

# CANADIAN ELECTRICAL NEWS

AND  
STEAM ENGINEERING JOURNAL.

Vol. II.

TORONTO AND MONTREAL, CANADA, AUGUST, 1892.

No. 8.


## VANCOUVER AND NEW WESTMINSTER ELECTRIC RAILROAD.

In October of last year the Vancouver & New Westminster Electric Railroad was opened for traffic between these two cities, as well as a general service in the city of New Westminster.

The main line, which is fifteen miles long, passes through for the greater part, an immense forest of cedar and Douglas fir,

seen, viz., that it is a long way too large for the present plant, is beautifully finished in pine, the floor, walls and roof being nicely stained and varnished, which makes it look in every way, a superior place and is besides, easily kept clean and in order.

The plant consists of 3 steel boilers of 80 h. p., two Leonard Ball tandem compound engines of 125 indicated horse power each, two upright tubular heaters and two Worthington duplex pumps of ample capacity to feed the boilers and for a fire service,



VANCOUVER AND NEW WESTMINSTER ELECTRIC RAILROAD POWER HOUSE.

which had to be cleared far enough with 8 crossings to prevent any danger from falling trees, is a single track and is laid with 40 lb. T rails, ties being laid two feet between centres. The over-head line is of the single bracket construction, except when it comes into town, when the usual double pole is used.

The road at present runs over some very hilly country and has some very quick curves, with grades of over 10% on the curves, which have a radius of 35 ft. in some cases, which makes it rather hard to operate. Notwithstanding this fact it is being very successfully operated.

The power house and car barn is situated nine miles from Vancouver, as is also a hotel for the men, and cottages for the superintendent and chief engineer. It is built entirely of wood, covered with corrugated iron; all the windows have folding shutters covered likewise, as a prevention against fire. The interior of the building, which, by the way, shows wisdom seldom

hose connections being fitted on. Water is supplied from three wells sunk near the boiler house, but it is intended in the near future to connect with the New Westminster water service. The foundations for the engines have unfortunately given trouble, although they are built quite massive, the soft nature of the soil upon which they were built having proved treacherous.

The dynamos are from the Edison works at Peterborough, Ontario, and are of 100 kilowatt capacity at 500 volts, and are belted direct. The switch board is built up of native curly wood polished. The switches, etc., as will be seen by the illustration, are plain but neat, and all that is necessary nothing to confuse the engineer when a break down occurs, but the opposite, so that he can see at a glance where the fault is. There is nothing so annoying to the travelling public as these waits of 5 or 10 or 15 minutes which is thus so far helped to be avoided.

Owing to the long distance and the nature of the road, feeders