

# THE ELECTRIC ROAD.

## COMPLETION OF THE FIRST SECTION.

### The Boilers and Engines Now Being Set Up at the Power House.

Two or three sharp blows with a heavy sledge-hammer drove home a silver spike yesterday afternoon, a gang of lusty-lunged laborers rent the air with their hearty "hurrahs," and with no more form or ceremony the first section of the San Francisco and San Mateo Electric Railway was completed.

For several days a large force of men has been at work pushing the track down toward the objective point just in front of Holy Cross Cemetery in San Mateo county, just fifteen miles from the city terminus at Steuart and Market streets. Yesterday word was sent to General Manager Hartzell that the work would be finished last night, and with the message was a request that he be present and drive the last spike. When he reached the end of the section some forty men stood about the end of the track. These were the track layers. Besides them there were present Henry Ayres and Charles L. Hinkel, the teaming contractors, and J. Lufkin, chief of construction.

The latter, producing a silver spike, requested on behalf of the men that the manager drive it. Mr. Hartzell picked up a sledge, and as he poised it for the blow said: "I think this is properly an occasion for congratulations. You men, who have done so much toward making this thing possible, know something of the difficulties that we have encountered and the obstacles we have surmounted in the last four months, and I believe that you are as glad as I am that we have reached this, our present goal. When this spike is driven the first section of our road will be finished."

Then, swinging the sledge like one who knew what a hammer was, the general manager sent the silver nail deep into the redwood tie. The men swung their caps and cheered the road and the general manager again and again.

Before many weeks this, the pioneer of electric railways so far as San Francisco is concerned, will be in operation for a distance of over sixteen miles, and yet the public knows little of what has been done or of the large amounts of money already expended. From Market and Steuart streets to Thirtieth and Guerrero, about six miles, the road is double tracked. The tracks and wires are ready for running, the only work necessary being the removal of the earth spread over and between the rails to protect them. From Thirtieth street out across the county line there will be a single track, with turnouts at intervals of 2000 feet. The poles are all set and the wiring is almost done. Some idea of the amount of wire necessary may be gathered from the fact that already over 100 miles of the largest size of copper wire has been strung.

Nowhere does the road bear evidence of cheapness of construction, and in several places much money and time have been spent in making it safe and durable. At Croton avenue a bridge 300 feet long has been built across a ravine, and the approaches have been bulkheaded and rippapped in substantial fashion. In all, there are sixteen places where the road crosses street and steam tracks. Just below the House of Correction it passes above the Southern Pacific track on a bridge, and at two other points runs under it. In low ground the poles are set in boxes of cement and concrete, so as to insure solidity. Forty-pound rails and regulation railroad ties have been used throughout.

The power-house, on block 14 of the Sunny Side tract, is rapidly nearing completion. It is on sloping ground, and is reached by a side track from the main line. The one-story brick boiler-house, 29x79 feet, is completed except for the smokestack, and the boilers are being set up. There will be a main battery of five tubular boilers, each with four drums, and each 250 horse-power. There will be an auxiliary battery of the same strength for use in an emergency. The power-house proper is to be of wood, and will be one-story and a half high. Here will be the engines and dynamos. The engines are on the ground, and are being put up. They are of the Corlies triple-expansion condensing type, and each has a capacity of 500 horse-power. As a foundation for the engines a block of concrete has been set in the ground eighteen feet deep and with a top area of 26x36 feet, costing \$10,000.

The dynamos, eight in number and with a capacity of 120 horse-power each, are being made in the East. Back of the power-house is a two-story machine shop, where will be another engine of sixty horse-power. Another building, capable of housing 100 cars, will be erected on the same block.

By the end of January the dynamos will be running and there will be nothing to prevent the running of cars on regular schedule. By then there will have been expended on the buildings, including the engines and dynamos, nearly \$250,000. Besides this the electrical equipment for the cars will cost \$145,000. The cars, fifteen of which are now in the city ready for use, are double-enders, thirty feet long over all, each carrying two twenty-five horse-power motors. Thirty cars will constitute the rolling stock for the first section.

Next week a company will be formed under the name of the "Redwood and Baden Electric Railroad Company" to continue the line from the present terminus to Redwood City. Work will be commenced on this, the second section, as soon as the first section is in complete running order. This, according to the calculations of the builders, will be early in February. Another power-house will be necessary, but it need not be so large and expensive, as the second section will be over a level country.

It is figured that outside the city limits the electric cars can and will run without difficulty at a schedule speed of twenty miles an hour.