

nor better, it is problematic whether any degree of free trade with the States would help the Canadian grain growers or millers.

Holmes' mill at Chatham is now running on the roller system.

The Rockton grist mill has been rented by H. Wright and W. Moss.

Messrs. J. D. Sibbald & Co. are erecting a grain elevator at Regina, N. W. T.

Mr. R. Thompson, of Lynden, shipped two cars of flour last month to Cape Breton.

The capacity of the Portage la Prairie, Man., Milling Co.'s mill has been increased to 300 barrels.

The work of siding and shingling the grist mill at Minnedosa, in the Northwest, has been commenced.

Leitch Bros., of Oak Lake, Man., have already milled about 25,000 bushels of wheat this season.

Messrs. Martin & Reid have purchased Henderson's flour mill at Mount Forest, paying therefor \$4,500.

Mr. Melbride, the Strathroy, Ont., miller, has taken a partner. The name of the new firm is Melbride & Waite.

The machinery for Mr. Jas. Jermyn's new flour mill at Minnedosa in the Northwest, has been shipped and some of it is being put in place.

McBean Bros.' elevator at Morris, Man., had a narrow escape from destruction by fire last month. It was damaged to the extent of about \$400.

The Messrs. Law, millers, have left Georgetown for Hamilton. The Messrs. Freure have rented the Georgetown roller mills and will operate them in connection with their mills at Acton.

Mr. Sutherland, of the Hamilton Provident Loan Co., offers a free site for a flour mill at the Neepawa, Man., station. Mr. Hay, the well-known miller of Listowel, Ont., has been visiting the Northwest lately, and is said to be thinking of erecting a roller mill at Neepawa. It is proposed that the town shall add to Mr. Sutherland's offer exemption from taxation.

Mr. Goodfellow, of Wroxeter, has purchased the grist mill at Tara, Ont., and proposes making it into a roller mill with a capacity of from 50 to 75 barrels per day. The village lends Mr. Goodfellow \$500 for six years without interest. The work of making the necessary changes in the mill has been let to Messrs. Golche & McCulloch, of Galt, and will be commenced immediately.

Indian wheat does not appear to be increasing in favor in Great Britain. Mr. W. A. Thoms, a well-known baker, writes in the *British Baker, Confectioner and Pastrycook* that Indian wheat is a curse to the home agriculture and no blessing to our millers; it is sown, reaped, and marketed in misery; and inasmuch as its absorbed water is sold at the price of wheat or flour, it is transported and manufactured in fraud.

Barrie *Advance*: The Midhurst grist and saw mills were burnt down on Wednesday. These mills, the oldest in the country, were erected by Mr. George Oliver on the site granted by Government in 1819. In the year 1841, Mr. Boys, the late County Treasurer, purchased them, improved them and worked them for several years, doing a large business. At that time a distillery was attached to the mills, which supplied all the hotels north of Bradford, and the grist mill did the grinding for all the settlers between Barrie and Lake Huron.

The charges of dishonest practices in trade preferred against the firm of J. P. McKay & Co., grain dealers, of this city, have been thoroughly investigated by the council of the Toronto Board of Trade, which a few days ago, rendered the following verdict: "That the said W. J. and E. B. McKay have been guilty of conduct unbecoming members of this Board and highly to be reprehended, and the sentence of the council is, that they be suspended from all the privileges and uses of this Board—W. J. McKay for the period of six months, and E. B. McKay for the period of twelve months, from this date—and that this report be printed and a copy mailed to each member."

Superintendent Whyte, of the C. P. R., who has been looking into the storage accommodation for grain in the Northwest, reports that farmers have prudently refrained from rushing their grain upon the railways all at once, and another source of relief is the fact that the reports of Manitoba's great harvest attracted a great number of tramp vessels to Port Arthur, from which point they have contracted to take over 600,000 bushels. The Port Arthur elevator is empty and there are only 120,000 bushels in the one at Port William. When the rush comes after the close of lake navigation the prospects are that there will be lots of room in the elevators for the surplus brought in by the farmers over the immediate carrying capacity of the railway.

The following elevating and storage rates at the Port Arthur and Port William elevators have come into force: Summer storage—Elevating (including 20 days' storage) per bushel, 1 1/4 cents; storage for each succeeding 15 days, or part thereof, per bushel, 1/2 cent; cleaning and blowing, per bushel, 1/2 cent; scouring, per bushel, 1 cent. Winter storage begins 15th November, and expires 1st June. Between these dates, when charges at regular rates accrue to 4 cents per bushel, no further charge will be made. Winter stored grain remaining in elevators after 1st June, will be charged 1/2 cent per bushel for each succeeding 15 days, or part thereof, in addition to accrued charges. Orders for shipment must be given in writing, and accompanied by original railway shipping or warehouse receipts, covering quantity of grain so ordered out.

Mr. R. R. Bayne, a journalist of Calcutta, who is making a journey through the Canadian Northwest, said, in reply to a question regarding the competition of Indian wheat with that of Manitoba, that this country would always be ahead as regards the better grades, as both the climate and the method of cultivation in India preclude the growing of the highest grades. No agricultural machinery such as is in use here is known there or could be introduced profitably, human labor being so extremely cheap. The wheat growing lands are divided up into small parcels and all the work is done by hand. As a result, a considerable quantity of dirt becomes intermixed with the grain. Just now a railway is being

built through the largest wheat growing district of India, Summipore, which has hitherto had no foreign market. The immediate effect of the opening up of this section will tell more against the sections of India at present exporting grain than upon America or Russia, since it is much nearer the sea than those districts.

The *Winnipeg Commercial* in a lengthy article, demonstrates very clearly that Commercial Union would not benefit the farmers of Ontario or the Northwest, and adds: About the only manufacturing industry which has assumed any proportions here is flour milling, and the proposed union would practically wipe out of existence a score or so of roller mills throughout the province and territories, as they would be practically at the mercy of the huge milling combination in Minneapolis, which is powerful enough to dictate freight rates to railways running to the east. This and many other minor considerations weigh heavily against Commercial Union, and should make the most radical advocate of change pause and consider before declaring for such a policy.

The Dominion Board of Flour Examiners met in Montreal Oct. 26th, to select standards of flour for the current year. The following delegates from the various city Boards of Trade were present: Toronto, Messrs. J. N. Peer, J. F. McLaughlin, W. M. Stark; Hamilton, Messrs. C. R. Smith, R. R. Morgan; London, Mr. J. D. Saunby; Quebec, Messrs. T. Brodie, Jno. Glass, T. Kirouac; Montreal, Messrs. A. E. Gagnon, Hospice Labelle, Jno. Brodie. The Board examined over one hundred samples, from which the following were selected for the new standards: Patent winter wheat, "Aurora;" patent spring wheat, "Ogilvie's patent Hungarian;" straight roller, "Kent Mills;" extra, "Exeter;" superfine, "Sparkling River;" fine, "Ogilvie's Strong Bakers." The Board also authorized the Montreal delegates to supervise the procuring of flour and compare it with the samples selected, and issue standards to the various inspectors.

Owing to the short crop of spring wheat in Ontario, millers in that province will have to buy largely of Manitoba hard wheat; in fact they are already buying, one firm alone having sold 40,000 bushels within the past few days to various mills in Upper Canada. The demand for Manitoba flour is so great that the thirteen or fourteen mills in the Northwest cannot begin to turn out sufficient to supply the demand, and as Ontario mills are grinding flour from Manitoba hard wheat more extensively, the output of this product during the coming season will be very heavy. A car load of Manitoba flour ground from new wheat has just been received in this city, which is pronounced by judges to be the finest lot of flour of its description that was ever placed on this market. Manitoba wheat flour is undoubtedly the coming favorite, both for home and export purposes, as it compares very favorably with the best spring wheat flour on this continent.—*Montreal Trade Bulletin*.

The fact that there are, but two organizations of operative millers in the United States, and that these are for social and benevolent purposes only, says the *Northwestern Miller*, speaks volumes for the good condition of the industry. One can count on the fingers of one hand, we believe, all the strikes which have ever occurred in mills in this country. It is true that hours are long in all our mills, but there has been no particular change in rates of wages since the war, and our operative millers seem to be very thoroughly contented with their lot. So far as we have been able to learn, the membership of millers in other labor organizations is extremely light. Where they do enter such associations they exert a very wholesome influence, and for this reason millowners encourage their men in the idea of entering labor organizations. Judged by present conditions and indications, the time seems very far distant when we shall have labor troubles in which mills and millers will figure prominently.



Listowel has granted a \$5,000 bonus to Hess Bros. furniture manufacturers.

Peterborough will vote on a by-law to authorize \$40,000 for the encouragement of manufactures.

A new iron foundry and machine shop, to cost \$15,000, are to be erected at Vancouver, British Columbia.

Messrs. Tickell & Sons, furniture manufacturers, Belleville, Ont., will shortly open a warehouse in Toronto, in charge of Mr. G. W. Tickell.

It is proposed to form a joint stock company and turn the Cochran works at St. Thomas, Ont., into an establishment for constructing locomotives.

Messrs. Geo. F. Haworth & Co. are fitting up No. 11 Jordan Street, of this city as a leather belt manufactory. Operations will be commenced about the first of January.

Mr. W. H. Clarke is building a foundry and machine shop at Bryson. Its dimensions are as follows: Main building 24 by 36 feet, to which is attached a wing 24 by 38 feet; the latter is intended for a moulding room.

The people of Trenton have subscribed \$35,000 of stock in the new smelting works which Mr. James McLaren proposes to establish in that town. The works will occupy 25 acres of ground, cost a quarter of a million, and employ 400 men.

The Dominion Government has awarded contracts for the manufacture of about 500 new cars for use on the Intercolonial Railway. The Ontario Car Company's share of the work is 200 coal cars, the James Harris Car Company, of St. John, N.B., receiving the balance.

The Moncton, N. B., Brass and Iron Works, which went into liquidation four years ago, were recently purchased by Mr. D. A. Duffy, who has had the buildings repaired and commenced casting iron and brass goods. Employment is given to twenty men. The factory is superintended by Charles J. Harris.

Messrs. Ewing & Co., of this city, manufacturers of mantels, mouldings and photographers' supplies, called a meeting of their creditors early in October. Their liabilities are placed at \$25,000. The creditors, at a meeting held on the 19th ult., decided to accept a compromise of 60 cents on the dollar, payable at short dates.

J. Howard Cromwell, speaking of belts and pulleys in his recently issued book on that subject, says that the origin, age, first application and use of what is known to us as the "endless belt and pulley," are entirely unknown. As far back into the history of the ancients as we can see by means of the earliest mechanical records, we find the endless belt running continuously around the pulley, precisely as it does to-day.

Mr. Russel Mason, an inventive young watchmaker of Newcastle, Ont., has invented a push button, so-called electric bell, that works without electricity. No battery is required, and no spring has to be wound up. It is automatic and works even better than electricity. The invention has been patented, and when the inventor sells the rights of manufacture for the United States he purposes starting their manufacture in Canada himself. So says the *Port Hope Times*.

The *Peterborough Examiner* says: A St. Catharines, Ont., gentleman was in town Saturday, looking for a suitable site for the establishment of saw works. He was much pleased with Peterborough, which he said suited him better than St. Catharines, as it was more centrally situated. Mayor Stevenson offered him the usual terms of exemption from taxation, and correspondence is going on anent the subject. If the St. Kit's man starts a saw works here he will employ about forty or fifty men.

It may be said that the general use of gas engines dates from Dr. Otto's patent of 1876. Since then very rapid strides have been witnessed in the development of gas motors. It has been demonstrated that the absolute efficiency of the gas engine of today is already greatly superior to that of the steam engine, when both are treated as best engines. The mechanical efficiency of the gas engine now made has been shown to be quite as high as that of steam engines, and further, that when gas engines are worked with cheap fuel water gas, their working cost is considerably less than that of steam engines of equal power. If this startling revolution has been created in ten years, what may we not expect in the near future, now that the principles on which success depends have been learned?—*Progressive Age*.

The Tanite Co., of Stroudsburg, Pa., are experimenting with crude oil as a fuel. The oil is carried under ground from a reservoir over one hundred feet distant from the boiler house, a one-inch steam pipe having the capacity to supply two boilers. A half-inch pipe conveys the oil to each boiler, and this pipe before reaching the boiler is connected with a steam pipe in such manner that streams of steam and oil enter together into a small cast-iron retort in the center of the fire-box. In this retort, kept at a high heat, the steam and oil are converted into gas, and to all appearance gas is the fuel, and not liquid. The fire is easily managed, and there is great saving of labor due to entire absence of ashes. The company are not prepared at present to make any statement as to the practical results, but careful and repeated trials are being made, and it is thought that in a few weeks exact data can be furnished.

Messrs. John Gillies & Co., Carleton Place, Ont., lately manufactured four 5 h. p. coal oil boilers for the Fish Oil and Guano Co., St. Thomas, Que. They will be used for driving two separate engines in a catamaran, which is built entirely of steel. The vessel will also be fitted with a 2 h. p. coal oil engine supplied by the same firm, for driving an electric light dynamo. The vessel is made shallow so as to be able to approach very near the land, and as heavy seas are prevalent at times in the Gulf of St. Lawrence and vessels are often washed over and their fires put out, and frequently lost as a consequence on account of drifting on the rocks before steam can again be raised, the advantage of the coal oil engine will readily be seen; for even though the fire be extinguished it can be re-lit again immediately and the steam kept up. This vessel is only an experiment, but if it proves successful the company will order ten more of the same style, built on a larger scale.

FOREIGN GRAIN AND FLOUR MEASURES.

Following is a statement of the equivalents of standard measures of grain and flour in various countries: A quarter of California wheat weighs 500 lbs.; of other American, Chilean or Danubian wheat, 480 lbs.; of South Russian wheat, 462 lbs. A sack of flour weighs 280 lbs.—nearly equal to a barrel and a half. A Russian chetwert of wheat equals about 354 lbs. An Egyptian ardeb of wheat is 300 lbs. A French kilogramme equals 2 1/4 lbs. A German last of wheat equals 3 tons, 200 lbs. A Smyrna kilo equals one bushel. A Malta salma equals about 450 lbs. A Spanish fanego equals 99 lbs. A Chilean fanego equals 32 lbs. An Austrian staga equals 137 lbs. A maund of Indian wheat equals 82 lbs. A Portuguese alqueire of wheat equals 24 lbs. A Barcelona cras equals 1,925 bushels. A Norway maller is 10 maas, or 4,126 bushels. A German maller is 12 scheffeln or 18,145 bushels. A Vienna metzen equals 1 7/10 bushels. A German centner is about 110 lbs. A French quintal is 220 1/2 lbs.

Mr. J. P. Norton, of St. Thomas, Ont., electrician, has perfected a dynamo with which he claims electric light can be furnished as cheaply as gas. A company is being formed for the manufacture of the incandescent light.