

ments record continuously with ink upon graduated revolving charts all changes that occur in pressure, temperature or electricity, so that a record of a period of 24 hours or more may be observed at a glance. Many of these instruments are in actual operation, and may be inspected by visitors to show the manner of construction and scientific principles upon which their operation depends and the extreme sensitiveness and accuracy that it is possible to obtain in instruments of this character without rendering them too delicate for commercial application. Recording pressure gauges are shown for ranges from full vacuum to 10,000 pounds per square inch, recording thermometers and pyrometers for ranges from 60° below zero to 1,200° F. The recording thermometers are made in many varieties of form to make them applicable to all industrial requirements, especially where it is desired to record temperatures at a distance from the source of heat. Recording volt, ampere and watt meters for both alternating and direct current are shown, including a great variety of ranges suited to commercial demands for different voltages and currents in electric light, power and railway plants.

Recording water level gauges are shown in operation and also a new instrument designated as a thermometer-thermostat. This last instrument is so constructed that it may be used to give an alarm or set in operation temperature regulating apparatus at any predetermined point of temperature.

A full line of sizes of Bristol's patented steel belt lacing is also exhibited and includes styles and sizes of lacing for all varieties and thicknesses of belting.

FLYWHEEL INSURANCE.

Flywheel insurance is steadily growing in popularity, for the reason that repeated and serious accidents show the necessity of protection against such occurrences, while as a general thing these explosions of flywheels are due to causes against which there are few safeguards. If a flywheel went to pieces because of defects in its construction a manufacturer could make sure that he had a first-class wheel and would feel reasonably safe, but in the great majority of cases the wheel bursts because of an accidental increase in speed due to some derangement of the mechanism of the engine. A slight derangement of the governor, the loosening of a screw or nut, or the breaking or slipping of the governor belt, may allow the engine to race, under which conditions the strongest and best flywheel is liable to burst. This accident almost inevitably wrecks a costly engine, damages other machinery and often destroys the power house and causes loss of life. All this is covered by flywheel insurance, and in addition there is a regular inspection of the engines and wheels that is of great value.

The coke oven plant to be erected at Sault Ste. Marie by the Consolidated Lake Superior Corporation will have a capacity of about four hundred tons daily. Some 350,000 tons of coke will be handled annually and about 300 men will be employed. Construction work will be started in the spring. All the coke will be taken by the Lake Superior Corporation for use in the blast furnaces on the Canadian side of the river.

CAPTAINS OF INDUSTRY.

The following items of information, which are classified under the title "Captains of Industry," relate to matters that are of special interest to every advertiser on these pages, and to every concern in Canada interested in any manufacturing industry whatever, this interest extending to supply houses also.

If a new manufacturing enterprise of any kind is being started, or an electric lighting plant instituted, or an electric railroad, or a telephone, or a telegraph line is being constructed; or a saw mill, a woolen, cotton, or knitting mill; or if any industrial establishment has been destroyed by fire with a probability of its being rebuilt, our friends should understand that possibly there may be something in the event for them. Do you catch on to the idea?

The starting of any such concern means a demand for some sort of machines, machinery, or supplies, such as steam engines and boilers, shafting, pulleys, belting, lubricants, machinery supplies, wood or iron working machinery, ventilating and drying apparatus; pumps, valves, packing, dynamos, motors, wire, arc and incandescent lamps, and an infinite variety of electrical supplies, chemicals, acids, alkalies, etc. It is well worth the while of every reader of the Canadian Manufacturer to closely inspect all items under the head of Captains of Industry.

The ratepayers of Hespeler, Ont., have voted favorably on a by-law granting a loan of \$20,000, to Messrs. Clark & Demill, Galt, Ont., to establish a plant for the manufacture of wood working machinery there.

The Barclay Hodgkins Lumber Co., Toronto, have been incorporated with a capital of \$50,000, to manufacture lumber, etc. The provisional directors include C. A. Barclay, Pickering, Ont., O. Hodgkins and H. Hodgkins, Wellandsport, Ont.

The International Mercantile Agency of Canada, Limited, Toronto, have acquired the business of the Canadian International Mercantile Agency and the Sprague's Mercantile Agency of Ontario with a capital of \$250,000.

The Senator Mill Mfg. Co., Toronto, have been incorporated with a capital of \$100,000, to manufacture machinery for the reduction of rock, ore, cement, etc. The provisional directors include J. K. Griffin, J. Ridley and Wm. St. Clair, Galt, Ont.

The Chronicle Printing Co., Port Arthur, Ont., have been incorporated with a capital of \$40,000, to acquire the business of F. B. Allen and to carry on a printing and book binding business. The provisional directors include Geo. Hodder, J. T. Emmerson and F. B. Allen, Port Arthur.

The Canada Process Co., Toronto, have been incorporated with a capital of \$50,000, to manufacture metals, minerals, compositions, etc. The provisional directors include G. I. Sherlock, J. M. Neil and G. H. Campbell, Toronto.

The Anyun Fuse & Electrical Co., Hamilton, Ont., have been incorporated with a capital of \$40,000, to manufacture electrical and mechanical supplies, etc. The provisional directors include D. M. Cameron, J. J. Markham and Wm. Shaw, Hamilton.

Owing to recent storms the power house at Toronto Island, was damaged and will have to be rebuilt and new machinery installed.

The Dominion Chair & Cabinet Co. have changed their name to the Clarke Mfg. Co.

The Huronian Co., an American concern recently organized for the purpose of constructing and operating an extensive power transmission system between Turbine, Ont., and the Copper Cliff plants of the Canadian Copper Co., have awarded an important contract for generating equipment, to the

Crocker-Wheeler Co., Ampere, N.J., and New York City, which calls for two 2,000 k.w. alternating current generators of Brown-Bouverie type. These machines will be direct connected to 3,500 h.p. water turbines, which have not yet been contracted for. Power will be derived from High Falls, on the Spanish River, which are capable of developing about 15,000 h.p. The transmission line will be about 30 miles long. The Canadian Copper Co.'s electric plant is at present operated by steam, which power will be held in reserve as soon as the new system is in operation. Contracts are also about to be placed for a number of big motors, including one of 700 h.p., for driving compressors, etc. Electricity generated at the Huronian plant will be utilized for the purpose of operating the mines and smelters at Copper Cliff. The consulting engineers of the Huronian Co. are Ross & Holgate, Montreal. The contracts for equipment, etc., are being placed by David T. Trainor, the purchasing agent of the International Nickel Co., New York City.

The Chatham Mfg. Co., Chatham, Ont., have received an order for 2,000 wagons from the International Harvester Co., Chicago, Ill., at a cost of \$200,000.

The McClary Mfg. Co., London, Ont., manufacturers of stoves, etc., will close their shops at Hamilton, Ont.

The Brockville Lumber Co., Brockville, Ont., have been incorporated with a capital of \$75,000 to manufacture lumber, hardware, cement, etc. The provisional directors include V. R. Marshall, W. H. Constock, Brockville, and E. W. Rathbun, Deseronto, Ont.

The Corundum Refiners, Limited, who have a large corundum mine in Renfrew County, Ont., have opened up a village to be known as Jewellville. The opening of the corundum mines has caused a large influx of people into the district, and contracts have been let for the erection of a large number of dwellings for the corundum company's workmen. The construction of the different mills are in progress. Mr. J. H. Jewell, of Toronto, will be in general charge of the development work at the mines.

As a result of goods supplied by the Ontario Wind Engine & Pump Co., Toronto, to the Imperial government the last seven or eight years this firm received this week an enquiry for their famous Canadian airmotor from the Imperial government in one of the Crown Co.