

THE CROFTAN STORAGE BATTERY.

THE Croftan Storage Battery Company, believing that Canada offered a profitable field for operations, have opened a branch at 22 Sheppard street, Toronto, Ont., where they are manufacturing storage batteries which they claim are superior to all others in lightness and efficiency, with an equal amount of durability. The battery is the result of five years' study and experiment by Dr. Croftan, a prominent physician of Chicago, assisted by Mr. J. K. Pumpelly, one of the best known storage battery experts in the United States, and the inventor of the Pumpelly Sorley cell.

In the construction of the Croftan plate chemically pure lead only is used, all foreign substances such as antimony being discarded, for the use of such substances (and they are quite commonly used) shortens the life of the battery, leading to rapid disintegration. The plate is formed of minute particles of lead, deposited to the desired thickness upon a perforated sheet of pure rolled lead by means of a spray, the perforated sheet having 8,100 perforations to the square foot. The sprayed lead forms perfect contact with the perforated lead, and is further secured by perfect union through the perforations. The plate is then run through a corrugating roller, by means of which interces are formed for the reception of further active material. Then, by means of an electro chemical process, the plates are converted into spongy lead, and peroxide plates are formed by further conversion of the spongy lead plates.

A plate is by this means formed whose entire surface is active material and whose "grid" or inactive portion is the perforated lead sheet in the centre, being less than 15% of the entire weight of the plate. All the joints in the battery are burned, no solder whatever being used; thus disintegration or sulphating at the joints is avoided.

The Canadian branch is under the control and management of Messrs. Rein Wadsworth and W. M. H. Nelles, with E. B. Arnold, a brother of B. J. Arnold, consulting engineer of the Electric Storage Battery Co. of Philadelphia, and W. L. Arnold, of the Siemens & Halske Electric Company of America, manager of the manufacturing department. The Croftan battery is claimed to be especially adapted for lighting plants and all work requiring the use of large storage batteries, while their smaller batteries, on account of their lightness and great efficiency, make a perfect cell for the use of doctors and dentists, and are most suitable for carriage lamps.

The Goldie & McCulloch Co., of Galt, Ont., have shipped a Wheelock engine, weighing 19,440 pounds, to the Montreal Belt Line Railway Co.

JAMES MILNE

Mem. Can. Soc. Civ. Eng. Late Gen. Sup't. Toronto Incandescent Light Co. Teacher Electrical Engineering, Steam and Steam Engine, Toronto Technical School.

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TRADE NOTES.

The Eugene F. Phillips Electrical Works, Limited, of Montreal, are supplying all the wire for the transmission plant of the Cataract Power Company, of Hamilton, which plant was described in our June issue. This order represents some 150 miles of wire.

La Compagnie Manufacturiere et Electrique de Montmagny have given an order to the Canadian General Electric Co. for a 100 k.w. monocyclic generator, which will be operated at a potential of 2,080 volts, together with the necessary station instruments for the operation of the plant.

The Hudson Bay Co. have given an order to the Canadian General Electric Co. for the installation of a complete lighting plant for their stores at Calgary. The plant will consist of one of the Canadian General Electric Co.'s latest four-pole type generators, having a capacity of 9 kilowatts. Messrs. Goldie & McCulloch Co., Limited, of Galt, are supplying the engine and boiler required for this installation.

The J. C. McLaren Belting Company, of Montreal, by means of a small folder, invited visitors to the Canadian Electrical Association convention to make an inspection of the belting in the generating station of the Montreal street railway system, transmitting 7,000 h.p. This belting, which was supplied by the above company, consists of twelve 24-inch three-ply belts. The number of hides used for its manufacture was 1,630, and the total weight of leather 15,000 lbs.



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