or less clearly indicated lines of development—to the Spanish-American Republics on

the south, to Russia and China on the west.

"I wish that more Americans could make as we did the trip across Asia and Europe from Vladivostok to Petrograd, and could realize fully what a future the Russian Republic has before it. Siberia is no dreary wilderness of snow in which escaping convicts are everlastingly pursued by bands of wolves. It is a country strikingly like our own so that in passing from the east one feels that one is almost retracing in an opposite direction the steps taken in going westward to Vancouver. First there are fertile regions of Manchuria like the Pacific slope of Canada and the United States. Then the mountains about Lake Baikal, not far inferior to the Canadian Rockies in beauty, and perhaps as rich in mineral wealth as any of the ranges of our continent. Here there will grow up some day a great mining and industrial state with Irkutsk as its capital. Finally in the interior of the continental area we reach the great black earth belt which corresponds to our middle western with Omsk as its Chicago; and so on to the European Russia which we know but which will be only a small part of the Russia of tomorrow.

"The American Red Cross Mission to Russia, of which Dr. Frank Billings of Chicago was the head, included a group of medical and sanitary experts from Technology Chicago, Columbia, Harvard, Johns Hopkins, Pennsylvania and Yale and a business staff, headed by Mr. W. B. Thompson of New York. It studied the relief problems of Russia and entered into cordial relationships with the various Russian relief organizations and after a little over a month in Petrograd was in position to establish permanent headquarters in that city with a warehouse in Moscow, and to begin the shipment of regular monthly instalments of the particular supplies most needed for the medical care of the Russian army in co-operation with a special joint committee of the Sanitary Department of the Army, the Russian Red Cross, and the Unions of Zemstvos and Towns. On the civilian relief side it is working with the Ministry of Social Help for the care of the children of Petrograd. Raymond Robins of Chicago has been left in immediate charge of this phase of the work, and four million and a half pounds of condenser milk were ordered for the use of the new feeding stations as early as last September, of which three million pounds have been delivered.

"The officials of the Ministry of Social Help invited us to sit with their committees on this work and displayed a touching eagerness to avail themselves of American experience and American organizing ability. The All-Russian Congress of Child Welfare cabled to Washington a resolution of gratitude which closed with the sentence: "The people of Russia especially appreciate the possibility of a co-operation of our young democracy with free America, not only in a struggle for existence during this period of war, but also in the actual reconstruction of the new life of the future."

"In a speech of welcome, one of the delegates said in English:

"We incline to the faith that after having quite successfully resolved the immediate problems of your philanthropic mission, you will not stop. Our democracy is yet a child, a healthy one, being born in not quite regular conditions, but still healthy, but still a child. She needs assistance and help from her elder sister, the great democracy of America and will meet it thankfully. We are antagonistic within our country to philanthropic principles of social protection and aid, but we are not at all against international philanthropy. So we hope to see you among us for a longer time, and to see you often again."

"The Russian and the American are singularly congenial. They have many of the same view points and work together easily and well. On the other hand, their qualities are in a large degree complementary, so that in the interaction of the two peoples there is rich promise for the future. As the Russians of largest vision constantly told us in word and in action, Russia needs not only our material help, but our faith and confidence, our experience and self-government, our organizing ability, and our keen sense of practical values. There is no place in the world where these qualities of America can be used to better purpose than in aiding the Russian Republic to develop its tremendous resources in the new world that is to be after the war."

TALKS OF FINE ARTS

Next Sunday afternoon, February 3, Mr. Joseph L. Smith will speak at 3.00 o'clock at the Museum of Fine Arts on the "Experiences of An Artist in Japan." The lecture is to be held in the Gallery of Japanese Painting III. Mr. Barrett Wendell will also meet visitors in the Print Department at 3.45 o'clock. These talks are free to all.

**Technology Men
in War Service**

The Tech wishes to print the names of Technology men in War Service, whether in a military or industrial capacity, together with the branch of such service with which they have allied themselves. Notification of any corrections or changes in the information given in this column will be appreciated. Address any information of this character to the Managing Editor, The Tech, Massachusetts Avenue, Cambridge, Mass.

- Class of 1893
WILFRED A. CLAPP, Chief Eng., Q. M. C., War Dept., Washington.
- Class of 1896
ROBERT C. CLARKE, 1st Lieut., Co. I, 156th Regt., 39th Div., Camp Beauregard, La.
- BUTLER AMES, Maj. Gen., M. S. G.
- Class of 1900
STEPHEN BADLAN, Capt. Inf., N. A.
- Class of 1902
ALLEN W. CROWELL, Q. M. C., Chief Draftsman, Cantonment Div.
- Class of 1904
AUSTIN Y. DOY, 2nd Lieut., Seige Btry., R. G., B. E. F.
- NOEL CHAMBERLAIN, 1st Lieut., A. S. S. C.
- Class of 1905
DONALD R. BATTLES, Lieut. Comdr., Constr. Corps, Navy Dept., Washington.
- WILLIAM D. CLARGE, Co. 1., 23rd Engrs., E. O. R. C., Camp Meade.
- GEORGE H. DAVIS, Instr., School Mil. Aero., M. I. T.
- Class of 1906
ROGER W. BABB, U. S. S., "Old Colony."
- Class of 1908
FRED G. OOBURN, Lieut. Comdr., Nav. Constr., U. S. Nav. Aircraft Factory, Navy Yard, Phila.
- CHARLES S. COTTER, Pvt., Intelligence Dept., Inf., 9th Colonial Islands Brig., British.
- W. P. DRULY, Lieut. Comdr., Constr. C., Navy Dept., Washington.
- Class of 1909
MILTON C. CLARK, 1st Cl. Pvt., 2nd Co., O. T. C., Camp Upton.
- WILLIAM D. CLARK, Capt., 5th U. S. Cav.
- ALLEN L. DICKERMAN, Capt., O. R. C., Ord. Dept., Washington.
- LEE S. BORDER, Constr. C., U. S. N.
- LAURANCE D. CHAPMAN, Pvt., Co. 6, C. A. C., Fort Banks.
- Class of 1910
FRANK F. BELL, 1st Lieut., 45th Aero Sq., Gerstner Field, Lake Charles, La.
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- GUY W. BOLTE, 7th Bn., Ft. Sheridan.
- HARVEY H. BROWN, JR., 2nd Lieut., C. A. C.
- NINO T. CATLIN, Hull Drafting Room, Bath Iron Works, Me.
- ALLEN J. CHANTRY, JR., Lieut. Comdr., Constr. C., Navy Yard, Phila.
- FRED A. DEWEY, Capt., Gas Defence Ser., San. C., Med. Dept.
- Class of 1911
LEW M. ATKINS, Lieut. Comdr., Constr. C., U. S. N., Fall River, Mass.
- HAROLD C. BROWN, Engr. Hq. Co., 1st Regt., C. A. C., M. N. G.
- Class of 1912
HENRY A. BABCOCK, Pvt., A. S. S. E. R. C.
- ARTHUR T. BENNIS, Seaman, 1st Nav. Dist., U. S. N. R.
- HARVEY S. BENSON, Lieut., Ord. U. S. R., N. Am. Motors Co., Pottstown, Pa.
- ROY W. CHANDLER, 1st Lieut., O. O. R. C., Avia. M. G. Off. of U. S. A.
- WILLIAM H. COBURN, Lieut., San. Corps, Gas Defence.
- HAROLD B. DAVIS, Lieut., U. S. A.
- BOYD DUDLEY, JR., Capt., U. S. A. O. R.
- Class of 1913
WINFRED S. BOYNTON, Engr., Chicago Base Hospital No. 39.
- CHARLES L. BURDICK, Lieut., Ord. Dept.
- GEORGE P. CAPEN, Insp. Ord. Dept.
- GEORGE S. DARLING, U. S. N. R. F.
- Class of 1914
HAROLD W. BARKER, 1st Lieut., 110th Engrs., Co. A., U. S. R.
- HOMER M. CARVER, Food Insp., San. Corps, 89th Div.
- CHARLES H. CHARFIELD, U. S. N. Avia. Detach., Inst., M. I. T.
- JAMES S. CHURCHILL, 1st Lieut., Ord. Dept.
- FRANK C. CLEVERLEY, 3rd Cl. Asst. Engr., Merchant Marine.
- HAROLD COHEN, Cadet, Hq. Co., A. S. S. C.
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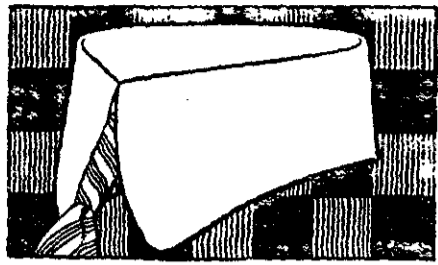
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Iowa—Twenty-five men have settled
down to a routine of intensive train-
ing on the mat in preparation for the
two dual meets which Iowa has on her
schedule and the Western Intercol-
legiate at Chicago, which is to be
held early in March. The only short-
age of material is in the heavyweight
classes, more than enough feather and
lightweight men being available.

Texas A. & M.—A reorganization
of the military training classes has
been recently effected with the result
that a regiment of twelve companies of
nearly war strength have replaced the
former brigade of two "skeleton" reg-
iments. The change was necessitated
by the entrance of a large number of
upper classmen for voluntary drill, and
practical work was substituted for the
old close order drill.

Shattuck—There are four gener-
als, fourteen colonels and eleven majors
among the 345 Shattuck alumni who
are at present in military service. A
large service flag containing that num-
ber of stars now flies from a staff on
the campus. Word has just been re-
ceived of the death of Lieut. N. H.
Lovell '16, the first Shattuck man to
die in foreign service in the present
war.

Wisconsin—Some bland female
equipped with large amber glasses and
a heavy veil has been making profit-
able tours through Chadbourne hall,
one of the dorms at Madison. She is

always looking for someone who is not
there when she accidentally enters a
room that is occupied. A policewoman
is now on the job and expects to re-
cover considerable money when she
makes her next tour in search of
"Madame X."—the unknown.

Texas—The use of the "Lib" as
a general rendezvous and visiting place
with the result that no five consecutive
minutes there are known any longer as
"quiet" has led to a series of articles in
the Daily Texan pointing out the
abuses and the reason why the nuisance
should not be permitted any longer.
"Common courtesy" is the title of the
last appeal. Its title is self-explanatory.

Indiana—Mr Paul Haworth '99, who
has won fame as an Arctic explorer and
discoverer, is to become a member of
the faculty of the Hossier University
next semester, filling a vacancy in the
department of history. While in col-
lege, Mr. Haworth won fame as a varsity
fullback whose ability on the gridiron
was only surpassed by his aptitude for
study. He has published several works
on his explorations in the Arctic and
in the Canadian Northwest.

Michigan—Twenty-six Ann Arbor
nurses are now in the service, twelve
being in France already, and the others
attached to hospital units which will
eventually be sent across. Several in-
teresting letters, describing the adverse
conditions under which they have to
work, have been received from some of
the nurses in France. One writes that
she must heat her ward and cook food
for her fifteen patients with two small
open stoves—besides attending to the
usual duties of a nurse.

Yale—In accord with the announce-
ment of Mr. F. B. Johnston, general
manager of the university, that "as the
college decreases in size we will seize
every opportunity to shut up more
buildings and consequently save coal,"
Haughton and Osborn Halls, used for
recitations, have been closed "until fur-
ther notice." It is possible that some
of the fraternities will be compelled to
combine at once, in order to prevent the
further wastage of fuel in heating a
house with a capacity of thirty now
occupied by fifteen.

Texas—Intercollegiate basketball for
Texas started off with a rush last week
when Southwestern was defeated 43 to
2. The Longhorns outclassed the Meth-
odists at every angle, although the lat-
ter put up a game fight, despite the
indication of the score to the contrary.

McGill—Another McGill graduate has
won fame in scientific circles. Lieut.
Harold H. Vroom '10 has invented a
hydroplane for which he has been highly
complimented by Admiral Jellicoe. The
machine has been accepted for service
in the British navy.

Columbia—Announcement has just
been made by the trustees of three
plans under consideration by the medi-
cal faculty in the curriculum which
will require a clinic course and an extra
year of work for the medics. This will
make the medical school course five
years.

Yale—The O. R. T. C. at New Haven
received as a gift from the Bartlett-
Hayward Company of Baltimore, 24
pounds of dummy 75 mm. shrapnel for
use in loading and firing practice. The
battery is equipped with French "75's"
and the ammunition has been the only
thing lacking for complete equipment.

Kansas—All students of the Univer-
sity of Kansas have been ordered to be
vaccinated for smallpox at once, Dr. J.
S. Crumrine of the State Board
of Health having issued the edict not
because of any epidemic, or threatened
trouble, but because Dr. Crumrine felt
that it was for the best interests of the
University and the town.

Iowa—Since September the enrollment
of the University of Iowa has decreased
fifteen per cent, 137 men having left to
enter military service and the usual
number because of illness or failures.
Ames, likewise, has lost considerably,
the decrease there being almost twenty
per cent of the total enrollment.

Dartmouth—Because Lieutenant-Col-
onel Swartzkopensky, an officer in the
Russian army, who was to have fur-
nished the second "smoke talk" of the
year last Saturday, disappeared very
mysteriously, it was necessary to call
off the affair. He was for twenty years
an officer in the regular army and then,
due to political intrigue, was exiled to
Siberia, where he spent a year in prison
before escaping and being befriended by
Count Tolstoy, who aided him to es-
cape to America. He returned to Rus-
sia after the revolution and then came
back to the United States to work for
the new government. His manager has
been obliged to cancel a number of
speaking engagements due to the Col-
onel's peculiar exit.

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MR. W. R. D. HALL TO SPEAK

On Wednesday, February 6, 1918, Mr.
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licity Bureau of The Philadelphia Cham-
ber of Commerce, will speak to the
Technology Club of Philadelphia on the
"Engineering of Civic Efficiency." The
benefits derived by a city from its
Chamber of Commerce and the proper
relation between the latter organization
and the engineer are to be discussed.

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