

*PROGRESS OF THE LICK OBSERVATORY.*

SOMETHING like a year ago, we reviewed the policy and operations of the Board of trustees of Mr. James Lick's bequest of about four millions of dollars for objects patriotic, charitable, and scientific, directing due attention to the conservative management of the estate, showing the utter folly of the attacks which have from time to time been made upon their official actions, and giving the best of reasons why all interested in the administration of this trust should uphold the board in the continuance of the policy which they have seen fit to adopt. The cessation of these impolitic hostilities is a matter of noteworthy significance, because of the relations of the bequest to the Lick observatory, and the other scientific objects which Mr. Lick thought worth gaining.

The trustees' first work — the construction of the great observatory on the summit of Mount Hamilton — has been prosecuted with such vigor during the past five years, that its completion at a definite epoch in the near future appears now to be a matter of certainty. It is only possible to say this because information has just been received from the glass-makers, Messrs. Feil and Mautois of Paris, that all serious difficulty in making the disk of crown-glass for the great telescope has at last been surmounted, — a difficulty which has already delayed the beginning of the opticians' work nearly three years, and has permitted the trustees to advance the remainder of the observatory to a finished state. The opticians now hope to be enabled to begin their labors upon this great object-glass by next August or September, and to complete their part of the contract within two years' time. This encouraging condition of affairs has been brought about largely by the recent action of the trustees themselves, who, desiring to complete as soon as possible their task of constructing and equipping the observatory, and finding that all further progress was conditional upon getting the necessary disk of glass, despatched a responsible agent to the eastern states, where he could be in consulta-

tion with prominent astronomers, and in ready communication with Paris.

The results of this action have been very satisfactory, and will enable the trustees to sketch the important outlines of their plans for future and final operations on the mountain. The fact that the glass is now to be obtained with reasonable certainty, has prepared the way for determining the size of the dome which will be required to cover the telescope when finally mounted. This building is already in process of erection, and will consume all the attention of the superintendent of construction for the next two seasons. The dome will have an interior diameter of seventy-three feet; and the telescope itself, whose exact length cannot yet be defined within narrow limits, will probably be fully sixty feet long, while, with the monster spectroscope attached, it may reach a length of nearly seventy feet from end to end.

Aside from this important end of securing the data necessary to avoid the entire cessation of work upon Mount Hamilton this summer, the agent of the trustees has also personally inspected the mountings of the great domes at Charlottesville, Washington, and Princeton, including the smaller ones at Harvard, Amherst, Columbia, and other colleges; and, on his return to San Francisco, he will report to the trustees on the information he has obtained, and recommend that plan for constructing and mounting the great dome which appears likely to insure in every way the best results. Any competent person who will take the trouble to consider the problem of building this dome from an astronomical and engineering point of view, will readily appreciate the nature of the obstacles to be overcome; but the eminently satisfactory arrangements devised, and already put into successful operation at this mountain observatory, will go a great way toward inspiring confidence in whatever form of dome the trustees finally decide to adopt. In an early issue, we shall place before our readers an account of the Lick observatory and its work, together with a fully illustrated description of the site, buildings, and instruments.