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TORONTO, ONTARIO, FEBRUARY, 1887.

KEADOWVALE ROLLER MILLS, MEADOW-VALE, ONT.

PHE above mills are situated at the very picturesque village of Meadowvale, in the County of Feel, 23 miles from Toronto, on the Credit Valley branch of the C. P. R., and on the River Credit, a large and neverfailing stream of water. The head is 111/2 feet, and the motive power is turnished by a 56 inch Vulcan and 36 inch Perfection water wheel, both built by Messrs. Paxton & Tate, of Port Perry, Ont., with power estimat-

First storey (basement) contains flume and penstock, built of white oak, 2 water wheels, 2 Eureka power packers for barrels and bags, holding each 125 barrels, 1 hand bag packer holding 60 barrels, bran and shorts bins, bottoms of 22 stands of elevators, wheat elevator and conveyor from storehouse, heavy wood and iron cog bevel gears, line shafting and iron pulleys for belting to

Second storey contains 16 pairs of Case rolls with Case vibratory feed, 12 pairs being set in line roller mill within a distance of 20 miles. It is also doing an extensive shipping trade. Considerable flour is being sold in Toronto to bakers and dealers, and it is giving the highest satisfaction wherever tried. The largest portion of shipments are direct to dealers in the Eastern Provinces, and the flour is making for itself an excellent reputation.

The mill throughout has been planned most conveniently, and the rolls, machinery and workmanship reflects much credit on the builders, Messrs. Inglis & Hunter,



ed at 120 horse. The basement or first storey of the mill, is of stone, to feet high. On this rest four other stories built of heavy timber, making in all five stories, size 40x70, with an addition 40x40 on stone basement 10 feet high, for storing wheat, with capacity of 20,000 bushels, which is received from farmers and railway, elevated

to the store house, and returned to cleaners by conveyors. This mill, containing 5 run of stones, and farm property connected therewith, was formerly owned and operby Messrs. Gooderham & Worts, of Toronto, and in 1882 was sold to Messrs. Wheler Bros., of Cataract, Ont., who in June last sold to the present owner, Mr. A. H. Wheler, formerly of Uxbridge, Ont., who, immedi ately after taking possession, had the mill changed to latest full roller process on the celebrated "Case" system of Columbus, Ohio, U.S., and closed a contract

ssrs. Inglis & Hunter, of Toronto, sole licensees anada for above system. They have completed .eir contract in a most satisfactory manner, under the direction of Mr. Win. Petch, their well-known roller mill expert, who programmed the system of separations and mill throughout, and Mr. C. Forsyth, head millwright. The following is a description of the mill as re-constructed, with a capacity of 150 barrels daily:

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across the mill and 4 pairs set in line at right angles in rear of front line. ? is arrangement gives plenty of room on this floor and a fine appearance to rolls. There are also bottome of five stands of elevators and all spouting to rolls; also receiving hopper and scales for wheat.

Third storey contains large Eureka brush wheat cleaner, stock hopper (600 bus, capacity), chest of wire scalpers for break flour from rolls and bolting chest, containing 8 reels 16 feet long, each fitted with double conveyors, all driven by bevel gears set in iron brackets; also a large dust collector.

Fourth storey contains 1 Kurth cockle separator, 1 Eureka smutter and separator, 1 double and 1 single Case purifier, also bolting chest containing 4 reels 16 feet with double conveyors, fitted same as storey below, and air duct to blow room.

Fifth storey contains a rolling wheat separator, a sin gle Case purifier, heads of 25 stands of elevators, 1 No. 414 Silver Creek centrifugal bolting machine, 1 Excelsior bran duster, 1 Richmond shorts duster, and 1 large wheat conveyor.

The mill was completed and started about the 15th of October, and has since been running steadily day and night, doing a large custom trade, there being no full and the general results of the mill both for high grades of flour and clean finish of offal is most satisfactory to the proprietor and the above firm, who have lately introduced the Case system into Canada, which they consider to be the most improved system of roller milling of the age.

ALLOYS.

In a recent lecture, Professor Austen Roberts mentioned that the union of copper and antimony by fusion produces a violet alloy when the proportions are so arranged that there is 51 per cent. of copper and 49 per cent. of antimony in the mixture. This alloy is brittle and difficult to work, so that its beautiful color can hardly be utilized in art. The addition of a small quantity of tin to copper hardens it, and converts it, from a physical and mechanical point of view, into a different metal. The addition of zinc and a certain amount of lead to tin and copper confers upon the metal copper the property of receiving, when exposed to the atmosphere, varying shades of deep velvety brown, characteristic of the bronze which has from remote antiquity been used for artistic purposes.