

The Modern Flour Mill.

A GREAT INSTITUTION, WITH WIDE RAMIFICATIONS.

During the past summer the large Ogilvie flour mill in Winnipeg was completely overhauled, much of the plant was replaced by later improved machinery, and the capacity of the mill was largely increased. The work was carried out under the direction of Frank W. Swanton, head miller, who previously to coming to Winnipeg, had many years experience in some of the large Minneapolis mills. The mill was overhauled from top to bottom, and a thoroughly new system of milling instituted, including everything in the nature of improvement known to the scientific milling of the present day. The mill was only established in 1882, and the plant was mostly in good order and included the best machinery procurable at that time. But it was determined, notwithstanding this, to spend a large sum in making the mill absolutely perfect, according to the highest milling standard of the day, with a view to providing a new line of flour, claimed to produce twelve to fifteen loaves of bread per barrel more than any other flour manufactured under the old system, besides producing a finer and whiter loaf.

The cost of carrying out these improvements

through double iron doors. The engine room is a solid brick one story apartment, adjoining the mill on the south end, and adjoining the engine room again is the boiler room. Adjoining the mill at the north end is a large elevator, frame superstructure, and beyond this again is an annex elevator, built some time later. On the west side of the mill is situated the flour packing and storage building. A railway switch runs between the mill and flour packing warehouse, connection with the mill from the packing house being made overhead of the track. Another railway switch runs along the other side of the storage and packing rooms, thus giving abundant railway facilities. On the east side of the mill, in a separate building, a little removed, is the machine, blacksmith and carpenter shops, and in another separate building is the mill office and bake shop.

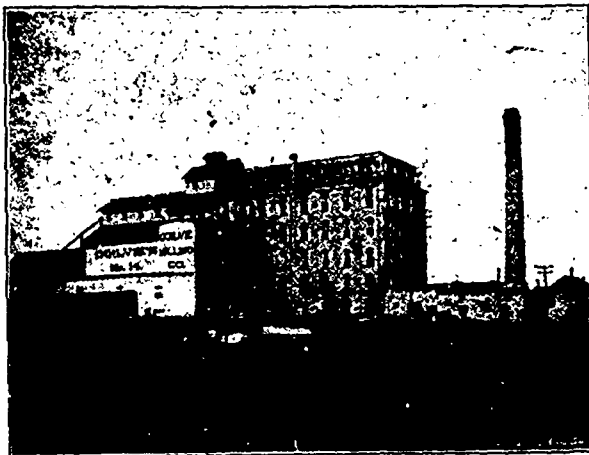
THE MILL PROPER.

This aggregation of buildings alone indicate the importance of the industry. It is only after an inspection of the mill and attachments thereto has been made throughout, that the full extent of the industry is realized. The modern flour mill is truly a great institution, with its great floors, one after another, filled with machinery of various designs, and all running so smoothly and noiselessly as to scarcely be felt. The first thing that strikes the visitor to this mill—that is one who had been somewhat familiar with its internal ap-

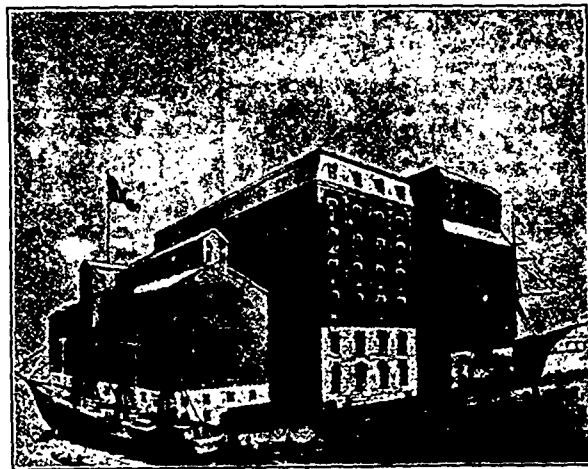
pears to be driven from one shaft. Everything has been done to economize power. The basement floor is 18 feet high, and with its new fittings, freshly painted, looks fine. The head miller, with pardonable pride, claims that it is the finest basement floor in any mill on the continent.

We next move up to the second, or grinding floor, which contains 47 double stands of Allis rolls, arranged in regular order, and presenting a fine appearance. A large number of these rolls are entirely new, and the others have been replaced in position so as to give more room, while at the same time the capacity is largely increased. The latest improved feeding device has been added to all the rolls, so as to effect a uniform distribution to rolls. This results in more even and improved work. On this floor there are also two run of stone for grinding purified middlings; also the dynamo which furnishes heat for the oven in the bakery, and is kept running all the time.

The third or bin floor is largely taken up for spouting. The whole system of large, bulky bins has been dispensed with, and spouting is done direct from reels and purifiers to rolls. On this floor is situated an automatic machine for taking samples of flour every hour. The machine is entirely under the control of the head miller, and cannot be tampered with by any other person. The head miller can lock up the machine and go away for a day, and



OGILVIE'S WINNIPEG MILL.



OGILVIE'S ROYAL MILL, MONTREAL.

in the mill amounted to over \$80,000, or a sufficient sum to build several good sized country mills, buildings and all. An army of men was employed to perform the work, 200 men being employed at one time in and about the mill, headed by expert millwrights from such flour manufacturing centres, as Minneapolis, Duluth, Superior, etc. The work was pushed through in about two months, increasing the capacity of the mill by about 600 barrels, to a total of 1,800 barrels in 24 hours.

Though it is but a short time since the work was completed and the mill put in operation again, good results are already abundantly attested. Bakers are writing in complimenting the manager upon the wonderful quality of the flour now produced, which is declared to stand unrivalled, and in spite of the dull times the trade is growing.

THE BUILDINGS GENERALLY.

A brief description of the mill, since the improvements were made, may prove interesting. The work was done principally within the buildings, and has not altered the appearance much from without. The mill proper is a large brick structure, with stone foundation and basement. The portion of the mill containing the wheat cleaning machinery is separated from the rest of the building by a solid brick wall, from the ground up to the top, connection being only

pearance before the remodeling process took place—is the evidence of more space to move about in. It would appear at first as though the capacity of the mill had been reduced by the removal of a portion of the plant. The fact is, that by the institution of new and improved machinery in place of the old and more bulky kinds, the capacity has been largely increased, while at the same time considerably more spare room for moving about is afforded on the different floors. The uniform and systematic arrangement of the different machines, has also allowed of great economy in space. On one floor, where it was previously only possible for a man to squeeze through there is now room for three or four men to walk abreast around the rows of machines, thus removing a bad feature in case of fire. Another feature is the order and regularity of everything. In a large mill there are a great number of machines of similar design, and by placing them in regular order a fine appearance is made. Everything is scrupulously clean about the mill, and just now, after being newly painted, it is particularly attractive.

Now a few words in regard to the interior of the mill. The basement or ground floor of course contains the shafting, and here great improvement is noticeable in economizing space and power. A new shaft has been put in, and a lot of the old shafting has been removed. No less than thirty double star's of

when he returns he can have a sample of the flour, taken every hour by the machine. In this way he has a check upon the work that is being done all the time, and can locate any neglect on the part of millers in charge. The flour testing room and office of the head miller is on this floor.

Up we go to the fourth floor, which comprises all the most advanced machinery in bolting and purifying, including Smith purifiers and Allis round reels, perfectly arranged. This floor has been entirely replaced with new machinery, and a great saving in space has been made accordingly, while better and more work is done. There are twelve Victor heaters located here for tempering wheat in cold weather, so as to bring the cold grain to the proper temperature, before passing to the rolls. The fifth floor is a duplicate of the one immediately below, and like it has been replaced with all new appliances.

On the sixth floor we find the main drives for reels and purifiers and for the elevators. There is also a shaft, belted from the fourth floor, which drives the centrifugal reels. All these reels have now been placed on the sixth floor, making a row two deep—or one above the other, making more space.

The seventh floor is an extra storey added to the mill during the recent overhauling, for the purpose of giving another belting floor. The elevators have been run up to the seventh