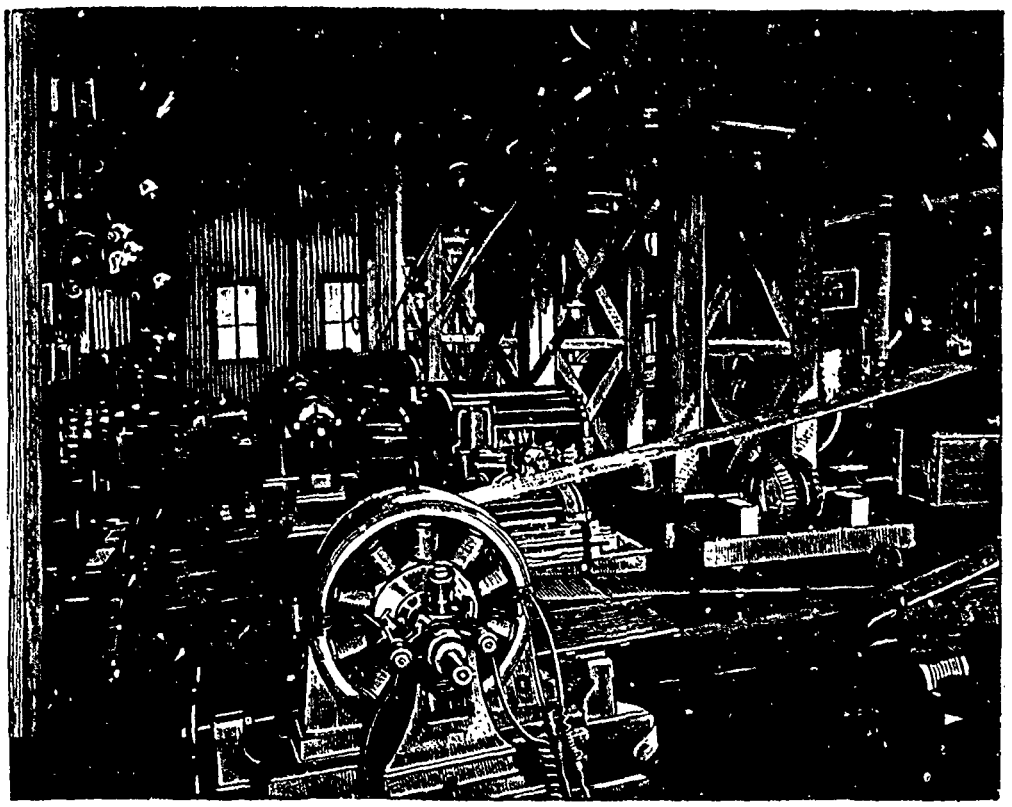
THE VANCOUVER ELECTRIC RAILWAY AND LIGHT CO.

THE Vancouver Electric Railway & Light Co., Ltd., was formed less than two years ago by the consolidation of the Vancouver Electric Illuminating Co., and the Vancouver Street Railway Co., and at once began the construction of a plant for operating the street railway and arc and incandescent lighting systems.



DYNAMO ROOM, VANCOUVER ELECTRIC RAILWAY AND LIGHT COMPANY.

One year ago last June it began actual operation with the apparatus shown in the accompanying photographs of engine and dynamo rooms.

The electrical machinery is comprised of three fifty light Thomson-Houston arc machines from the Royal Electric Co. of Montreal, two 750 light Westinghouse alternators with separate exciters, and two 80 h. p. Thomson-Houston railway generators from Lynn, Mass. The steam plant consists of one Westinghouse and three Armington & Sims engines of 100 h. p. each.

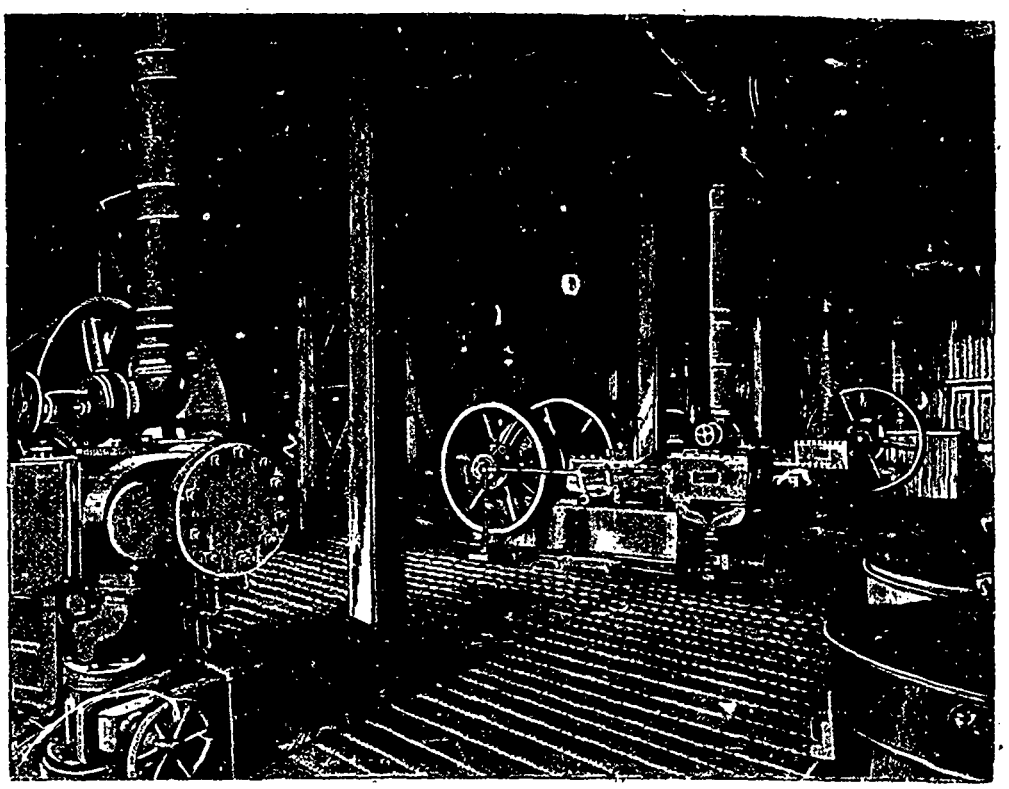
By means of the elevated countershaft almost any combination of dynamos and engines may be obtained, so that a serious interruption of service is very nearly impossible. The buildings are situated on Barnard Street, near Westminster Ave., and have a wharf frontage on False Creek of 180 feet, so that the company is able to bring coal direct from the mines on scows in large quantities.

The power house is a brick veneered building one story in height and 70 x 85 feet on the ground. Early in the present year it became evident that the present buildings would furnish inadequate space for the coming winter, and a two story addition 50x85 feet has been added, making the whole building 85 x 120 feet. The addition to the engine room will contain a Westinghouse compound engine and three T.-H. generators, and leave the engines now in use for railway work available for lighting. The second story of the new building will be used for storerooms and offices.

The car house has been doubled in size, and is now 45 x 120 feet. The company has 3½ miles of road in operation, and is now engaged in building about five more, which will be completed this fall. Twenty-five pound rails were used in the present track, but nothing less than 40 lb. rails will be used in future. The guage is standard, and the maximum grade five per cent. Six cars are now in use—four with two 10 h. p. motors each, and two with 15 h. p. motors. The cars were manufactured by the John Stephenson Co. and the motors by the Thomson-Houston Co. Four new cars by the same maker are being equipped with two 20 h. p. Westinghouse motors each, as some of the grades on the extension run as high as eight and nine per cent.

Both the arc and incandescent systems are loaded to their full capacity, and additions will be made to them at once. The plant is thoroughly equipped with testing instruments in all departments to assist in carrying out the company's policy of taking every precaution against the interruption of service.

Mr. F. L. Dame, formerly district engineer of the Westinghouse Co. at Portland, Ore., is superintendent. Collections and miscellaneous business are looked after by Mr. W. E. Brown, who has the title of business manager. T. E. Barnett is chief engineer. Owing to the resignation of Mr. H. E. McKee, who has held the presidency since the organization of the company, that office is now vacant. The officers are: T. Dunn, vice-president; H. T. Ceperley, Sec.-Treas.; Directors—T. Dunn, J. W. Horne, M.P.P., C. D. Rand and Geo. Turner.



ENGINE ROOM, VANCOUVER ELECTRIC RAILWAY AND LIGHT COMPANY.

While the gases of combustion from the thorough burning of one pound of coal would be from 276 to 533 cubic feet at 500 degrees Fahrenheit, they would at 62 degrees occupy only 150 to 290 cubic feet; and this agrees pretty closely with the 140 cubic feet of air at 62 degrees Fahrenheit required to completely burn one pound of coal.