# The Technology Review

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## ALL EYES ON JUNE

Outline of plans for the great Technology Reunion June 12, 13 and 14, 1916

At the last meeting of the Alumni Council Charles A. Stone, '88, chairman of the All-Technology Reunion Committee, told of the plans for the great reunion of 1916, and outlined a tentative program. It is planned to carry out every detail of this reunion on a grand scale, and in order to properly accomplish this, preparations were begun early in the fall and are now being worked out in a most satisfactory manner. The general program is as follows:

FRIDAY, SATURDAY AND MONDAY, JUNE 9, 10, AND 12:

> Registration: June 9 and 10, in some central location in the business district of Boston to enroll as many local men as possible and simplify registration of outside alumni on Monday.

MONDAY, JUNE 12:

- 11.00 a. m. Farewell to Institute buildings.
- 2.00 p. m. Tour of Charles River basin. Guests to be taken from the Boston side and landed in front of the new buildings. Inspection of new Technology, student guides to be located throughout the buildings.
- 4.00 p. m. Afternoon tea in new buildings. Guests to be divided into groups in several parts of the building to prevent crowding.

6.00 p. m. Class dinners.

- 8.00 p.m. Smoker at the City Club. Some form of entertainment on auditorium floor; refreshments on next floor.
- 10.30 p. m. Cheer Rogers' Building.

TUESDAY, JUNE 13:

- 10.00 a.m. Excursion to Nantasket; buffet luncheon; class stunts.
  - 8.30 p. m. Pageant in the great court in connection with a water fête. Buildings illuminated; fireworks display.

WEDNESDAY, JUNE 14:

- 11.00 a. m. Meeting of the Technology Clubs Associated.
- 12.30 p.m. Departmental luncheon.
- 2.30 p. m. Dedicatory exercises in the Great Court of the new buildings.
- 7.00 p. m. Grand banquet in Symphony Hall.

There will be an opportunity for fraternities and societies to get together either for luncheon Monday, June 12, or for dinner Tuesday evening, June 13.

All these different events will be placed in charge of special committees, and, although many of the chairmen have been selected, the names will not be published until the appointments have been completed.

The enthusiasm with which the alumni are preparing for the reunion indicates a wonderful gathering here in Boston such as we have never seen before and may not see again for a long time. It is expected that there will be delegates from every Technology club in the United States and many of those abroad. A long distance cup will be offered; also a cup for the class making the best showing.

It will be noticed from the above program that it appeals as much to the women as to the men; practically every function will be open to them except the smoker at the City Club Monday night, the meeting of the Technology Clubs Associated Wednesday noon, and the grand banquet Wednesday night. In the latter case, however, the ladies can view the interesting features of the banquet from the balconies. Probably some form of entertainment will be arranged for the women on Monday night.

Several of the classes have registered their class stunt, keeping in mind that it cannot occupy over three or five minutes, that it should have some definite point, and should, as far as possible, include members of the class in some way. This feature of the reunion will undoubtedly be a remarkable one. Every feature of the reunion will be recorded in photographs and moving pictures for reproduction later on at local alumni centers and elsewhere.

The local alumni associations have been requested to appoint some active member to coöperate with the General Reunion Committee and act as chairman of the local committee, the other members of which will be made up from the class representatives which will be appointed in each of the large cities.

Arrangements for transportation are already being made, and it is likely that an interesting statement will be made by the Transportation Committee in the next number of the REVIEW.

Every Tech alumnus should make up his mind to come to this reunion if possible. We want to make a demonstration that will bring forcibly to the public eye the wonderful history of the Institute, and the still more wonderful opportunities that will be afforded in the new buildings, not only for the education of young men in the lines of applied science, but for research in practically every field of

scientific endeavor. We also particularly want to emphasize the fact that Technology is offering its students social advantages unusual even among the best equipped universities. In order to do this the Walker Memorial, which is to be the students' club room on the new site, must be built so as to completely fulfill its mission. For this purpose and the building of the gymnasium, swimming tank, etc., probably half a million dollars more is needed. How much of this the alumni are willing to give directly for these purposes is a question to be answered, but it is hoped that this anniversary occasion will bring the Institute so favorably to the attention of generous friends that these student features which are now a source of much anxiety to the Building Committee as well as to alumni, will be fully assured.

### Meeting of Philadelphia Club

At a meeting of the Technology Club of Philadelphia, held November 3, Carleton E. Davis, '93, chief of the Philadelphia Water Bureau, described the new water system that is being constructed in New York, and described it as the greatest feat of hydraulic engineering ever undertaken. He laid particular emphasis on the capacity of the work, speaking especially of the reservoir in the Catskills, a hundred miles from the city, which will have a capacity of 138,000,000,000 gallons. Mr. Davis was enthusiastic in his praise of the plan suggested by the Engineers Club for forming a central clearing house, where information on engineering subjects can be exchanged.

### Raised the F 4

It is interesting to note, from the news of the class of '05 in the TECHNOLOGY REVIEW of last month, that the apparatus used in the raising of the submarine F.4 at Honolulu was designed by Naval Constructor Furer, '05, and was built under his direction. He is connected with the United States Naval Station at Pearl Harbor, T. H.

# TECH SONG COMPETITION

In connection with the All-Technology reunion of 1916 there will be need of some good, ringing Tech songs, and a committee has been appointed to secure contributions of songs, words and music, which can be used not only for the reunion but also at meetings of students and of alumni. It has been decided by the committee to offer a silver cup as a prize for the best contribution in this class, the decision to be left to a jury of five Institute alumni, to be named by the Reunion Committee.

We would also like to get particularly good words which can be set to popular music which everyone would be likely to know—and last and fully as important as the others are the little verses with an original twist like Gelett Burgess's " $xy^2 + 18xy...$ " which he composed for the reunion of 1909. In other words we ask every Tech man to send in a contribution to this department knowing that among the many offerings there will be a number that will be particularly good.

The song selected from the contributions received will be printed with other Tech songs in an alumni song book which will be used at the reunion and will also be available later on for class, fraternity and local alumni meetings.

Please bear in mind that one of the important considerations is to have music that is well within the compass of the average voice and which at the same time has verve and "go."

Please send contributions to George B. Glidden, 551 Tremont Street, Boston, Mass., Chairman of the Music Committee.

## REUNION PLANS AND SITE HISTORY

# Chairman Stone outlines Reunion program and Everett Morss tells story of Tech sites at Council meeting

The meeting at the Engineers Club, November 29, was, in point of attendance and interest, one of the best in the history of that body.

During the salad course Edward B. Rowe, '06, chief illuminating engineer of the Holophane Works of the General Electric Company of Cleveland, who has charge of this work at the new buildings in Cambridge, was called upon to speak for the Cleveland association. He told of the many activities of the club and of the enthusiasm shown in Technology affairs. He had recently visited a number of the larger cities, and the alumni there are eagerly looking forward to the reunion.

Field Manager Litchfield told of his trip to New York, Pittsburgh, Indianapolis, Louisville, Cincinnati and Philadelphia. Everywhere he found the alumni responsive to every Technology interest, and the different clubs visited are growing in strength, influence and usefulness. At Louisville a new local alumni association was formed with James Clark, Jr., '90, as president, and Lewis S. Streng, '98, secretary.

Mr. Bemis was then called upon to report for the Dormitory Committee. He said that the most cheering news he could offer was that the ground had been broken on that very day for the dormitory units described at the last meeting. For the present there was little more to say about it. Later there would be the question of the supervision of the dormitories. Messrs. Allen and Dalton and the other members are getting information in regard to the practice at other institutions, which will be analyzed with a view to making recommendations. The final report of the Dormitory Committee, which was discharged at the October meeting, was presented but not read. The report is as follows:

At a meeting of the Alumni Council held April 27, 1914, there was a general discussion of the several ways in which the Council might be of most immediate service to the Institute. Among other things it was urged by Mr. Munroe that the Council at once take hold of the dormitory question to see if it might not assist the Executive Committee of the Corporation in raising funds, in studying the problem of layout, and in dealing with the complex question of the relation of the fraternity houses to the ordinary dormitories.

As a result of the discussion, a committee, consisting of J. P. Munroe, '82, A. C. Anthony, '86, A. T. Bradlee, '88, C. W. Eaton, '85, F. A. Merrill, '87, and the president and secretary, *ex-officio*, was appointed. This committee held a number of meetings and conferences, to some of which were invited the President and treasurer of the Institute and other interested individuals, including Mr. A. F. Bemis, '93, the chairman of the committee on student housing, whose excellent report was published in the REVIEW for May, 1913.

On February 12, 1915, the committee called a meeting at the Engineers Club of delegates of fraternities, for an informal dinner and discussion. Fifteen of the twenty-one chapters at the Institute were represented by thirty-seven men, and there were present also Messrs. Bemis and Bourne of the Student Housing Committee, and Messrs. Snow and Cushing of the Technology Christian Association. The discussion was participated in by a large proportion of the men present, and a fine spirit of loyalty to the Institute, and of desire to coöperate with it in solving in the best way the dormitory problem, was made evident.

Dr. Marcy, speaking officially for Delta Kappa Epsilon, and others speaking unofficially, including Mr. Bemis for Theta Xi, Mr. Allen for Delta Tau Delta, Professor Talbot for Phi Gamma Delta, and Dr. Chase for Sigma Chi, all expressed the belief that their fraternities would be willing to locate on the campus, provided a feasible scheme is presented for their consideration. All were unanimous, however, in the belief that if fraternity houses are made part of the dormitory scheme, each of such houses must have its own lounging and dining room and separate service. The meeting was marked by a fine spirit and a desire to subordinate personal preferences to the highest good of the Institute as a whole.

The Alumni Council meetings of March 1 and March 29, 1915, were largely given up to a general discussion of the closely allied problems of dormitories, the Walker Memorial, the gymnasium and the student commons. At both meetings it was emphasized that these four services are essential to a proper student life on the new site, and that all of them should be ready for the fall of 1916. It was the general opinion, however, that in the beginning, dormitories for only a portion of the undergraduates requiring to be housed need be furnished, this modified provision being dictated by money limitations and by the need of a gradual and cautious working out of a problem so new to the Institute authorities.

At these meetings it was the informal opinion of the treasurer and other official representatives of the Institute that the Corporation should provide in some form for a general lunchroom and a gymnasium, and that it should assist the alumni, as far as its resources permit, in providing the money for an adequate Walker Memorial and for dormitories to house at least 400 or 500 students.

In June, 1915, the President of the Institute announced the receipt of two anonymous gifts, one of \$150,000, the other of \$100,000, which, together with an existing gift of \$100,000 from Coleman du Pont, '84, were to be used towards the erection of dormitories.

Since these gifts appeared to supersede any general system of dormitory financing by the alumni, such as had been under consideration by this committee, the main reason for its continuance seemed no longer to exist; and the chairman wrote, therefore, to the President of the Institute, asking what, if any, further service this committee of the Alumni Council might render. To this inquiry he received the following reply:

#### "DEAR MR. MUNROE:

On various occasions during the last few years I have voiced the opinion of the Executive Committee of the Corporation that the provision of dormitories was one of the most important elements in the large problem of establishing what is popularly spoken of as the 'New Technology' on the banks of the Charles. There has been no change of view within the committee as to the urgency of the need that has thus been expressed and it has always been the understanding that we should proceed at once with the erection of dormitories as soon as money was available for the purpose. Your committee and others set up by the Alumni Council have rendered most valuable aid by careful investigations as to the needs and by keeping the broad issue before those who are watching with special interest the progress of the Institute. In June last I was happily in the position to announce that two benefactors had promised substantial sums to be used for the erection of dormitories and immediately after that the matter was placed in the hands of the Institute's architect together with material furnished by committees of the Alumni Council. It has taken a long time to get plans into a form that satisfies all our needs and to reconcile the somewhat conflicting demands of low cost to the student and appearance worthy of the Institute and of the standard that it has set in its educational buildings. We have not yet reached a complete solution of this problem, but I believe that we are very near it. We expect before the winter sets in to begin the erection of dormitories on the river front, costing about a quarter of a million dollars, and these will be ready for occupancy next fall.

I beg to tender to you and your associates the

thanks of the Executive Committee for your helpful coöperation.

Yours sincerely, RICHARD C. MACLAURIN."

Consequently, at the meeting of the Alumni Council on October 25, the committee asked for its discharge, with the understanding that its formal report might be presented at a later date.

In making this formal report the committee desires to express its special obligation to Mr. Hart, the treasurer of the Institute, for his very cordial coöperation in devising plans for financing the dormitories, to Mr. A. F. Bemis for active and constructive work on the problems of specific room plans, and to Mr. R. H. Howes, '03, for much practical assistance from his experience as a contractor.

> JAMES P. MUNROE, H. J. HORN, ARTHUR C. ANTHONY, ARTHUR T. BRADLEE, CHARLES W. EATON, F. A. MERRILL, WALTER HUMPHREYS.

Everett Morss, '85, a member of the Institute Corporation and one of the members of the committee to investigate the various sites offered to the Institute before the Cambridge location was chosen, was next introduced. His story of the vicissitudes of negotiations for a site was intensely interesting. We have not opportunity of reproducing it here, but it will be printed in the January number of the REVIEW. In closing his remarks Mr. Morss said:

"It is nine years from the appointment of the first Fund Committee to now. Some members of the Council are impatient because the alumni have not appropriated the money for the Walker Memorial. They are disappointed when they think that nothing is being done. Now you must remember that the Corporation hasn't said what it would do. In the meantime the funds have been coming in, \$280,000 to \$300,000 last spring, \$346,000 now; in addition there was \$20,000 given to pay for land and therefore taken out. This makes \$366,-000 in all. I estimate the fund may reach \$400,000 to \$410,000 a year from now. This is a lot of money, and not one cent of it has yet been appropriated for anything.

"We have had subscriptions of \$500,-000 from the alumni. This is good, but

personally I don't feel all have done as much as could have been done. My idea is that the amount should have been about \$1,000,000. The reason we cannot appropriate what you wish is that we only got about half the money needed. The Corporation has refused to do many things it couldn't do because there was no money. We have done what we have done, right. We should be feeling much pleased over some of the things that have been accomplished. The Walker Memorial, the commons, the gymnasium, dormitories, are being mulled over. They should be considered, not as individual projects, but we must see their relation to a logical whole. The subscriptions are perhaps all that we could have expected. We never did make a clear presentation to the alumni. It was all a hazy dream. A specific plan would have obtained more. We did not make a good case and got contributions from only about 25 per cent of the men.

"Starting January 1, we shall be on a new basis, and we shall expect to get the rest of the money required from the alumni, when they realize what we want to do. Our hope is that we shall have our problems worked out satisfactorily. January first is the date to start. We are working and will make a tremendous effort to get these things together as a whole."

President Horn next introduced Charles A. Stone, '88, chairman of the Reunion Committee. Mr. Stone said that the committee had got to work early on the general plans for the reunion, but that all the details of the program had not as yet been arranged. The items that had been decided on started with the registration which will be most active June 9 and 10. In addition to the regular registration headquarters a room will be secured in the business district where as many of the business men will be registered as early as possible in order to simplify registration of outside alumni on Monday.

On Monday, June 12, at 11 o'clock, there will be opportunity to visit the present buildings. At 2 o'clock p. m. there will be a tour of the Charles River basin. The guests will be taken from the Boston side and landed in front of the new buildings. In the buildings will be student guides who will give information in regard to the various departments. At 4 o'clock afternoon tea will be served in the new buildings, possibly on the roof, and in the evening there will be a smoker at the City Club. Some form of entertainment will be given on the auditorium floor. At 10.30 the alumni will march up to the Institute headed by a band and cheer Rogers Building, which will be decorated and illuminated.

Tuesday, June 13, at 10 a. m. guests will take steamboats to Nastasket beach where a buffet luncheon will be served at noon and where the class stunts will be given in the afternoon. At 8.30 p. m. there will be a pageant in the great court of the Cambridge buildings in connection with a water fête, pyrotechnic display, etc.

Wednesday, June 14, at 11 o'clock there will be a meeting of the Technology Clubs Associated at one of the hotels. At 12.30 departmental luncheon will be served, and in the afternoon at 2.30 or 3 o'clock the dedicatory exercises will be held in the great court of the new buildings. The ceremonies here will be impressive. At 7 o'clock p. m. on Wednesday will occur the grand banquet in Symphony Hall.

Mr. Stone called attention to the fact that there were three occasions from which the classes and fraternities could choose opportunities to have dinner or luncheon meetings. These are on Monday noon, Monday night and Tuesday night. Mr. Stone spoke of how the various members were taking hold of the work and predicted an immense turnout of Tech men on this occasion.

Matthew C. Brush, '01, spoke of the great impression that Mr. Morss's history of the site question had made on him and hoped that it would be given wide publicity among the alumni.

James P. Munroe, '82, moved that it was the sense of the meeting that the President write a letter to the president of the Elevated Road Company and suggest that the station at Kendall Square be changed to "Technology." This motion was unanimously carried.

## INTER-CLUB MEETING AT INDIANAPOLIS

Local alumni association gives a blow-out on its first anniversary. Hoosier Tech men generous entertainers

The Neighborhood Technology Clubs meeting, which was held by the Indianapolis association at Indianapolis, November 20, and which included the members of the Cincinnati association, the Dayton Technology Club and the Tech men of Kentucky, was advertised as a Technology Thanksgiving Union Meeting, but it not only partook of a Thanksgiving atmosphere, but also had all the happy and patriotic features of Christmas and Fourth of July. The receipt for this most successful reunion included unlimited quantities of loyalty, Technology spirit and hospitality, and the event will long be remembered by the visiting delegates.

During the forenoon of the 20th the representatives from the other associations began to drift into headquarters at the Severin Hotel, and long before the luncheon hour everybody was thoroughly acquainted with everybody else. There were thirty-five or forty at the luncheon, following which, automobiles took the party to the ball park where a football game, to determine the supremacy of Wabash or DePauw, was to be played. Here Technology cheers were almost as much in evidence as those of the warring factions. Between the halves of the game a picture was taken of the Technology group.

There were some forty present at the banquet, which was held at the University Club in the evening.

The dinner committee had given the decorations and program a great deal of thought, and there was never a lagging moment. It was, of course, most appropriate that Thanksgiving services should be held in connection with the celebration, and in order to fill this need the committee had had erected in one of the alcoves a duplicate of the "Chapel" which, when opened for inspection, was found to be fully up to tradition. The president of

the Indiana association, J. Lloyd Wayne, 3d, '96, acted as moderator of the meeting, and after invocation he announced that the evening meal was opened for discussion. Between the courses Tech "hymnbooks" were passed around and everybody joined in the songs with a will. During the desert course the guests were served with little individual New England mince pies, each embellished with an M. I. T. monogram.

The speakers of the evening were Henry M. Waite, '90, city manager of Dayton, Ohio, who was announced to deliver the sermon; I. W. Litchfield, '85, Boston, field manager of the alumni associations, who conducted the Sunday School, and Severance Burrage, '92, of Indianapolis, who was supposed to lecture on the dawn of enlightenment in heathen lands. Mr. Waite took for his subject the commission manager form of government, which is so succesfully working out in Dayton, Ohio. The plan has now been on trial long enough to observe its tendencies and gain some results. Mr. Waite stated that it was applicable to any city which was willing to do away with partisan politics in municipal affairs. He described how it was working out in Dayton, some of the difficulties they had encountered and some of the developments that had been effected. His conclusion was that a centralized form of municipal government is far superior to the federal form, and he prophesied that there would be a large increase in the number of cities adopting this form of government in the near future.

Mr. Litchfield showed progress pictures of the new buildings from the bare site up to the present time. He described the buildings and told of the status of the dormitories and the Walker Memorial. The audience was particularly interested in the plans for the grand reunion of June, 1916, and it is expected that a

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Some of the participants at Indianapolis

considerable number of the men who were present will attend the reunion at that time.

Severance Burrage, who is director of the biological laboratories of the Eli Lilly & Company, Indianapolis, showed by moving pictures the process of making antitoxins. During the evening a number of celebrities presented special acts, among them William P. Turner, S. M. A. '86, professor of practical mechanics, Purdue University, Lafayette, Indiana, whose artistic efforts on the harmonica recalled the Symphony Hall concerts of student days. His chef d'œuvre was an original rendition of the "Arkansas traveler," which brought down the house. Alex. Vonnegut, who represented the Harvard Club of Indiana, gave an excellent impersonation of Teddy Roosevelt. Professor E. H. Davis, '01, of Purdue also performed on the harmonica, after which Charlie Rockwood, '01, presided at a Faculty meeting, before which the cases of Douglas C. Jillson, '01, for cutting Chapel, and Charles A. Tripp, '93, for cutting mechanical laboratory were discussed and the culprits appropriately punished. In presiding over the Faculty, Rockwood had it distinctly understood that although he could not mimic President Maclaurin, he could mimic him if President Maclaurin were to mimic Harry Lauder! To those who know Charlie Rockwood, it is needless to say that this impersonation was perfect.

The Christmas feature of the entertainment came at the wind-up of the dinner and the great yellow pie in front of the toastmaster was investigated and appropriate presents were distributed to everybody in the room.

The hospitality of the Indiana men was undiminished on Sunday when the delegates, most of whom remained, were taken in automobiles for a tour of the residential portion of the city and the

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inspection of the great Indianapolis automobile speedway. Some dozen of Tech men lunched together at the Claypool, and in the afternoon visits were made to points of interest in Indianapolis.

The meeting was a most successful one and is undoubtedly the beginning of a number of small interclub gatherings, which will make the alumni of neighboring cities better acquainted with each other.

Those present were: From Cincinnati: J. M. Hargrave, '12; Stanley A. Hooker, '97; H. S. Morse, '03; A. H. Pugh, Jr., '97; Morse W. Rew, '09; from Dayton: J. E. Barlow, '05; Frank B. Heathman, '98; Gerard H. Matthes, '95; Charlton D. Putnam, '08; C. H. Spiehler, '08; Henry M. Waite, '90; Walter G. Wuichet, '89; from Indianapolis: A. Russell Atwater, '13; Severance Burrage, '92; H. M. Chapman, '92; Albert W. Higgins, '01; John H. Holliday, Jr., '05; Douglas C. Jillson, '01; W. C. Marmon, '95; C. B. Mayer, '05; Wilson B. Parker, '88; Charles P. Rockwood, '01; Herman A. Scherrer, '03; F. B. Shields, '07; J. W. Stickney, '96; Charles A. Tripp, '93; William G. Wall, '96; J. Lloyd Wayne, 3d, '96; also: Edward H. Davis, '01, of Purdue University; Howard A. Dill, '91, Richmond, Indiana; Prof. E. D. Hayward, DePauw University; I. W. Litchfield, '85, Boston, Mass.; William P. Turner, S. M. A. '86, Purdue University; Alex. Vonnegut, representing the Indiana Harvard Club.

### Gcod Outlook at the Capitol

The Washington (D. C.) Tech Club has taken a new lease of life, and the program for the year, thus far, has been unusually interesting. Conditions in Washington are such that it is more difficult to keep the men together than in perhaps any other city, but there is now a spirit of hearty coöperation there, and the men are pulling together as a unit. Under these circumstances it seems likely that interest there may grow until it has become one of our most important Technology centers.

One reason for the interest of the members and for the success of the meet-

ings has been the appointing of special committees for each meeting, thus giving added zest to the program and bringing a large number of men into active work.

The largest contemplated undertaking is that of establishing a Tech house. It will be remembered that the Technology Club of New York started practically as a rooming house for Tech men, and it is thought by many in Washington that there will be enough young men there who would take rooms in such a house to make it a success. It would be in effect a Technology club, the living rooms on the main floor of the house being open to Tech men as a meeting place. It is apparent that the younger men are doing the principal amount of work, and if they are heartily backed by the older members, the continued success of the association and its undertakings will be fully assured.

### Starting Freshmen Right

The work of assisting the freshmen to register on their arrival at Technology, of suggesting boarding places and giving helpful advice during the early weeks of their stay here, was undertaken by the Technology Christian Association last year and further developed this fall. The association provides, principally from the ranks of the seniors, advisers for the freshmen, which have the approval of the Dean. In order that the freshmen may be impressed with the desirability of applying for a student adviser the Dean sends a communication to each of them, describing the offices of the Christian Association and suggesting that they take advantage of the opportunity thus presented. The character of the services rendered is most efficient and Tech men who have come to the Institute during the last ten or a dozen years, who know the intricacies of registering at the present time, will realize the advantages of the services that the freshmen are offered.

# Death of Professor N. Frederick Merrill

N. Frederick Merrill, '70, emeritus professor of chemistry at the University of Vermont, died suddenly October 26.

### POWER HOUSE NEARLY DONE

## Model 2,000 horse-power plant with all approved mechanical accessories to be the steam laboratory

The steady growth of a tall creamcolored chimney at the northerly end of the new site of the Massachusetts Institute of Technology marks where the new boiler house is being built, and with such rapidity that a month hence will see it in commission. The steam will then be available for drying the plastering that is being applied in quantity to the walls of the offices, study rooms and laboratories.

The new plant will at the beginning develop about 2,000 horse-power in steam. It is modelled on the lines of a very modern power house but unusually condensed, being ten feet narrower than any other station of similar capacity. This narrowness is because the building lies in the ninety-foot strip belonging to Technology between Vassar street and the railway. The latter affords economical delivery of coal in large quantities, and with mechanical stokers and other appliances the coal is not handled by men at any stage of its use.

The boilers lie transverse to the street and railway, being so placed in order to make more easy the addition of other boilers as the future needs of the growing Institute may demand. There will be 1,560 horse-power of new boilers and four hundred removed from Trinity place, the new ones being of the Babcock and Wilcox pattern, with Riley stokers and working under forced draught.

One especial feature will be that the boilers will be equipped for heavy overloading, which is not to be taken in the sense that they will be other than exceedingly safe, but that they will be able to evaporate water to an almost unlimited extent in ratio to the combustion. When not in demand, any boiler will be automatically slowed down.

There are features in this plant that make it different from ordinary commercial boiler rooms. It will itself be a laboratory for the use of students, it will care for lighting, heating and power and will be built on the lines of a big central station. The laboratory use is likely to demand a high peak load, which the establishment must be able to care for, but, at the same time, the load factor is comparatively low. The location of the plant, besides affording the convenience and economy of direct coal delivery, is sufficiently far from the educational and student portions of the Technology assemblage of structures to be no nuisance in point of dust, while the chimney will group itself with the near-by commercial chimneys of the busy city. The boilers are of the wrought-steel, water-tube type, designed for 175° working pressure and superheating the steam 100°F., an important economy, in the use of the steam turbine. The stack measures ten feet in its bore and eighteen feet in outside diameter and when the capping is placed will stand 180 feet above its base.

To convey steam to the buildings and laboratories where it will be needed, a subway of reinforced concrete is being built, about seven feet square in inside measurements and 625 feet long. It is to connect with the educational group through the administration building and from this the steam will be distributed to the points where it is needed. For the present the supply will be a twentyinch pipe for utilitarian purposes, a teninch pipe for furnishing the laboratories and a five-inch return for water from condensation. For furnishing condensing water for the turbines, a concrete main has been laid. This conduit is thirty inches in diameter, running back from the Charles River basin along the western edge of the great court. It will be above a quarter of a mile in length, and in rainy weather it will collect the