



DRIVING OF THE LAST SPIKE ON THE CANADIAN PACIFIC RAILWAY,

By Donald A. Smith, now Lord Strathcona, at Craigellachie, B.C., Nov. 7, 1885. The C.P.R. Co. was incorporated by Letters Patent, Feb. 16, 1881, and one of the conditions of the contract with the Dominion Government was that the whole line between Callender, Ont., and the Pacific Coast should be completed and equipped by May 1, 1891. Owing to the energy displayed by the Company the work was finished in 4 years and 6 months, or 5 years and 6 months less than the originally stipulated time.

any entrained water. These receivers act as steam reservoirs. The whole of the above steam piping, receivers, headers, etc., will be covered with the best pipe clothing, to vary in thickness in accordance with the temperature of the covered surfaces.

DISTRIBUTING SYSTEM.—The electrical distribution beginning at the feeder panels in the power house rises in lead covered cable to the top of the wire tower on the power house, and from thence it is distributed through bare copper stranded conductors of 250,000 circular mils to the various shops. In these shops certain distributing centres are provided and equipped with automatic overload and no load release group oil circuit breakers.

Each feeder on the main switchboard in power station is also equipped with overload breakers. All feeders in the yards are carried on structural steel poles, with steel cross arm pins and break arms. At the entrance to buildings all strains are taken on turn buckles and ball insulators.

MOTORS.—A list is given below of the various shops and the number of motors in each:

Locomotive and erecting shops	86
Boiler shop	15
Blacksmith shops	29
Car machine shop	14
Truck shop	16
Iron and switch shop	67
Planing mills	1
Pattern shop	17
Wheel shop	4
Grey iron foundry	9
Outside cranes and transfer tables	6

Owing to the fact that the new Angus Shops are designed to cover all the manufacturing of the C.P.R. east of Fort William all the old tools in the various shops in the

different localities which were thought suitable are moved to the new premises. There are, therefore, a great number of machines which are not suitable for direct connection to motors, and it was deemed advisable in most cases to drive these machines in groups instead of individually. Certain new and special machines, however, have their own individual drives, some by alternating current and some by direct current, the direct current only being used for variable speed where desirable. All motors are supplied by the Canadian General Electric Co.

LIGHTING.—The outside lighting of yards has been done by series alternating lights, but interior lighting of large spaces by alternating parallel lamps. The lighting of individual tools in small spaces by incandescents.

All lighting is supplied through transformers, reducing from 550 volts to 115 volts in the case of the interior lighting, and from 550 volts through tub transformers, to 3,000 volts for the series arcs in the yards.

For the foregoing information we are indebted to Ross & Holgate, consulting engineers, Montreal.

The Canadian Rolling Stock Co. (Ltd.), has been incorporated under the Dominion Companies' Act, with a capital of \$250,000 to manufacture, and to sell, lease, mortgage or otherwise dispose of locomotives, rolling stock, machinery or plant used in connection with railways, street railways or tramways. The offices are located at Amherst, N.S., and the provisional directors are: N. Curry, N. S. Rhodes, Hon. T. R. Black, C. T. Hillison, E. N. Rhodes, of Amherst, N.S.

RAILWAY FINANCE, MEETINGS, ETC.

Atlantic & St. Lawrence Rd.—The annual meeting of the stockholders was held Aug. 2, but as there was not a quorum present, no business was transacted, the old Board of Directors holding over, and the meeting stood adjourned without delay. The line is leased to the G.T.R. and is operated by that Co. No report is issued. The officers and directors are: President, C. M. Hays, Montreal; Vice-President, F. W. Morse, Montreal; Clerk and Treasurer, W. W. Duffett, Portland, Me.; other directors: J. W. Loud, Montreal; F. R. Barrett, W. W. Brown, E. A. Noyes, P. G. Brown, Portland, Me. Manager, F. W. McGuigan; solicitor, C. A. Hight, Portland.

British Columbia Electric Ry.—Railway earnings for June: Vancouver, \$19,403; Victoria, \$10,087; New Westminster, \$11,406; total, \$40,896, against \$38,080 for June, 1903. Gross earnings: railways and lighting, \$65,932 against \$57,437 for June, 1903. Working expenses, \$39,455; renewal funds, \$4,988; net income, \$21,489, against \$31,922, \$4,222 and \$21,293 respectively for June, 1903. Aggregate net earnings for 12 months ended June 30, \$285,042, against \$224,347 for same period 1902-03. The increase in working expenses is due to the extra cost during the transition period when both the steam and water power plants at Vancouver were in operation.

Bruce Mines and Algoma Ry.—The officers for the current year, as elected recently, are: President, J. McKay, Sault Ste. Marie, Ont.; Vice-President, H. Weil, New York City; Secretary, M. Wile, Buffalo, N.Y.; Treas-