

AMONG THE MANUFACTURERS

A department for the benefit of all readers to contain news from the manufacturer and inventor to the profession.

OPERATION OF TROLLEY POLE TESTING MACHINE.

The machine used for testing trolley poles was designed to test material of circular cross-section as a beam loaded at one end and fixed at the other. The capacity of the machine is up to a bending moment of 30,000 inch-pounds, taking diameters up to four inches.

The machine consists of a frame or base of heavy 15-inch steel channels, the rigidity of which is so great that the deflection of the frame is negligible.

At the other end of the frame is the device for applying carrying the load-weighing device, consisting of a scale of 500 pounds capacity, reading to half pounds, and sensitive to two ounces. This scale is vertically adjustable in the stand to accommodate the position of the end of the piece under test.

At the other end of the frame is the device for applying the stress to the piece under test. This device consists of a frame carrying a horizontal shaft capable of being rotated by means of a hand-wheel operating a worm and gear through an angle of about 10 degrees. This amount of rotation will produce a deflection of 30 inches on a test-piece of 16 feet in length. The horizontal shaft carries a chucking arrangement by which the piece under test is clamped rigidly with the centre lines of the horizontal shaft and the piece under test intersecting. The end of the horizontal shaft carries an arm, in the end of which is fixed a micrometer reading to .001-inch, whereby the movement of the horizontal shaft is measured. The reading of the micrometer is translated into deflection of the test-piece by simple proportion.

The design of the machine is such that it is not necessary to apply any correction to the reading unless the test requires an accuracy greater than 1 per cent. error.

In testing trolley poles on this machine, the scale is set at the proper distance from the rotating chuck, corresponding to the length of the trolley pole under test; the pole is then placed in the chuck and on the scale, and the weight of the pole so supported recorded. The chuck is then tightened. The micrometer is set at 0, and the scale elevated or depressed in its stand until it indicates the weight of the pole as before recorded. Load is then applied by the hand-wheel and the deflection measured by the micrometer. The elastic limit is easily detected by an increase in the deflection indicated by the micrometer, for equal increments of load, or by measuring the set by the micrometer on removal of the load.—John Millen & Son's Catalogue.

NEW INCORPORATIONS

Shediac, N.S.—E. Paturel Co., \$7,000. T. R. Robertson, H. H. Munro, R. Miner.

St. Basile, Que.—Eastern Paper Co., \$10,000. E. R. Pepin, J. O. Collette, J. S. Piche.

St. Euphemie, Que.—Compagnie G. Blais, \$45,000. G. Blais, Z. Cloutier, H. Tardif, St. Pierre.

Winnipeg, Man.—Western Manufacturing Co., \$250,000; C. M. Boyton, R. T. Ferguson, H. Lillie.

Collingwood, Ont.—Nottawasaga Curling Club, \$5,000. W. A. Copeland, F. F. Telfer, W. T. Toner.

Brockville, Ont.—Brockville Construction Co., \$100,000. W. S. Buell, J. H. Botsford, G. H. Mallory.

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Ottawa, Ont.—Daniel J. McA'Nulty Realty Co., \$500,000. D. J. McA'Nulty, Ottawa; M. J. Hogan, H. Quinlan, Montreal. Canadian Quarries and Construction Co., \$2,000,000. J. Black, R. T. Mullin, Montreal; S. Bilsky, Ottawa. Calder Mining Co., \$500,000. F. H. Chrysler, C. J. R. Bethune, N. G. Larmonth.

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Winnipeg, Man.—Grand Pacific Land Co., \$10,000; F. S. Andrews, H. A. Burbidge, F. M. Burbidge. Grose & Walker, \$60,000; P. Walker, J. K. Sparling, F. W. Sparling. Winnipeg Bridge and Construction Co., \$60,000; J. Frankman, H. Frankman, J. Frankman, Minneapolis. Implement Specialties Corporation, \$80,000; J. M. Johnson, A. McCurdy, A. Parker. Silvester and Willson, \$100,000; G. Silvester, Calgary; H. L. Willson, W. M. Crichton, Winnipeg. Canadian Hotel Supply Co., \$60,000; J. M. Allan, J. Simpson, T. S. Ewart. Sterling Investment Co., \$5,000; J. H. Holtby, O. Badcock, J. Simpson.

Montreal.—Williams & Wilson, \$250,000. A. R. Williams, Toronto; F. C. Wilson, W. A. Wilson. Central Canada Iron and Steel Corporation, \$500,000. G. V. Cousins, O. B. MacCallum, S. T. Mains. Quebec Pulp and Paper Co., \$15,000,000. C. G. Greenshields, E. R. Parkins, R. Brodeur. Bell's Galleries, \$400,000. L. Barry, E. A. Barnard, E. D. Maguire. Progress Realty and Investment Co., \$50,000. O. Marchand, W. Marchand, H. Lauzon. International Shows, \$50,000. P. A. Boivin, J. H. Ostigny, J. Fluet. Hair Goods, \$49,000. C. W. Schickendanstz, H. Schickendanstz, A. W. P. Buchanan. International Gully and Manufacturing Co., \$20,000. A. Colas, S. Whiteside, E. Colas.

Toronto.—Standard Chemical, Iron and Lumber Company of Canada, \$6,000,000. J. Wood, T. W. Lawson, J. E. Riley. Yrworld Land Co., \$40,000. D. Lowrey, B. D. Lowrey, W. B. Russel. Business Men's Club. H. Baldwin, W. J. Duncan, A. T. Sprowl. Vermont Athletic Club. J. Richardson, F. E. Coath, A. E. Gilmore. A. & T. Hall, \$40,000. H. S. Harwood, E. Rive, G. E. McCann. Maple Leaf Oil Co., \$1,000,000. J. T. White, G. R. Sproat, J. H. Cavell. Dominion Historical Association; J. F. Selby, C. T. Patterson, W. McComb. Augustine Automatic Rotary Engine Co. of Canada, \$1,000,000. B. F. Augustine, J. Franey, Buffalo; R. D. Hume, Toronto. Plastics, \$170,000. R. H. Parmenter, W. S. Morlock, N. B. Wormwith. Atlantic Securities, \$200,000. J. S. Lovell, W. Bain, R. Gowans.