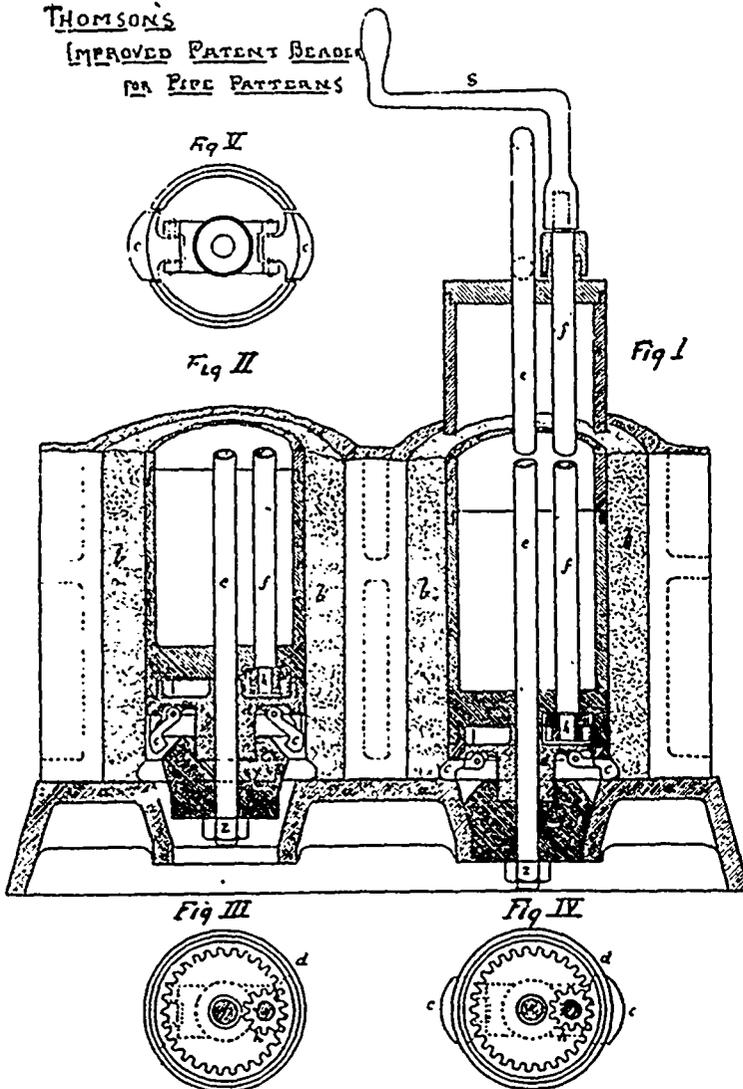


THE GARTSHORE-THOMSON PIPE AND FOUNDRY COMPANY, LIMITED.

The Canada Pipe Foundry was established in 1870, although the product of pipes was not begun on a large scale until the year 1876, the output at that time being only about five to six tons per day of one size of pipe; at the present time there is a possible output of 50 tons per day of all sizes from 4 inch to 60 inches in diameter, the larger sizes (above 36 inches) being chiefly used for railway and highway culverts, superseding stonework. The pipes made at the works have been used in every principal town and city from Cape Breton (Sydney) to Vancouver and Victoria, B.C., and compare favorably with those made in Scotland and the United States.



Particular care is taken in having a good mixture of iron, ensuring good sound castings. All the latest improvements in the manufacture of cast-iron pipes are adopted, one of which is the patent "beader" invented by Mr. Thomson of this firm. The pipes being cast on the ramming stool ensures the metal being of uniform thickness, which is of the utmost importance in castings of this kind. The firm has lately been reconstructed, and is now called The Gartshore-Thomson Pipe and Foundry Co., Ltd.

TRIAL TRIP OF THE WILSON TRANSIT CO.'S SCREW STEAMER, "W. D. REES."

This steamer, which is the largest vessel that ever sailed from a lake port, went on her trial trip from Cleveland to Fairport, O., on the 15th inst. Her principal dimensions are: length, 413 feet; breadth moulded, 46 feet; depth moulded, 28 feet. She will carry 4,600 tons dead-weight at 15 ft. 1 in. mean draft and 7,100 tons at 20 feet draft. Her engines are of the triple expansion type, the diameter 23 inches + 38 inches + 63 inches, and common stroke of piston 40 inches. She has two Scotch boilers, each 14 feet diameter by 13 feet long, with 6 furnaces, each 46 inches by 9 feet, working pressure 170 pounds per square inch. Diameter of propeller 13½ feet. The steamer was under way continuously for four hours; mean speed attained, 12.2 miles per hour; mean revolutions of engines, 81; steam pressure, 158 pounds; vacuum, 23½ inches. In water, 138°. This steamer is of great strength, and was constructed under the superintendence of Joseph R. Oldham, naval architect, of Cleve-

land, O. Her water ballast tanks contain 1,800 tons of water. The plating, with the exception of the keel plate, is lap-jointed and quadruple riveted, except at the ends and near the neutral zone, where the laps are but triple riveted. She has twelve cargo and one coal bunker hatches. The upper bottom is extra strong, and in no part less than double riveted, so as to withstand the impact of ore when loading, without the intervention of the usual wood ceiling. She has steel shifting boards for carrying grain, and will receive a 25-year class in the U. S. standard. The compasses were adjusted by Frank Morrison. The builders were represented by Mr. Robt. Wallace, of the Cleveland Ship Building Company, and the owners by Capt. Ed. Morton and Joseph R. Oldham, N.A., superintendent of construction.

FIRES OF THE MONTH.

Cunningham's boot and shoe establishment, Antigonish, N.S., was destroyed.—The Metapedia saw mill, J. P. Mowat, proprietor, \$500 loss on machinery.—Chestnut & Hipwell, Upper Woodstock, N.B., carriage factory; total loss.—April 1—Harland Bros.' hardware store, Clinton, Ont., damaged to extent of \$500.—April 2—Frost & Wood, implement manufacturers, Smith's Falls, Ont., storehouse damaged by fire set by spark from cupola.—April 6—The Vulcan Foundry, Lucan, Ont., damages, \$1,000.—April 9—Heslop's Roller Mill, Wellandport, Ont. Loss, \$10,000; insurance, \$4,500.—April 9—The Oxford Foundry, Woodstock, Ont., one building damaged to extent of \$3,000; no insurance.—April 15—Ontario Wheel Co.'s Works, Gananoque, Ont. Loss, \$50,000; to be rebuilt at once.—April 22—Imperial Oil Co.'s Refinery, Petrolia, Ont. Loss, \$25,000.—April 17—The oil storehouse, G.T.R. station, Thorold, Ont.—April 17—Geo. Ingles, sash and door factory, Lindsay, Ont., one building destroyed; loss \$3,000.—April 18—Toronto Electrical Works, Henry S. Thornbury & Co., Toronto; damages amounted to \$2,500.—April 23—C. M. Bostwick & Co., St. Martin's, N.B., saw-mill and stores destroyed.—April 23—The drying house of Ruel's box factory, St. Joseph de Levis, Que. Loss \$1,000; no insurance.—April 21—Forest Canning Co.'s buildings, Kingston, N.S. Loss \$30,000.—April 26—Jacob Large's planing mill, Listowel, Ont. Loss \$1,000.—April 27—Waterworks' storehouse, London, Ont.; five tons of lead pipe destroyed.—April 28—Attempted burning of Harris & Walton's sash and door factory, Belleville, Ont.—Bisnett's saw-mill, Blenheim, Ont. Loss \$2,000—May 1—Chambers' saw-mill, Scotland, Ont. Loss \$3,000; no insurance.

HORSELESS VEHICLE RACE.

It appears that Hamilton, Ont., is not to have the much-talked-of horseless vehicle race. The Hamilton Jockey Club was enthusiastic in support of the idea and were prepared to give prizes to the amount of \$1,500 and the use of their grounds, but the promoters of this race and exhibition did not think the amount sufficient. It is unfortunate that the matter should not have been determined earlier, as new competitions and exhibitions are being announced on the other side of the international boundary. As will be noticed in another column, the Rhode Island State Fair will have a race of this kind as a leading feature, and will offer prizes amounting to \$5,000. Canada should give evidence of its native energy and ability by making some move towards assisting in the development of one of the epoch-marking creations of our century—the horseless vehicle.

DIMENSIONS OF SHAFTING, ETC.

An Ottawa correspondent writes to THE CANADIAN ENGINEER asking what dimensions of shafting, cylinder, and other parts of an engine are necessary for a given power. It is not possible to give an answer to such a comprehensive question without specific data. However, there are a number of valuable publications which may be had, at moderate cost, which will enable anyone to find such results as size of cylinder, length of stroke, etc., upon the assumption of certain specified facts, as the horse-power required, purpose of engine, etc., etc.

THE HALIFAX STREET RAILWAY.

The new street railway in Halifax is equipped in a first-class manner. The engines, four 300-horse power Robb-Armstrong, are among the finest produced by that well-known firm. A generator of 100 kilowatts is attached to each engine. The cars were supplied by the Rhodes-Curry Co., and are said to reflect great credit upon the manufacturers. The electrical equipment was put in by the Canadian General Electric Co., of Peterboro'.