

## AUGUSTUS LOWELL LABORATORY OF ELECTRICAL ENGINEERING

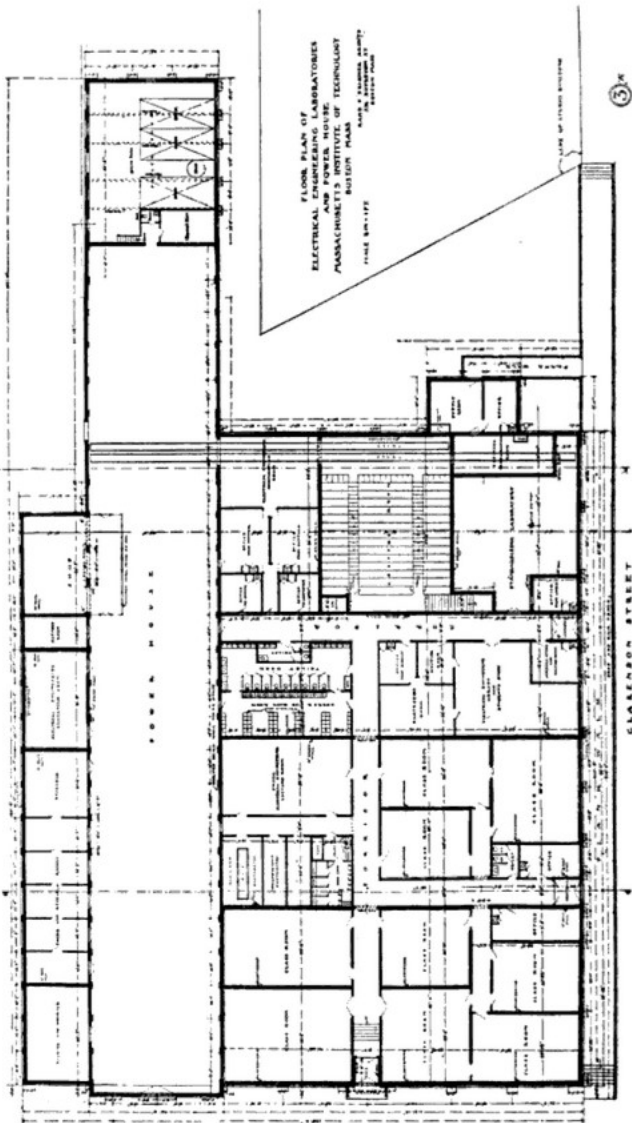
The new building for Electrical Engineering at the Institute will be known officially as the Augustus Lowell Laboratory of Electrical Engineering, but it will generally be called the Lowell Building. The plan is the result of considerable study of other building propositions for this and other departments, and combines, as far as possible, the points considered particularly adapted for the special purposes of the new department.\* The proposition to relocate the whole Institute on some other site confronted the architects just as the plans were begun, and was considered of sufficient seriousness to warrant this building being planned simply as a temporary structure. Orders were given for the most economical structure which would pass the building laws of the city of Boston, and which would accommodate not only the Electrical Engineering Department, but also the first-year classes in language and mathematics and the lectures and recitations in chemistry.

The story of the erection of the building is, briefly, as follows: On Saturday, June 28, contracts were signed; on Monday, June 30, the lines were laid and work was begun on the excavation; on Tuesday, pile-drivers were at work. Within ten days, portions of the floor were laid, and in ten more, portions of the roof were in place. By the end of another ten days the greater part of the masonry was erected, and the framework of the building was completed. On Monday, September 15, the building was ready to receive furniture and apparatus. In other words, only sixty working days were used between the starting and the completion of the building, as during that period there were two holidays and six days of rain on which no work was done.

The accompanying plan shows a building covering 42,800

\* An account of the organization of the now separate Department of Electrical Engineering and of the apparatus and arrangement of the laboratories of this department will appear in an early number of the *Review*.

PIERCE BUILDING



FLOOR PLAN OF  
ELECTRICAL ENGINEERING LABORATORIES  
AND POWER HOUSE  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
NOT TO SCALE  
SCALE: 1/8" = 1'-0"  
DATE: JANUARY 27,  
1922

3  
1 1/2 24

square feet, and divided into three sections. The most interesting feature is the power house, 40 feet wide and 317 feet long, equipped with a travelling crane for the easy handling of apparatus. New boilers, engines, generators, and heavy machines will be placed here on concrete foundations, and this will become the heart of the Institute, as all light and electric power will be generated here and will be sent through conduits to all the other buildings.

The west section is divided into small research-rooms for thesis work and special experimental study. It contains also packing and storage rooms, storage battery space, and a machine-shop.

POWER HOUSE AND LABORATORY  
 MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
 BOSTON - MASS.  
 SCALE 1/8" = 1'-0"



The east section contains class-rooms, lecture-rooms, offices, and preparation-rooms, lavatory, locker, and toilet-rooms; and ample corridors lead to a broad plank walk by which the building is approached from Clarendon Street, and to an exit on Stanhope Street.

The building is unique in being almost entirely lighted by skylights; these are of the saw-tooth variety, so common in weaved constructions of recent date.

A system of tracks and traverses is to be run through the power house, preparation-rooms, and lecture-rooms; this will materially assist in the shifting of lecture apparatus, and will greatly increase the effectiveness of the lecture-room. Several rolling tables will be provided, and upon these experiments can be set up outside in the preparation-rooms, and these prepared tables can be brought in while classes are shifting. This makes possible succes-

sive use of the room by classes as different in character as first-year chemistry and fourth-year street railway motors.

The general contract for masonry, carpentry, plastering, roofing, etc.,— in fact, the complete building, excepting steam heating, plumbing, and electric wiring,— was awarded to Mr. Frank B. Gilbreth, of Boston, who regrets daily that he had no technical training, but makes up for it by employing men who have enjoyed it. Too much credit cannot be given to Mr. Gilbreth for the masterly way in which this building has been put through; but to his assistants,— Institute graduates,— Stone, Wilson, and McNaughton, should be given due share of praise; this should be extended, also, to Hamlin, Larkin, and Buzzell of the Worcester Polytechnic; for to a man they have done what all Tech men are noted for doing,— their duty,— and they have done it well.

The steam heating was laid out by Professor Woodbridge, and was put in by Mr. Charles W. Bradlee, '97, of the firm of Bradlee & Chatman. The plumbing was done by Huey Brothers, of whose firm Mr. William Huey is a Tech man. In short, to Technology and to technical education is due the fact that so much work and such good work has been accomplished in so short a time and with so little friction.

THEODORE H. SKINNER, '92,  
*Architect.*