DR. MACLAURIN'S REPORT

(Continued from page 1.)

Unfortunately the conditions under which they live do not make it possible to take advantage of such opportunil ties to the full.

An important step in the development of the social life of the students was taken last year and referred to in the report of the Acting President. This was the opening of the new Technology Union designed to serve the purpose of a students' club house. It has continued throughout this year to be the center of social life amongst the students and has contributed largely to the marked increase of social activities that is referred to by the Dean in his report. The successful management of the dining room at the Union has proved a problem of considerable difficulty and one that has not yet been solved in a thoroughly satisfactory manner. The health of the students as a whole continues excellent, and it is particularly gratifying to find that their health seems to improve steadily as they stay longer at the Institute. Interesting statistics on this matter are given by the Dean and Medical Adviser; and from these it appears that the very hard work that the Institute demands from its sudents is a good thing for them physically as well as mentally.

The most important change in the carrying on of our work during the year has been the establishment of a separate course in Electro-chemistry. The purpose and leading features of this course are lucidly set forth in the report of Professor Cross.

Besides doing the regular work of instruction, several of the departments have devoted a considerable share of their resources and energies to the conduct of scientific research. This has for some time been a marked feature of the Institute, and it is of the first importance that it should be maintained. Doubtless in various schools many educational sins have been committed in the name of research; but there can be no question that the spirit of research is the very breath of life to a scientific school. The Institute has been peculiarly fortunate in having on its faculty men who recognize this thoroughly; and it is not a little remarkable that many of the most important contributions to pure science that have been made within recent years in America have been made by graduates of the Institute of Technology, which on its scientific side is popularly, although of course quite erroneously, supposed to be almost exclusively a school of applied science. It is interesting, too, to note that a number of the gifts recorded in the Treasurer's report are for the prosecution of research. Amongst these is the gift from an anonymous friend for sanitary research work; from a member of the Corporation tor research in applied chemistry; from several contributors to the fund of seismological research; from Dr. Charles Weld for research in naval architecture; and from Dr. Noyes for research in the department of physical chemistry. One of the most gratifying of the gifts is that from Mrs. William Barton Rogers, whose interest in and enthusiasm for the Institute could not have been greater when it was founded by her husband nearly half a century ago. The largest item on the Treasurer's list of gifts is that of over $40,000 from the Alumni Fund. This, of course, has been contributed, not by one individual, but by a large number of the alumni.

Relation with the Alumni.

There have been many proofs during the year of the continued and increasing interest of the alumni in the welfare of their Alma Mater. The contribution towards the alumni fund, to which reference has just been made, was a practical demonstration of allegiance which has greatly helped the Institute at a critical stage of its development. Indeed, but for such support it would have been impossible to carry on the work without a very serious diminution of efficiency. The great reunion of the alumni in June surpassed anything of its kind in the history of the Institute, both in the magnitude of the gathering and the intensity of loyalty and enthusiasm displayed by those who came. As the success of the Institute must depend in large measure on the attitude of the alumni, any movement that tends to bring about a closer relationship between the alumni and your Corporation must be of interest to this body. During the last year an important change has been made in the constitution of the governing body of the Alumni Association, which has become more truly representative in character. By the new constitution an Alumni Council has been established, to which the Corporation might appropriately refer any question with reference to which an authoritative expression of opinion on the part of the alumni might be desired. This Council may also render great assistance to the administration by considering various problems of interest to the Institute and reporting the views of the alumni as to the best method of dealing with them. At the first meeting of the Council, committees were set up at the suggestion of Dr. Noyes, then Acting President of the Institute, to consider the following questions: the establishment of a camp for the summer school of civil engineering; the equipment and instruction in refrigerating, gas engineering, and aeronautics; the foundation of scholarships to connect the Institute with the more important high schools in this section of the country; the development of a research laboratory of engineering; the establishment of a committee on Student Welfare.

Society of Arts.

With regard to the Society of Arts, I am pleased to be able to report that there has been a gratifying revival of interest in its proceedings. This Society has played a conspicuous part in the educational development; but like other similar societies elsewhere it has suffered in its popularity by the change of conditions since its foundation. The interest in science has not diminished; on the contrary, it is intenser and more widespread; but science has become much more specialized. This has led to the establishment of numerous technical societies dealing with special branches of science, and the proceedings of these societies attract the attention and monopolize the time of a large number of those who are most seriously interested in science and its applications. Apart from this, there has been a marked falling off of the "lecture habit" in most communities in which a generation ago lectures by competent men attracted a great deal of attention. If the recent revival of popular interest in the proceedings of the Society be maintained, it will, of course, be an encouragement to continue the work on the lines that have been followed so long. Unless, however, this be the case, the Society will doubtless divert its energies into some different channel. The next few years will therefore be critical ones in its history.

Policy for the Future.

As to the future policy of the Institue as a whole, there seems no call for radical change as regards its educational methods or its films and ideals. It has had the great advantage of having been started on a broad gauge and kept thereon by a long succession of broad-minded instructors and administrators. For sime time its combination of liberal and professonal studies and its emphasis on science as a means of culture were regarded as experiments in the world of education. The experimental stage, however, has long since been passed; and the type of education initiated here has conclusively proved its usefulness. As far then as internal management is concerned our problem presents no peculiar difficulties. We have merely to continue along the natural lines of development and do all we can to secure the best type of instructors and maintain the highest possible standard of scholarship and technical skill. If we do this, we will continue to render a great service to the state and to the country as a whole.

Amongst the features of the Institute that are specially encouraging in the outlook on the future may be mentioned the peculiar devotion of the Faculty and of the alumni. In the short time that I have occupied the office of President I have had several opportunities of observing the readiness with which members of the Faculty sacrifice their financial interests through their belief in and loyalty to the Institute. Moreover, the number of the students is very encouraging, especially when we consider the relatively high fees that we are forced to impose in order to maintain our standards of efficiency. Here we have no problem of staying th decline of an institution that is running down, for the number of our students is as large as we can accommodate. What is still more important is that the quality of the students is excellent; for, after all, in an educational mill the great thing is to get good grain. The students that come to us are nearly all young men of character and grit, just of the type for whom careers of usefulness and success can be most confidently predicted. I may add that one of the chief assets of the Institute is the tradition of seriousness of purpose and hard work on the part of the students. It is certainly a tribute to Rogers' wisdom that the school that he founded has succeeded so easily, one might say inevitably, in avoiding the more serious problems of discipline, the abuse of athletics, and the various other difficulties that have long been pressing so hard on many of the colleges throughout the land, and of late have been causing so much disquietude both within and without these colleges. It is scarcely necessary to say that the prestige of the Institute must prove invaluable to it in facing the difficulties of the future. It is known and respected throughout the world as one of the pioneers in the field of education that it occupies and as one of the most successful today in maintaining the highest standard in the training of engineers and of architects. Its graduates are eagerly sought for to fill imporant positions all over the world, and now, as formerly, every head of a department reports that far more graduates are applied for than can possibly be supplied. Then, although it has not as yet the financial resources that are needed for its development, the Institute is fortunate in having large assets and in being entirely free from debt.

The Need of Further Endowment.

I mention these encouraging features because I think it well that we should all realize that the one thing needful is further endowment to enable the Institute to take up new work and to improve the conditions of the old. This claim for new endowment is unfortunately a commonplace of presidential reports, but it is none the less pressing because of its commonplace character. It will be seen from the Treasurer's report that we have this year a real deficit,—a real excess of expenditure over income. This is the case in spite of the greatest care in keeping expenses as low as is consistent with the high standards that we endeavor to maintain. Besides this, it has been recognized for long that we have not sufficient means to develop naturally, and that the quality of the instructors that we can employ must inevitably deteriorate if we can not meet the increased cost of living by the payment of better salaries. In many respects the salaries that we pay compare very favorably with what is the best practice in this matter in the country. Our peculiar weakness is in our middle men, on whom a large share of the burden of teaching falls. These men are eagerly sought to fill higher positions in similar institutions elsewhere; and, although we should always welcome their promotion, we should be able to get the best of them back if we need their services later; or if we cannot get them, we should be able to get men of equal grade. To make this possible, further endowment is indispensable. It is to be hoped that this will come from public-spirited citizens; but it is also, I think, to be hoped that an effort will be made to secure more support in this direction from the State. No one who has looked into the matter can fail to recognize the great service that this Institution has already rendered to the State, and still more he greater service that it can render in the future if not allowed to languish by insufficient support. At present it receives an annual grant of $25,000 from the State of Massachusetts, which is not a twentieth part of its annual expenditure. Such a grant to such an institution seems absurdly inadequate, especially in view of what other states are doing. We have only to look to the western states of this Union to see how differently matters are being dealt with elsewhere; and the zeal for technological education on the part of the State is certainly not confined to this Union. A recent visit to Europe has made it evident to me that many of the states of the old world that have been slow to recognize the needs of the age are rapidly making up for lost ground. It would be peculiarly unfortunate if Massachusetts, which was a pioneer in the matter of state support for this type of education, should be left behind in the race.

The Problem ofa New Location.

The problem of securing increased endowment is not the only serious one that confronts us. We must find a new location for the Institute. The need for such a change was urged in his annual reports by Dr. Pritchett for years, and Dr. Noyes last year summed up the matter thus: "There has grown up not only amongst your own members, but amongst all other groups of men connected with the Institute,—Faculty, Alumni, and Undergraduates,—a sentiment so strong that it will be satisfied with nothing less than the creation of a new Insitute on a new site." The situation must therefore be familiar to every member of your Corporation, and it can not be necessary for me to do more than briefiy recapitulate the desired change.

1. The present site, although conveniently situated, is noisy, dirty, and subject to mechanical and electrical disturbances which interfere with its efficiency as an educational machine. It is cut up into a number of sections at a considerable distance from one another, separated by busy streets; and no land is available in the immediate neighborhood of any of these sections except at a prohibitive price.

2. The present buildings are overcrowded, the need for more room being a constant source of complaint from heads of departments in their reports. Devices of all sorts have been adopted to economize space, with results that are for from satisfactory and seriously hamper the proper development of the Institute.

3. The buildings are scattered in such a way as to necessitate a separation of department, which for convenience of teaching should be closely associated.

4. This overcrowding and scattering of buildings not only limits the efficiency of the Institute, but robs it of the outward dignity of a great educational institution. It should be part of the education of an engineer or an architect to be brought up under conditions that impress him with the dignity of his profession; the lack of such conditions, not only acts unfavorably on the student, but reacts on the public. It fails to attract their attention to the importance of the Institute and the claims that it has on their support.

5. The older buildings have reached a stage when repairs of all sorts are necessary and great expense is incurred in their maintenance. In many respects they have grown out of date; for example, they are not ventilated by modern methods.

6. The newer buildings are mostly temporary in their structure and are beginning to reach the limit of age for which they are designed.

7. It is difficult, if not impossible, under the present surroundings to provide properly for the physical and social development of the students.

8. The unfavorable conditions that exist today will be so aggravated within the next ten years that removal will then be inevitable and the Institute will be forced to a suburban location far removed from the center of the city,—a result which is almost universally admitted to be undesirable.

9. The expense of making proper provision upon the present site for the development immediately demanded is very large; and although it is less than that of removing to a new site, yet the difference is probably more than compensated by the greater ease of securing funds for the execution of a well-considered, consistent plan for rebuilding the Institute upon an attractive location.

10. In order that the prestige of the Institute may not suffer through the prevalence of the idea that it is resting upon its laurels, and in order to meet the competition arising from the development of similar schools throughout the country, it is important that some decisive and impressive step be taken as speedily as possible. The Institute needs a new site and new equipment, in order to maintain its position as a scientific school of the front rank and as the leading representative in the world of a characteristic form of combined liberal and professional education.

As to the requirements of a new site it is obvious that the site should be of sufficient area to make provision for the probable advancement in the next generation. It is difficult to see eve