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CANADIAN MILLER

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TORONTO, ONT., MARCH, 1892

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CHARACTER SKETCH.

MR. EDWARD PEPLOW

PRESIDENT DOMINION MILLERS' ASSOCIATION

"It is perfectly indifferent within what circle of honest men a man is provided he do but know how to understand and completely fill out that circle Goethe."

In August, 1891, when the members of the Dominion Millers' Association met in this city in annual session, the name of Mr. Edward Peplow, of Peterboro', was prominently mentioned in connection with the presidency. Mr. Peplow, however, could not see his way clear to accept the position, and refused to allow his name to go to nomination. Without asking "by your leave" his friends insisted that he should be a candidate for vice-president, and to that position he was elected.

In the lamented death of Thomas Goldie, than whom the deceased had no warmer friend and more loyal co-worker, Mr. Peplow, by virtue of his office as Vice-President, becomes the chief executive officer of the Dominion Millers' Association. It is a case of greatness thrust upon the man; at the same time, a greatness which Mr. Peplow, as an old and experienced miller, and one unselfishly devoted to the milling interests of this country, rightly merits.

Mr. Peplow is an Englishman, born in Shropshire, in 1839. He knows little of his native land from actual residence there, having removed, with his parents, while quite young, to Canada, and located in the vicinity of Peterboro'. When twenty-one years of age, in the year 1860, he took up his abode in Port Hope. Milling was his business, and in this town he engaged in milling on his own account, and by the force of his own merit has steadily made his way ever since.

In 1870 Mr. Peplow withdrew from milling and entered into the commission business, handling largely grain and flour. From 1880 to 1885 he had the management of the two large elevators of the Midland railway, since merged into the Grand Trunk system.

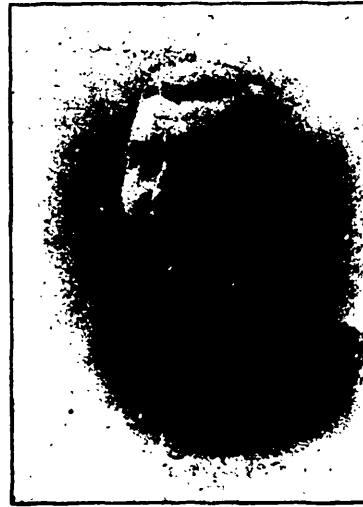
His native modesty which, without any simulation, it can be said, is a marked element in the character of Mr. Peplow, has never made him anxious for public office, but frequently this is a class of men on whom it is most desirable to place public responsibilities. Mr. Peplow's fellow-citizens in Port Hope took this view. For ten years he served on the Board of Harbor Commissioners of Port Hope, giving to the office that conscientious work that Mr. Peplow puts on any undertaking which secures his co-operation. In 1887 he became an alderman, and in 1889 was elected mayor of the town. It is simply a matter of historical record that during his occupancy of the chief magistrate's chair, he filled the office in a manner as creditable to his own talents and devotion as it was beneficial to the town of Port Hope.

Mr. Peplow is prominent in Masonic circles, having attained to the position of D.D.G.M. In religion he is a Methodist, and one who by deed and work has given the Church many years of faithful service on its official Board, and in other offices.

In 1889 Mr. Peplow returned to what might be fairly termed his native home, Peterboro', entering into co-partnership with Mr. Hilliard, under the firm name of Hilliard & Peplow, millers. Their mill is one of the best-known in the province, for the best thoughts of both partners are given to its management and development. What this means is shown in the large trade done by the firm in mill products both at home and abroad.

The respect which Mr. Peplow won during his twenty years residence in Port Hope goes with him in all his affairs as a citizen of Peterboro'. McCombie in his writings has said: "Right action is the result of right faith; but a true and right faith cannot be sustained, deepened or extended save in the course of right action."

To make a single application that will be appreciated by every miller, how exactly has this line of thought been acted out by Mr. Peplow, as a member of the Dominion Millers' Association. He has been one of the most intelligently active of the members of this organization. His activity has been a result of clear and right faith in the need for such an association and the possible development of milling in this country by a right use of the opportunities that the organization presents to every miller. Without this faith, and right action as a result of right faith, we would not find Mr. Peplow working with so much persistency as chairman of the special committee for the incorporation of the Dominion Millers' Association. He took hold of the matter in August last, and has hung on to it with genuine John Bull tenacity ever since. He believes that incorporation is absolutely necessary to the success of the association, and with his temperament he cannot leave any stone unturned to bring the work to a successful consummation. Does this characteristic tell of a man so set in his own views that no one else can teach him anything? Just the opposite: Mr. Peplow is one of the most approachable of men, ready to receive suggestion and help from any source, and lets one know he appreciates assistance when sin-



MR. EDWARD PEPLOW.

cerely given. He is generous to a fault, and imbued with a measure of geniality that makes friends readily, and because of his perfect sincerity and candor, holds them.

[Written for the CANADIAN MILLER.]

THE MILLER AND THE OIL CAN.

I GOT out of a job in my regular line once, said the oldest commercial man in the waiting-room, and after loafing a week or two I tackled lubricating oils.

I knew little or nothing about the goods, but my employer said "the less I knew the better, that the trade was terribly cut up; I would not find it a monopoly, and all he wanted was a hard worker and an experienced salesman in any class of merchandise."

I tried the regular trade first; was compelled to fall back on the big consumer, who gave but a meagre return, and finally I was forced to work the small mill men. With them I was fairly successful.

One day, some two months after my engagement, I pulled into a small town and proceeded to ferret out its industries. After dropping on to a planing mill and a small woollen mill, I found myself in the doorway of a

small stone mill with an ancient sign-board braced to the wall and bearing the faded inscription: "Chopen and Gristen Done While You Wate." About ten feet from the doorway, sitting on a stone with his legs crossed, the left hand testing the chopped stuff as it left the stone, the right grasping a discolored newspaper, sat the miller; rather a forbidding looking specimen - bullet-headed, short-necked and minus an eye.

"Good morning," I warbled in my best salesman's key.

"Well," he retorted, "I know that! What er yer doin' round yere?"

"Oh, ahem! I'm a tourist just round here for pleasure, and I thought I'd like to look through your mill. I never saw one before," I meekly answered.

By this time I had advanced some steps into the building. I was arrested by a growl: "Say, boss, got a boardin'-house? 'Cause of yer ain't we've got un-- good un, too-- best roun' these yere parts; four darters, new thirty-dollar secon'-han' organ, squeaks like old mill when work's plenty mill squeaks when we've hard work - mind me of good times, it does, every night-drops to sleep larlin'. Got boardin'-house?"

I murmured "yes."

"Say, what's in the bottle, mister?" he snarled. "Red eye?" He withdrew his hand from the chopped stuff, rubbed it on his pants, laid the paper down, and looked the picture of a hyena in expectancy.

A squeaky mill, no oil can or oilers visible, and almost nothing on the shafting, brought up visions of a barrel at least. I pulled the bottle from my pocket and answered: "That's oil, sir."

"What in the Sam Hill is oil? What's it for?" says he.

"To lubricate machinery," I replied. "Try it."

"Lubercate, eh?" he says. "Guess I will try er."

Putting the action to his words, he deliberately emptied my pint of oil by going half way round the mill and oiling up.

"Never saw oil before," I ventured to remark, as he waddled back and seated himself on the stool, handing me back the bottle, with

"Yere. Guess that's good stuff. No, never seed oil afore. Don't low nobody kum round yere sellin' truck. Moment drummer reaches that yere floor, down kums shotgun, filled with peas, hard uns - fired'er wanst at one smart Aleck, it 'im right in the stumjack, vomited out in front of mill three days."

Here was I, a hated drummer, right in the lion's den, the opposite of a courageous or a fighting man, inflated with the idea that I could still dispose of a barrel. Ill use a little strategy, I said to myself, and circumnavigate the old brute.

"Where do you get your oil?" I gently enquired. "I have a brother in the business and I might --"

I never got any further. He choked me off by roaring out:

"Say, mister, look yere. Yer the first man ever pulled the wool over my eyes so sleek. I makes my grease, ef yer wants ter know. Old woman raises forty geese and fifty ducks every year. I hooks the fat. We eats what's left of seven pigs arter we sells the hams. I grabs all the fat 'cept the lard. We kills two steers; one in fall, t'other in mid winter. We sells everything anybody'll buy, 'cept tallow that's mine; boarders eat the rest. Well, stranger, that makes my grease. No, I don't needs any oil. Yer'd better make tracks, heels 'wards the door."

I thought so too, for he fixed his single eye on the blunderbuss and sat like a stone with his jaw moving and fingers twitching.

I made my sneak with a "good day."

He never answered.

DOMINION OATMEAL MILLS.

THE business of milling is in no way limited to the manufacture of flour. Of course the universal consumption of bread gives flour milling a precedence over the milling of other products. We have, however, in this country a number of mills of considerable size devoted to the milling of other cereals, and especially of that which occupies so important a place in the preparation of the favorite dish of those hailing from the Land O' Cakes.

One of the leading oatmeal mills in the province is that owned by Gartley & Thomson, of London, and known as the Dominion Mills. The firm is composed of W. T. Gartley and Henry Thomson, both of whom have had many years of practical experience in the oatmeal business. The former has charge of the office and financial business of the firm, a position for which he is well fitted by virtue of the necessary training, and his exact, careful and thorough-going business habits. Mr. Thomson was for a number of years manager of the Seaforth mill of Walter Thomson, having special charge of the manufacturing departments. He knows how to mill only as an experienced and practical miller can mill.

Last spring the mill was thoroughly overhauled, and is now in excellent shape for turning out a good quality of meal. The capacity admits of 150 barrels of oatmeal, 125 barrels split peas, and 25 barrels pot barley per day. The firm does a large home trade, their products having an established and enviable reputation in every province in the Dominion, from Halifax to Vancouver. Their record abroad is just as favorable; the West Indies, South America, England and Scotland being important export centres for their output.

The Forest City has many important industries that have given to it fame and honor in our own land and across the seas. In the firm of Gartley & Thomson it has citizens who are doing their full share by meritorious work to extend this good reputation.

PATENTS AND RED DOG.

BY W. T. BATES, LONDON, ENGLAND.

A QUESTION of importance is the quantity of patent to be made from any given mixture of wheat. Now this modern term "patent" appears to me to be very elastic. It may be made to include anything and everything having a fairly good appearance. The term, no doubt, originated in flour made from purified middlings on the millstone system, and then it had some sort of definite meaning, although in the process there was no sort of patent; but now it seems to include all the flours except low-grade in some mills, and particularly in those mills in America where the term first originated. It may suit the trade there to brand about seven-tenths of their flour patent, and no doubt their excellent wheat gives them fair latitude in that respect, but I feel sure there is quite as much danger of our over-doing this as there is in making too big a percentage. I know some millers boast that they can make seventy or eighty per cent of patent, but I see nothing wonderful in that and I doubt very much if there is anything in it, after all, from a profit point of view. It is surprising how soon bakers discover the difference which the extraction of an extra quantity of patent makes. Get it up as fine and attractive as you will, the baker is sure to discover that he has only the carcass, that he has been robbed of the interior. There is little doubt that half the flour is the utmost patent that can be made from an ordinary mixture of wheat, and this can be made from purified middlings, leaving a residue of fair-looking stuff for bakers. But in making that quantity of patent all the virtue is taken from the bakers', the bulk consisting of break-flour and the last reductions. It may look fair, but it is surely of very doubtful quality and, to say the least, must be subject to great variation. The more perfect the purification is done and the more scientifically the mill is handled, the more pronounced is the inferiority of the latter-end products. This is indisputable, for in a well-arranged fully-equipped mill all the middlings are concentrated at the top, thoroughly purified, reduced, repurified and further reduced until all the good flour is extracted, and, if this is all taken for patent, the residue cannot be otherwise than poor. If, on the

other hand, the mill is badly arranged and unscientifically handled, and a great many are, a good portion of the middlings will pass from various reasons into the lower stages, where they help to enrich the lower qualities, but in that case the patent is not so good. It may be taken as a safe rule that, when a large percentage of very good patent is made, say fifty per cent, the mill is well handled, and that when a small percentage of patent is made which is not very good, as evidenced in either case by the demand, the mill is badly handled or of faulty construction. There is no harm in working a mill so as to make all the flour equal in appearance to patent, but the mistake is made in supposing that it really is patent. A dairy woman might just as well expect all her milk to be cream, or all her cream to be butter.

Besides this, there appears to be another point worth opening out, that is the difference in the nature of the flour made from the different portion of the berry. The middlings may not contain all the best flour, but there is a probability of middlings flour being practically of a different nature to the other flour, and, if they are separated, neither will do so well alone. But, of course, the patent, being purest, will necessarily do best by itself. Where this system is carried to great extremes, as it often is in America, we find that a certain residue called "red-dog" has a totally different taste from the good, pure flour; it is rank and bitter, and made into bread alone, would be utterly uneatable. We see it is only a matter of degree. If that flour in its just proportion were mixed with the other flour as it is made, instead of being drawn off separately, its presence would



DOMINION OATMEAL MILLS, LONDON, ONT.

scarcely be detected, except in the deterioration of color; but mixed with one-third of the most inferior part of the flour, it would be very evident, and even in two-thirds of the flour it would do mischief. It stands to reason that, if we extract fifty per cent. of the finest for patent and leave the residue mixed with this inevitable low-grade, a red-dog for a standard bakers' flour, we can only expect trouble and dissatisfaction among our customers. Authorities say that the flour made at the latter end of the mill, on the bran-rolls and last reductions, especially when worked very close, is not only of a poor color, but that its flavor is bad and that it makes its presence disagreeably evident in the loaf. We can readily believe that after tasting bread made from low-grade or red-dog.

I hold the opinion that a portion of each part of the flour should go into each quality for the above reason. This would necessarily tend to lower the quality of the patent to the bakers', but by the addition of a portion of the best patent to the bakers', the latter would be elevated quite as much as the other is degraded, and thus an even balance would be struck. This I mean when a very large proportion of patent is made, say 50 per cent, and upwards, and which usually is all the best flour down to a certain point. When only a small quantity is made the residue is not affected to any appreciable degree; and if the mill is badly worked it does not affect the latter at all, for in that case a great proportion of the best middlings goes to make the lower qualities, and if the patent is not first-class it shows also that a portion of the inferior flour is mixed with it. I do not, of course, advocate mixing of low-grade with patent, nor patent

with low-grade; indeed, it seems to me that what is not fit for the bakers' flour is best in the offal sack, especially at the present comparative prices of flour and offals. A great deal of American red-dog is sold for lower prices than our fine offals realize, and that being the case, it is, I think, best for us to save ourselves the trouble of producing it as a separate commodity. I know some milling authorities advocate the making of about 5 per cent. of low-grade as a separate product, but whether or not this is advisable depends a great deal upon the trade and the comparative prices of that flour and the fine offals. Certainly it is better alone than as a "destroying angel" in the rest of the flour.

The old-time milling was, in many respects, more straightforward and honest than the new, for then the wheat was mixed for a certain flour and, whether well or badly milled, was expected to produce one kind only. Now it is quite different. Modern milling opens the way for a multiplicity of quality and, also, I fear, too many doubtful practices. By the old method the miller had to give his customer the full benefit of the wheat, now he has the thing fully under control, and if the wheat be of a slightly higher quality, can tone his flour down by making an extra quantity of "patent." I do not think this altogether to the advantage of the miller, for all can play at that game. Look at it as we may, the straight flour as it comes from the mill is practically and intrinsically worth as much as it is when divided and subdivided into any number of qualities. If our straight flour is worth 28s. per sack, and we divide it into half patent and half bakers', the two together are worth only 28s. That is, if we get 30s. for the patent we must take 26s. for the other portion. What, then, is the benefit and where is the advantage to the miller? Indeed some, in the desire to increase their margin, have carried this division to its full limit, only to discover that the prospective advantages were far more apparent than real. I am well aware that, as a general rule, when dealing with a British miller the baker gets full value for his money; and, if by chance he find a deterioration in quality, he is now slow in transferring his custom to others. I have grave doubts about the sterling honesty of some of those imported flours, especially of the low grades, and some "straights" from which sixty to seventy per cent. of patent has been extracted.

FRICTION.

THE thesis of some of our practical men in reference to the laws of friction is apparently very faulty, in that the claim is made that the friction of moving bodies in sliding contact, as a shaft revolving in journal boxes, is independent of speed to the extent that it takes no more power to overcome the friction at a fast than at a slow speed. That is a great mistake, and is probably the result of the ambiguous statements made by some of the leading French and other engineers who years ago made a series of experiments for determining the laws of friction. It was found that frictional resistance, or what they were pleased to call the co-efficient of friction, was always the same, weight or pressure being the same, without reference to the area in contact, provided, of course, that all other conditions were equal. It was also determined that this so-called co-efficient remained the same without reference to or independent of speed within reasonable limits, or a speed that would not engender too much heat.

As remarked, that ambiguous statement is evidently the stumbling block of very many students in mechanics. It, however, ought not to be, because most practical mechanics, who have not studied the science of mechanics, know that increase in speed always results in an increase of frictional resistance which demands an increase in power to overcome it. They should then be able to argue from that knowledge that, while increasing speed may not increase the co-efficient of friction, it does not prevent the multiplication of co-efficiency, but, on the contrary, does multiply them in exact ratio to the increase in speed, which demands a like multiplication of power to overcome the increased resistance. When that point is clearly understood the whole question becomes simple.

THE PEOPLE'S MILLS.

IN the Royal City of Guelph, the capital of the county of Wellington, a section of country rich in its agricultural products, is located the celebrated People's Mills, of which James Goldie is proprietor. Mr. Goldie's operations in Guelph date from the year 1860, when he built the Speedvale Mills of that city. This property he afterwards sold, and in 1867 built the People's Mills of the same place. It is of this fine milling property we write.

The People's Mills is an imposing structure, built of beautiful white limestone and furnished with every adjunct necessary to the successful operations of the large business done by Mr. Goldie. To secure every facility both in receiving grain and shipping out a spur line has been built from the Grand Trunk to the mill. The movement of the cars is regulated by machinery fixed in the mill building; much valuable time being economized in this manner.

The mill owes its working power to steam and water, the latter supplied from the river Speed, through five Swain turbine wheels.

The capacity of the mill is 500 barrels per day, which has not unfrequently been run up to 500 and 600 barrels. Three lines of rollers are in use, embracing a total of thirty-four rolls and four runs of stones, which occupy the second floor.

Purifiers, scalping reels, centrifugal reels and other valuable milling machinery take their position on the third floor.

Bolting reels, almost altogether, have control of the fourth floor, where the bran dusters are also situated.

The large product of the mill is packed for shipping from the first floor, every effort being employed, by the use of labor-saving machinery and other modern methods, to simplify the work and thereby economize time.

We hear a good deal in these days of cleaning wheat, and from time to time the MILLER has written on the question. It is all-important to the production of good flour that the miller should have clean wheat. Mr. Goldie holds unequivocally to this opinion, and in an annex to the main building, connected with the second and fourth stories by doors will be found a wheat-cleaning apparatus that effectually does its work.

Consuming the large quantity of barrels necessary to a business the size of the People's Mills, characteristic shrewdness is shown by the proprietor in manufacturing his own barrels. The cooperage is on the opposite side of the river, and the barrels are run into the packing room of the mill by a tramway.

This large and successful business is supervised by the proprietor, Mr. James Goldie, and actively associated with him in the management are his four sons James, John, Lincoln and Rowell. Mr. Thomas Goldie, whose death, as is known to all millers, occurred little more than a month ago, was the senior of five brothers and, up to the time of his death, the active business head.

The product of the mill finds a large sale in the local market. For years Mr. Goldie has shipped extensively to the Maritime Provinces, where the name of Goldie, the miller, is most favorably known. A considerable portion of the output of the mill finds a market in Great Britain, and last year Mr. Goldie was among the leading exporters of flour to Newfoundland.

CAN SMOKE BE BURNED?

AS a matter of fact smoke, at the temperature necessary to ignite carbon, may be consumed, but smoke once created and carried by excess of draught from the hottest part of the furnace onward to the smokestack, may not be consumed. It requires a temperature of 800° to ignite carbon. The answer to the question must be with a view to practical value, and to compress the matter necessary to be understood. For answer we will assume a fresh fire be made and fed with bituminous coal. A large volume of smoke is seen to be given off and hurried by the draught to the smokestack.

Of what is that smoke composed? There is, firstly, the water that is in the coal converted into vapor, and that vapor is the carrier of the matter that we call smoke; that smoke is composed of hydrocarbons, and the more solid matter that is chiefly carbon. Now, bear in mind that the smoke is of the coal a part; yet one part is consumed and the other part escapes as soot and smoke. Why, burning is an act of contact, intermixture, ignition and union, by which the hydrocarbons and the solid carbon in the fuel enter into union with the oxygen derived by the draught from the outer air; that union, to be perfect, must be in scientifically determined proportions; if the air supplied be insufficient, then the union will be limited and the volatile constituents of the coal will pass away as soot; if the air be in excess the temperature will be lowered and the solid particles of carbon from the



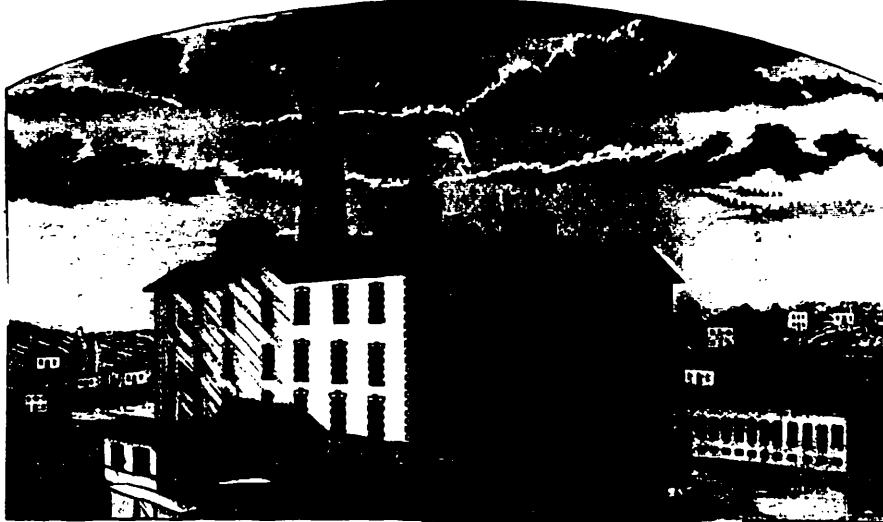
To find length of belt when closely rolled. The sum of the diameter of the roll and eye in inches multiplied by number of turns made by belt, and this product multiplied by the decimal .1309, will equal length of belt in feet.

When power is transmitted from a central engine by shafting, seldom more than 50 per cent of the power created reaches the machines, so great is the friction of the best shafting that can be made, having the best care and with the best lubrication. For small places and short transmission this may be reduced to 15 per cent., but when extended to a greater distance it eventually comes to 50 per cent. loss, and as the establishment becomes larger the efficiency of transmission diminishes more and more. A line of shafting two miles long could not, it is estimated, be turned from one end; it would twist itself off before you could turn it.

It stands to reason that if we have an engine fairly well made, with all its parts in line and the valves properly set, it will do its work without a sign, save the sign of the exhaust and the "creep" of the belt parting from the back side of the drum. More frequently we meet with engines whose "hug, chug," as they laboriously pound away at their work, seems to be emulating pile-drivers. The influence steam admission has upon the action of an engine, as regards its noise, is well shown at times in some variable cut-off engines. Within a certain range it works noiselessly, but when additional load is put on and the cut-off changes, the engine pounds furiously. A popular remedy for pounding is keying up connections all round, screwing down the binders on the shaft bearings, or settling up the shocks in the sides of them. In most cases this only makes a bad matter worse; for when an engine pounds from being out of line, the tighter the connections are the

harder they bind, and the stiffer they are. Pounding costs money, for it is power thrown away. It is expensive to have a noisy engine, and disagreeable as well. What is easily cured should not be endured.

Many people employed in operating flour mills and grain warehouses are at a loss to determine the hoisting capacity of the elevators used for taking grain and other products from the bottom, to the top of the house. A little careful reflection, however, would result in the discovery of a simple and easy method of making the calculation. First ascertain correctly the speed of the head shaft of the elevator, which can be done by counting, as the motions are always slow enough for that, rarely exceeding forty-five revolutions per minute. Then accurately measure the diameter of the head pulley and multiply it by 3.1416, which will give its circumference. Multiply the circumference by the speed already obtained, and the result will be the number of feet of the belt that will pass a given point in a minute. Reduce the feet to inches and then find the cup spaces by measuring from the top of one cup to the top of the next below; in inches, divide into the last product and the number of cups that will pass a given point in a minute is known. Then find out how much each cup will hold, by measurement, and multiply the last product by it, which gives the number of quarts or pints, as the case may be, that the elevator will take up in one minute. Reduce the product to bushels and the problem is solved.



THE PEOPLE'S MILLS, GUELPH, ONT.

disintegrating coal will be carried by the draught from the fire-bed unconsumed to the smokestack as smoke.

If the requisite oxygen was supplied in contact with the ignited and igniting coals, then the smoke would be consumed, for that smoke is only comminuted parts of the coal resulting from disintegration of the greater parts, the disintegration caused by the heat resulting from the union of the oxygen supplied and as much of the combustible particles of the coal in a gaseous state as that oxygen can take up.

Now, as combustion is an act of union, there will be no smoke from that which enters into union, and if there be a sufficiency of oxygen to enter into union with all the gases of the furnace, then by their intermixture there will be union, creating sufficiency of temperature for ignition of and combustion of the solid carbon particles, as well as of the volatile constituents; and no smoke.

The answer, therefore, to the question: "Can smoke be burned?" is yes, with the exact required proportion of oxygen in contact with, and intermixing with, the gases in the furnace; without the exact required proportions, and under the ordinary usual conditions of firing, with or without the hundreds of schemes, many of them revived fallacies for smoke-burning, it is not possible to burn smoke in the furnace; that is to say, it is not possible to burn smoke in the furnace except and to the extent of the portion that has entered into union with the oxygen provided by the draught from the atmosphere.



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BY ARTHUR C. MORTIMER

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THE CANADIAN MILLER AND GRAIN TRADE REVIEW caters to the Miller and all his associates, and to the Grain Dealer with all his allied interests.

The only paper of the kind in Canada, containing full and reliable information on all papers touching our patrons, and announced as an organ with any manufacturer, yours we will always be found honestly and earnestly endeavoring to promote the interests of our subscribers. Correspondence is invited from millers and millwrights on any subject pertaining to any branch of milling or the grain and flour trade.

ANOTHER FORWARD STEP.

JUST in a word we invite attention to the new department "Mill Products" opened in this number of the MILLER. It explains itself. We look upon the opening of this department as perhaps the most advanced step taken by the CANADIAN MILLER. Where the miller who is not seeking an improved and increased market for the product of his mill? The MILLER will do all it can to give his market to our millers.

LOSSES FROM SMUTTY WHEAT.

SMUT in wheat is an evil that will not stand toying with. A leading Winnipeg grain merchant, who has recently returned from New York, is reported to have said that New York shippers have lost heavily on their shipments of Manitoba low grade wheat to the old country because of the discovery of smut in the grain. "A very large percentage of the No. 2 regular showed a serious damage from this cause, while the No. 1 regular also shows a sufficient damage to spoil its sale in the old country. This circumstance has discouraged the New York exporters trading in Manitoba low grade wheat, and many of them say they are not disposed to handle any more unless it is entirely free from smut. They consider smutty wheat much worse than frosted."

The Winnipeg Grain Exchange has taken up the subject in a healthful, vigorous fashion. It is pointed out that the market for Manitoba and Northwestern grains has been extended to Great Britain and continental countries, and that smut in wheat to the extent that was common to the crop of 1891 will be fatal to an export trade.

An appeal is made to the farmer, in his own interests and the interests of the country, to avoid the "sowing of frosted and other poor seed, and the failure to treat even apparently good seed for smut before sowing." The following illustration is given: "Say a farmer seeds 100 acres. If with frosted or other poor seed the cost will be 175 bushels at 50 cents—\$87.50; when good seed will cost 133 bushels at 75 cents—\$100, or a difference of \$12.50 for 100 acres. Now, experience has proved, from actual tests at the experimental farms at Brandon and Indian Head, that the loss this year by sowing poor seed on 100 acres was, at a very low estimate, \$250."

A sample of smut, taken from the cleaning machines of our large mills, was sent by the exchange to Professor Saunders, director of the central experimental farms at Ottawa, and he writes as follows: "The smutty grain you sent is a very bad sample of the bunt, or stinking smut. This can be got rid of to a very large extent by treating the grain before sowing. From experiments carried on at Indian Head this year we are able to submit the following results. Where very smutty grain was sown, about one-half the crop was smutted. The same grain treated in the proportion of a pound of blue stone dissolved in water and sprinkled in ten bushels of wheat, the proportion of smutted wheat did not exceed five per cent. Where one pound of blue stone was used to five

bushels, the grain was almost entirely free from smut. Very similar results were obtained last year, both at Brandon and Indian Head, and the importance of this subject cannot be impressed too strongly on farmers. Many cases have occurred this year, to my knowledge, in Manitoba where the grain was so smutted as to be unsaleable, and where it is so easy to remedy this trouble, it seems a pity that farmers should neglect to take the necessary precautions. If the treatment of seed grain could be made general over the province for several years, this disease might be almost eradicated."

After handling several million bushels of the 1891 crop, the Winnipeg Exchange unhesitatingly concludes that the depreciation in value of the crop from smut is fully greater than from frost.

DOMINION MILLER MATTERS.

TWO meetings of the executive of the Dominion Millers' Association have been held during the month both well attended by the members. The Newfoundland troubles were fully discussed, and is made the subject of special comment by the MILLER in its new department, "Mill Products," elsewhere in this number.

The meeting held on 25th February was the first after the death of President Goldie. Feeling reference was made to the matter by Chairman Ed. Peplow and other members, a resolution of condolence to the widow and family was unanimously passed and the Secretary instructed to send copy of same to Mrs. Goldie.

The question of incorporation was again up for consideration. A draft bill modelled to a large extent on the lines of the constitution of the Toronto Board of Trade had been prepared by the solicitor for the Association, and its terms were with slight amendments approved of by the executive.

A special general meeting of the Dominion Millers' Association will be held in the Board of Trade building on Wednesday, 30th inst., when the draft of incorporation referred to above will be submitted for approval. The meeting will also be open for general business, and as the Newfoundland question is still unsettled, and other important matters have been under consideration by the executive, the meeting will be one of unusual moment and calls for a large attendance of members.

The vexed question of the inspection of Manitoba wheat at Port Arthur was once more the subject of discussion. No two opinions could exist in the mind of anyone, who has a knowledge of this matter, that there are good reasons for complaint. How to get at the trouble is the troublesome question. It cannot be said that any satisfactory progress has yet been made, but this much is certain, that the evil cannot exist for all time, and the persistency with which it is being followed up by the Dominion Millers' Association will ultimately bring success.

A letter received by Secretary Watts from Secretary Barry, of the Millers' Trading Bureau, of the United States, gives hopes that a remedy may be found for delays at the seaboard. We have made further mention of the subject on another page.

LEGISLATION AGAINST GAMBLING IN GRAIN.

Gambling in grain has long been carried on, more particularly in the United States, in so rascally a manner, the wonder is that determined measures had not been taken before to put an extinguisher upon the business. Congress this term is grappling with the evil in better form than any time in the past. The anti-option bill now before the House is directly levelled against these gambling practices. It has met with some opposition in business circles, for the reason that it was feared that its provisions would operate against the legitimate business of the grain merchant. The Journal of Commerce, of Montreal, remarks here: "The sale and purchase of crops for future delivery, or of any article for future delivery, at a price fixed months before such delivery can be made, may be as strictly legitimate as any other transaction. Where the mischief comes in is in carrying on sales and purchases of articles that do not exist, that are mere counters or chips used as a basis for gambling. As these transactions are carried on outside the market for the goods nominally dealt in; as they are not controlled or effected by actual values, or prospective values, as governed by existing stocks, or the

ordinary conditions that affect current market prices, they can be carried on to any extent. Options have been dealt in for more than double the amount that exists of the goods supposed to be traded. Thus the effects of the law of supply and demand, the conditions of which every person can ascertain, are interfered with by these bogus transactions, and honest holders of and dealers in produce, etc., have their business calculations disturbed, and their operations at times disastrously effected by dealings which have no solid basis, which are merely the tricks of unprincipled gamblers."

Senator Washburn has introduced an amendment to the original bill which is expected to overcome this seeming difficulty and yet be unmistakable in its application against gambling. It interprets the word "futures" to mean any contract or agreement whereby a party contracts or agrees to sell and deliver to another or others at a future time, or within a designated period, any of the articles mentioned in section 3 of this act, when, at the time of making such contract or agreement, the parties so contracting or agreeing to sell and make such delivery, or the party for whom he acts as agent, broker or employe in making such contract or agreement, is not the owner of the article or articles so contracted or agreed to be sold and delivered, or has not theretofore acquired by purchase the right to the future possession of such articles or article, under or by virtue of a contract or agreement for the sale and future delivery thereof, previously made by such owner.

Canadian law has quite effectually stamped out grain and stock gambling in this land, the bucket shop being a barbarism of the past. We shall be glad to see our neighbours equally successful in their efforts in similar lines. Public sentiment has, as far as present indications go, effectually banished the infamous Louisiana Lottery, and this other method of gambling should go next.

Grain gambling like most other evils affects others than those who are actual participants in the fray. President Baird, of the Toronto Board of Trade, voiced the best sentiment of the commercial community some days ago, when in strong terms he denounced speculation in grain, adding: "If it had not been for the 'bears,' wheat would be selling at least to cents a bushel higher than at present. British dealers seem willing enough to take it, but Partridge keeps them in awe."

MILLING TESTS OF CERTAIN WHEATS.

LADOGA is a wheat that just now is receiving more than average attention from the farmers of Manitoba and the Northwest, and 'par passu' in Minnesota and other northern countries where climatic conditions are somewhat similar. It had been a wheat that held strong favor with many engaged in wheat-raising in these countries, but of late it is losing in popularity. Because a certain wheat has proved unprofitable in its growing qualities in some particular locality does not 'pro se' consign it to universal condemnation as an unprofitable wheat. In the case of Ladoga it is claimed that its failure in some sections is attributable to the climate. A recent test of a very perfect character made at the Minnesota Experiment station can hardly be considered complimentary to this wheat.

The different wheats placed under test were pure Ladoga, pure Scotch Fyfe, pure Blue Stem and Fyfe. The particular test was made with respect to the early re-opening qualities of these wheats.

In the experiments referred to, twenty-five bushels of each of the following wheats were milled, the figures at the right showing the test weight as ground:—

	Lbs.
Pure Scotch Fyfe	63.2
Pure Blue Stem	59.0
Pure Ladoga	57.0
No. 2 Fyfe	61.1
No. 2 Fyfe, slightly bleached	60.0
No. 2 Fyfe, slightly frosted	58.2
No. 2 Fyfe, badly frosted	58.0
No. 3 Fyfe, badly bleached	57.1

The pure Scotch Fyfe was starchy, was A1 hard wheat; the pure Blue Stem was more glutinous. Both of these had been harvested and threshed without any damage being done them. They were raised upon medium soil in the Red River Valley. The rest came from near Hallock, Minn. Nos. 4, 5, 6 and 7 came

from the same farm and were grown from the same seed. Any differences were the effects of bleaching or frost. The Ladoga was the poorest appearing wheat, but chiefly because of its characteristic shrunken condition.

The baking tests made gave the following results:—
(1) As to weight of flour required to make a standard loaf, No. 2 Fyfe, slightly frosted, was first, Pure Scotch Fyfe second, and Ladoga eighth. (2) As to strength, Pure Blue Stem was first, No. 2 Fyfe, slightly frosted, was second, and Ladoga was again eighth. (3) As to weight of bread from a given quantity of flour Pure Scotch Fyfe was first, No. 2 Fyfe, bleached, was second, and Ladoga was again eighth. (4) As to color of bread, Pure Scotch Fyfe was first, No. 3 Fyfe, badly bleached, was second, and Ladoga once more was eighth. The Pure Scotch Fyfe bread was bright, rich and creamy, white and of very even texture. The Blue Stem was rich but of a slightly greenish or bluish tinge. The Ladoga had the dingy saffron color of the flour and was quite disagreeable in appearance. The bread from the frosted wheat flours was of a greyish tinge, but the worst of it is reported to have been vastly better than the Ladoga bread.

A CONTRAST IN MILLING.

Elsewhere we have said something of the progressive character of the milling industry in Austria. This compliment cannot be paid Finland, a country otherwise of high civilization, but in a very backward condition as regards milling. The fact seems to be that the peasantry and artisans, who form a large proportion of the population, are anything but epicures in the matter of bread. Wheat, rye, barley and oats are all raised, but of a poor quality, and after being harvested, are dried in kilns. The grain is then taken to the custom mills, which are driven either by wind or water. The millstones are usually of granite and reduce the grain to a sort of greyish brown powder. It is said that neither is the grain cleaned nor the flour bolted. Winter is the busy time with the mills, for in that season the peasantry make their annual bakings, and lay in a store of bread for many months. The loaves are in the form of discs, having a diameter of about eleven inches and a thickness of about one inch. In the centre is a hole some two inches across, which is made that the loaf may be spiked with several others by a staff, on which it is left to dry. When dried it will keep for a "year and a day," but becomes so hard as to defy the mastication of any jaws but those of born Finlanders.

The country has a few mills other than mere grist mills, yet the majority of these are destitute of grain-cleaning and dressing machinery. These are fitted indeed, with French buhrs; but these good servants are said to be so roughly treated that they soon become useless, and are thrown out of the mill door. From this sweeping condemnation, a few mills, which are in the hands of individuals or companies who appreciate the value of modern milling, are exempted. Finland is very rich in water, possessing 600 falls which are supposed to be capable of giving forth 2,700,000 horse power. At present not more than 35,000 horse power is utilized by the Finnish mills.

SMALL AND LARGE MILLS.

The relationship of the small mill to the large mill has always been a moot question in flour milling. The small miller seldom considers that his ratio of profits compares favorably with those of the big miller. In the present day when large mills are becoming more numerous, and big milling syndicates are in order, additional interest is given to this subject. The small mill is still here, and from the character of the business, is likely, for a long time to come, to be an active factor in milling matters.

We have been told that the reason why the operators of small mills fail to make as much money as the operators of larger ones, in proportion to the volume of business done, is that the operator of the smaller mill does not make as good yields as the operator of the larger mill does, and in his shortcomings on yields may be found the profits he failed to realize.

How to make better yields is the solution of half the trouble. Good machinery and enough of it well operated, and milling good, well cleaned grain is the answer.

Good machinery in one mill, well operated, will give just as good results as in another. "If the machinery is the same and the millers are both competent we both ought to get like returns. We will if we have like machines in like numbers. If you have an improved round-reel system in your mill which does high grade work and I am plugging away with an old hexagon, which is not economical, and requires twice the power yours do, your profits will naturally be larger than mine."

"Many millers do not understand how to figure on the relative capacity of break and smooth rolls necessary. Generally they have enough breaks but not enough smooth roll surface to handle the granulated stock, and poor yields is the result. To remedy this defect a competent man must be on the spot. No mill builder can learn by letter what you need, and you had better go to the expense of overcoming this trouble at once because it is expensive and grows so the longer it exists. About half the operators of small mills have not enough machinery of the most important kind. They do not know the grinding surface necessary to make a barrel of flour within a given time, nor do they know how to figure it. If they did their mills would be differently equipped and they would make more money. Crowd too much granulated stock on to the rolls and you send it to the tail end of the mill to become low grade at a big loss.

"Often instead of having two sets of reels to handle two grades of middlings they are run onto one grade of silk with the expectation of making two grades of flour. When the two grades expected don't materialize the miller swears and criticises his mill builder's methods, when, in fact, the mill has been constructed after his own plan, in spite of the protest of the constructing millwright. Many millers are prone to grind wheat not thoroughly cleaned and expect to make high grade flour. It is absolutely necessary to have good cleaning machinery and plenty of it. To make high grade flour the fuzz must be taken off wheat. If the grain gets to the break rolls before that is done goodbye to all high grade expectations, for though that flour went to London market the fuzz would be in it—you can't overtake the injury done by bad or no cleaning, no matter how good or how much other machinery you have."

EDITORIAL NOTES.

THE delegation from the Dominion Millers' Association that visited Ottawa a week since, re. the Newfoundland difficulties, interviewed when there the Minister of Inland Revenue concerning certain changes in the Inspection Act. This matter, it will be remembered, was discussed very fully at the general meeting of the Association. It is asked that the Dominion Millers' Association have representatives on the Boards chosen for the selection of standards of flours. The Government is also asked that the standards be selected twice a year instead of once. Experience has shown that the original standards bleach so much in course of time that injustice is done the milling trade in making one standard the standard for the whole year. The suggestions, in part at least, are favorably viewed by the Government, and some of the desired changes will no doubt be made.

THE London, Eng., Times, in an editorial article, makes the following comment concerning Russian matters: "In another column will be found a further installment of the correspondence which we have published from time to time, giving an account of the Russian famine-stricken districts, which is, indeed, bad enough to awaken compassion and to silence criticism. At the same time we see no reason to recede from our opinion that the crisis is not one that justifies a national movement here to collect subscriptions in aid of the sufferers, who, it must be remembered, are the subjects of a paternal despotism that undertakes the whole burden of responsibility for those under its rule, and is peculiarly resentful of the interference, however well meant, of other people. The Russian Government raises an enormous revenue and borrows largely for military and other purposes. It is unquestionably capable of providing for the elementary wants of a population to whom the elementary rights of citizenship are denied. This duty is much more incumbent upon an autocratic Power than upon the Government of a free state, where men are expected to help themselves and are able to do so."



MR. M. J. GOLDIE, son of David Goldie, of Ayr, Ont., who recently visited a number of the larger mills in the United States, is reported by the St. Louis correspondent of the Northwestern Miller to have said: "Since the mill has started they have never been obliged to shut down for lack of buyers. They place but two grades of flour on the market—straight and low grade. The straight goes to local consumers direct, while the low grade the poorer classes of French Canadians take. The latter trade has a peculiar fact connected with it which is interesting to our own millers. The flour is packed in the poorest of cotton sacks and sold unbranded. This allows the consumer the opportunity to replenish his wardrobe at the same time that he buys the flour, for the unbranded cotton sack when empty requires but small alteration to make any article of dress the French Canadian may be in need of. In this lies the secret of the low grade flour trade in Canada. Barreled low grade flour is unsaleable, but unbranded sack flour is eagerly bought."

"They tell me I'm a kicker," said Mr. John Brown, of the Citizens' Milling Company, one of the best known figures on Toronto "Change," "but it would be a sorry look out if there was not some one around to do a little kicking occasionally." And Citizen Brown is right. Human nature is strangely constituted. Things would work poorly enough if all temperaments were alike. Your sanguine spirit is a good man to send an enterprise along at a booming speed, but he is apt to run it into the ditch, unless drawn up sometimes by one of a less enthusiastic build. Some men are Quakers by instinct, and peace at any price is their motto. Their disposition is delightfully pleasant and they are usually as well loved as they are lovable. But many a good work has been run to the brink of the precipice because of the easy going spirit of these people. It is not always safe to take everything said for gospel. The millennium is not yet here, and a few individuals of designing character, ready to wrest affairs for their own end, are still around. The courage of the kicker may well be envied on these occasions. The kicker is a useful individual, all power to his nerve. I might give you a score of other reasons for saying this, but any man, who has seen anything of the world and its ways, knows these without my telling. At the same time we should be sorry for the community with too many kickers to the square acre.

One of the sights of "Change" for many months past has been the sportive pranks of not a few of the grain members of the Toronto Board of Trade. To one not knowing just what quarters he had dropped into, he might form all sorts of conclusions, seeing as he would, between the hours of twelve and one o'clock, a throng of the leading business men of the city in the roomy quarters of the new building, corner Yonge and Front streets, where they are wont to meet at that hour, chancing after one another and each endeavoring to get the biggest fistful of grain down the others' back, and peppering one another from all points with showers of No. 1 hard, the brightest Canadian barley, or whatever cereal was found most ready to hand. There they were, the coldest day in winter, or when the thermometer registered the highest mark of the season, with coats closely buttoned and collars turned up to ward off, if possible, the hostile attack of a brother grain man. Frequently even big boys carry their nonsense too far and must be suppressed. The following notice, found in conspicuous spots on the walls of the rotunda a few days ago, has proven the squelcher in the present case:

NOTICE. Members will please note that the Call Board Committee have instructed the caller to report any member throwing grain about or in any other way disturbing the proceedings of the Exchange. Section 13 of the Call Board regulations will be strictly enforced. By order

JOHN CURRIE, J. L. SPINK, M. McLAUGHLIN

VIEWS AND INTERVIEWS.

The Millers' Clowns.

Some day the millers of this North American continent may see the necessity of securing a miller's clown to while away an occasional idle hour, as did the kings of olden days. In the interim the place is being ably filled by the Milling World, of Buffalo, N.Y., though the tricks and jokes of his clownship are sometimes both broad and coarse. We congratulate our neighbor that for twenty-five years he has filled this position without a rival or an effort of any one to dispute his superiority in his own chosen line of milling journalism. Entering this month upon his twenty-sixth annual round, with the whisperings of old age creeping upon him, may he continue to reign supreme, and the foolishness of his intellect never forsake him. And though his chief condiment shall be a perpetual abuse of all things British, and his ravings be wilder than a Dakotian blizzard, he shall be forgiven, for who would abuse his own intelligence by abusing the clown of the ring.

What They Eat.

A sample of the bread being eaten by the Russian peasants has been forwarded to England and an analysis made of it by the London Lancet, probably the highest authority in medical journalism. The specimen is considered to be above rather than below the average quality. It is described as "dirty brown in color, and looks like coarse peat." It was evidently rye bread and as such could not be otherwise than dark in color. On fracture a slightly earthy and sour smell was observed, but with the features which characterize rye meal. Coarse particles of husk, leaves and small seeds could be seen with an ordinary lens. The analysis gave the following results expressed in parts per cent.

	Percent
Moisture	22.22
Organic Matters:	
Starch	35.31
Sugar, gum, etc.	10.01
Nitrogenous substances	14.81
Woody fiber	10.40
Fat	1.60
Mineral matters	72.15
Silica, sand, etc.	2.50
Alkaline carbonate, with small quantity of phosphate and chloride	2.00
Lime salts (phosphate)	1.13
	5.03
	100.00

We can quite understand, as the Lancet says, that "many persons to whom we showed the samples failed to recognize that it was bread at all.

Murder of The Miller Maiden.

The dusty miller, and more especially the dusty miller's daughter, has, all through the ages, been a favorite subject for the pen of the poet, albeit that some of this poetry has had to run the gauntlet of good, bad and indifferent. Tennyson has sung her praises in three of the prettiest stanzas he has written. The editor of a milling journal, published on the other side of the custom line, has made the discovery, however, that the average mill poet "must always murder the maiden in his poems," and he protests accordingly. Accepting the result of his research as correct we join in the protest, for why should the miller maiden who, in the words of the Poet Laureate, has:

Grown so clear, so fair
That I would be the jewel
That trembles as he near

suffer these indignities and cruel persecution? Our contemporary goes on to say "In a hundred poems devoted to the mill, the water, the maiden and the lover, at least ninety-nine of the maidens are made to drown themselves in the mill-dam, and it is generally a close shave with the unfortunate drowned one whether she wouldn't be better off in a drowned condition. Why all this bloodthirsty tragedy and savagery in the mill poet and mill poems? The old mill, the old miller, the placid dam, the romantic race and the singing wheel ought to suggest peace and happiness, but they seem to madden the poets so that nothing but the gore of the maiden will pacify. It's all a mystery to us, and we would like to see or hear a solution of the perplexing problem. Can any one suggest a solution?"

Educated Millers.

The German is nothing if not a believer in educational methods. His thoroughness in this particular stands out sometimes in conspicuous contrast to the superficial character, less or more, of the work we undertake in this newer country. This is most noticeable when we get outside of the ordinary educational system and examine his industrial, technical and military system. He believes in an educated soldier, an educated civil officer, an educated workman. He may be slow, but he is rarely else than sure. The millers are the latest body of workmen who have asked the State for aid in this direction. There are, according to a petition to the ministry of public instruction, 25,000 mills in that country, 5,000 of which are merchant mills. Milling is the leading industry of the Austrian empire and the only industry without a public school and experimental laboratory. The petition asks for the establishment of a national milling school, to be aided by the Government.

Not All Alike.

"I have lost all interest in advancing the work of this shop and my sole ambition is to put in ten hours per day and draw my pay Saturday night. I am entirely done with all ideas of trying to advance the interests of my employers by brain labor or improved methods of doing work. The firm has several of my devices which save it many hundred dollars per year. I have received several kicks, but no thanks, in connection with these matters; therefore, I am done with such business." This is the way an intelligent mechanic recently expressed himself. He was a good workman and a practical inventor. His effort had been to throw enthusiasm into his work, but it had met with no appreciation, and he had become soured. Forever after that man is likely to have a poor opinion of the employer of labor. Judging others by his own experience, he will consider all as simply task-masters, oppressors of the workingman, getting out of him everything that is possible, giving in return as little as he can, not even supplementing the pittance that may be paid by a word of kindness. Yet all employers are not alike. There are employers possessed with a generous supply of the milk of human kindness, whose thoughts are constantly working in lines that will help to make life more worth living to those who, by their enthusiasm, intelligence and labor, are no inconsequential factors in creating the fortune the employer is piling up. A broad sympathy, and a killing of the narrowness of view that too often takes hold of employer and employee, is what is wanted the world over between man and man. It pays has paid where ever tried.

The Moloch Of Modern Business.

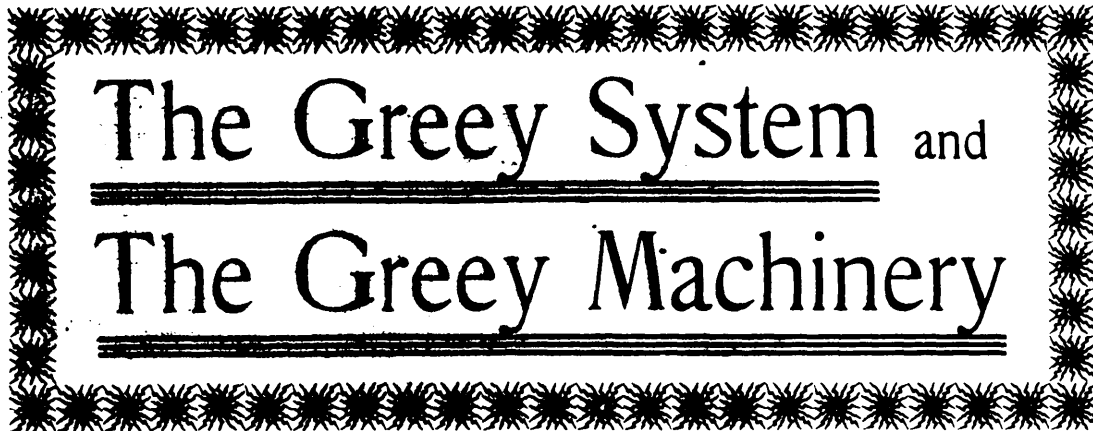
Are we living too fast? The question is not new. But we go on living, have we settled the problem? Hardly, unless everyday observation more than belies the record. This Corner of the MILLER is not given to moralizing. The aim of each paragraph written is to get at something thoroughly practical, but the observation of a neighbouring commercial journal "catches us" as having a very practical bearing, while possessing a strong moral coloring. "It was once the custom," says this representative of iron and steel, "to offer sacrifices to Moloch. The offerings to this gentleman were not of jewelry, vegetables or cash, but of human lives, served up on a hot coal or in a bloody basket. The altar of this man-eater was a shamble, in which the patriarch and the babe, the rich and the poor, the wise man and the fool, went into ashes and mince-meat without fear or a coroner's jury. We are fortunately living in better times. The butcher's shop is closed, and Moloch is out of business. The modern man is no longer served on a gridiron or a plate to a cannibal god. We are, however, doing some occasional whittling on the old block. In a refined and conventional fashion we are offering sacrifices of time, health and mentality to a modern Moloch. This last and improved addition of the man-eater is overwork. We live in a rapid age. The clock is too slow and the days too short. We spread a mile of life on a yard of time, and by burning the business candle at both ends the light goes out in the middle instead of at the bottom. Business is a race-horse seldom in the paddock, but mostly on the track. Everything moves under

the spur and whip. In the totals of progress we have forgotten the invoices of human life. The commercial structure is immense and magnificent. We spread printers' marks in statistical Te Deums and are patriotically proud of our national supremacy. But under the superstructure is a catacomb and on the back page of business statistics an extended list of lunatics and invalids and a growing pile of undertakers' bills. Attention has been called to this fact by physicians and publicists, but the underground railway to asylums and cemeteries is still running on time and paying dividends. In the modern conditions of business, it seems to be necessary for some men to be sacrificed for the rest. They are pivotal in their different vocations. When the king-pin is missing the wagon stops. Such men labor beyond the limits of reason and the endurance of nature. Life is a file of invoices. Rest is simply an anxious man sandwiched for a few hours between two sheets, with broken nerves, delinquent health and spells of sleeplessness and nightmare. Artificial remedies are resorted to in order to postpone the usual catastrophe. Opium, capsules and stimulants are used to stop the cracks in a leaky ship, with the usual finale, in a heavy cargo and a dead captain. There may be an excuse but there is no disguise for this fact. It is deplorably common. Overwork is becoming a public enemy. When business men are conscious of its encroachments on their vitality, they should wisely call a halt, not forgetting that even in this age of cupidity a bank account and a big business is no offset to premature exhaustion, a soft brain and a short life."

Wiman Talks to Millers.

The views of Erastus Wiman on his pet subject of Commercial Union are known, we suppose, to every reading Canadian. Having prepared, however, a special paper on this topic for that distinctly milling journal, the Northwestern Miller, it is just possible that millers may be disposed to read Wiman afresh, and discover, if possible, a new thought. The article covers over four columns of space, and he retraces all the well trod ground of the past. Coming more directly to the matter of the food supplies of the two countries he says it is "most fortunate for the people of the United States, exhausted as are their areas, and pre-empted as are their opportunities, that right beside them is a country equal to their own in size, possessing potentialities of wealth second only to her own, and ready for an expansion of trade of continental dimensions. Fortunate, too, for the United States that right beside them should exist this great land, so that, keyed up as they are to a rate of progress in manufactures, in railroad building and equipment, in production of machinery, and in all that goes to make up a progressive commercial community, there may be room for growth at the pace heretofore set, so that the new century may not witness a decline in percentages of increase from those which the last decades of the old centuries set in motion. All the natural resources to keep this great community in motion exist in Canada. As sources for food supply Canada possesses requisites for even a greater output than in the United States. In iron, copper, nickel, gold and silver; in coal on the Atlantic and Pacific and midway across the continent; in fisheries unapproached by those of any nation in the world; in timber in unlimited supply, and, above all, in agricultural areas of the widest and most productive character, the Dominion of Canada possesses just the things most needed by the United States, and in localities more desirable for her greatest need than could be otherwise provided, except by a Divine Providence, having in mind the creation of a great nation on its southern border. In ancient times the countries of the old world sent out their adventurous traders to discover new worlds for the purposes of trade. Columbus, Cabot, Magellan, Sir Walter Raleigh, Drake and a host of others added to the world's wealth the increase. The growth of population is as certain as the sun, the growth of food-producing area has reached its limit, and it will need a revolution in modes of culture, with the occupancy of all waste places, to keep up with the increased demand that is certain to set in. Even with this revolution and this occupancy, the future food supply will be inadequate for the enormous increase in demand that impends, unless outside territory is made available."

WM. & J. G. GREEY CHALLENGE THE WORLD TO EQUAL



They
Can't
be ...
Beat

They are Reliable
Give Satisfaction

See this Testimony - - - Prices Reasonable

Utopia Roller Mills, J. R. Bell and Bro., Proprietors

UTOPIA, Ont., February 15th, 1892.

WM. AND J. G. GREEY, Toronto, Ont.

Gentlemen,—We have got our mill started again, and consider we now have the best short system mill in this country. The new set of rolls and Little Wonders materially increase our capacity and make a good finish. Will you please send us statement in full of our account and we will remit.

Yours truly, J. R. BELL AND BRO.

We Lead the Times for High-Glass Machinery

ARE KEEN FOR GENUINE IMPROVEMENTS

WM. & J. G. GREEY

TORONTO, ONT. 2 CHURCH STREET

ORDERS, CORRESPONDENCE AND ENQUIRIES INVITED AND ATTENDED TO PROMPTLY
WE ARE CANADIANS AND KNOW HOW TO MILL CANADA WHEAT BETTER THAN FOREIGNERS

IT'S A DANDY

... THAT ...

LITTLE WONDER REEL

THE GREATEST MACHINE TO BOLT EVER INVENTED

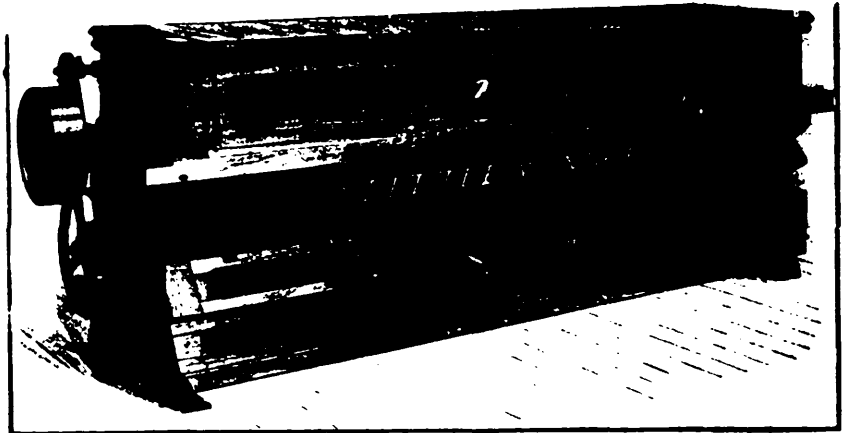
Campbell and Stevens, Chat-
ham, order one

Heimbecker and Ziegler, Han-
over, order one

John Munro, Cornwall, Ont.,
orders one

Patch and Armitage, Rich-
mond, Que., order one

And this is how.....
.....they all please :



MILDMAY, Ont., February 16th, 1892.

MESSRS. WM. & J. G. GREEY, Toronto, Ont.

GENTLEMEN:—Regarding the Little Wonder Reel I purchased from you, I am well pleased with its work. I am sending to it the low grade and all the dirty stock from the other reels. The flour bolted by it is bright and clear of specks. I am finishing up closer than I did before, and am not making half the low grade I did, and what I do make is better in quality. It has plenty of capacity. I am running it with a three-inch belt.

Yours truly,

H. N. SCHMIDT.

The Little Wonder is a Money-Earner from the Start Is Unequaled for Making Perfect Separations

NOTHING CAN TOUCH IT FOR BOLTING
OR RE-BOLTING ANY STOCK IN THE MILL
IMMENSE CAPACITY

So small it goes anywhere . . . Runs so easy, no trouble to drive
ORDERS PROMPTLY FILLED

.. SOLE ..
MANUFACTURERS **WM. & J. G. GREEY**
2 CHURCH ST., TORONTO



P. CAMPBELL, grist mill, Lachute Mills, Que., has assigned SIXTY-FIVE millers are members of the Toronto Board of Trade.

P. MCINTOSH & SON, wholesale flour and feed, Toronto, have dissolved.

THE farmers at Macdonald Station, Man., are talking of building an elevator.

W. R. CALHOUN will remove his flour mill from High Bluff to Portage la Prairie, Man.

MORDEN, Man., up to ten days ago, had shipped 465,000 bushels of grain for the season.

JACQUES & DOUGLAS, flour and grain, Ottawa, have dissolved. A. Jacques continues.

THERE is talk of the Columbia Flouring Mills Co. building another mill at Swan Lake, B.C.

BAND & McDONALD, late of the Pilot Mound mill, have leased the mill at St. Leon, Man.

THE farmers of Hartney, Man., will offer a bonus of \$5,000 to a good flour mill of 150 barrels capacity per day.

THE Northwestern Sampling and Milling Co. (limited) has been incorporated at Nelson, B.C., with a capital of \$100,000.

W. E. ELLIS & CO. have purchased the Oshawa Milling Co.'s mills, and business under the new management is brisk.

THE annex to elevator A, Fort William, Ont., is about ready for wheat. This increases the storage capacity there by 1,250,000 bushels.

IT is reported that Mr. Muirhead, of Ft. Arthur, Ont., will, if he gets favorable terms, establish flour, oatmeal and pot barley mills in Calgary, Man.

PETER QUANCE, proprietor of the grist and sawmills at Delhi, Ont., has formed a partnership with his brother Robert, the style of the firm being Quance Bros.

THE Winnipeg grain exchange has established a charity fund, not for starved grain men, but for general charitable purposes. The members have subscribed five dollars each to the fund.

IT is said on good authority that, provided a sufficient bonus is offered, a flour mill with a capacity of 150 barrels per day will be erected at Routhwaite, Man., this spring.

J. G. SNEYINGER, of MoulINETTE, Ont., is having his mill remodelled throughout on the roller process; capacity 100 barrels a day. The work is being done by the North American Mill Building Co., of Stratford.

MESSES. McGUIFFIE & CHAPPEL, of Gabriola Island, B.C., have taken advantage of the present open and mild season, and seeded down about twenty acres of oats. This speaks well for the climate and the enterprise of B.C. farmers.

C. O. CARD, of the Mormon settlement, Lee's Creek, Alberta, N.W.T., has been to Utah, and brought with him a practical miller to run the grist mill recently established in the settlement. He thinks there will be a considerable influx of well-to-do immigrants from that State to Alberta next spring.

A SAMPLE of what is known as Campbell's white chaff wheat shows on 'Change at Winnipeg, Man., a few days ago, has won much favorable comment. It was grown at Red Deer, Alberta, and was sent by Prof. Saunders, director of the Dominion Experimental farm.

W. KITSON and K. McKenzie, of Burnside, Man., have been to Winnipeg as delegates from the Burnside Farmers' Elevator Co., interviewing the Canadian Pacific railway officials respecting a site at the above-named place for an elevator which the farmers will erect there during the coming summer. The elevator will have a capacity of 50,000 bushels.

THE Edmonton district, Alberta territory, will not do much longer without a roller mill. MacKenzie, Ross, Hub, Mann and Nanton are the applicants for letters patent incorporating a milling company with a capital of \$35,000. The parties named are all capitalists, who own a large amount of land at Edmonton, and who are, therefore, desirous of furthering the welfare of the town.

No little surprise has been caused by the report that a shortage has been discovered in the flour mill of Messrs. Pearen Bros., Brantford, Ont. The managers declare that from the quantity of wheat purchased and taken to the mill since Aug. 7 last—about 90,000 bushels—there should have been upwards of 750 barrels of flour more than the quantity accounted for. After investigating the fact, the proprietors have concluded that the flour must have been stolen from one of their, or both, of their storehouses.

ON the 9th inst. Mr. James Pethick, who lives about three miles west of Millbrook, Ont., was using a grain crusher. He leaned over to try the feed to see if it was being crushed fine enough, when the sleeve of his frock caught in the gearing of the machine and, before the horse-power could be stopped, the flesh from the wrist to the elbow was stripped off to the bone.

A KEEN visitor to this province has been Mr. R. A. Jones, of Calgary, Alberta, who, among other objects, has been endeavoring to influence some person or persons to start a flour mill in this Northwest town. The present consumption of the community is 105 bags a day and growing rapidly. In 1882 the population was 100; in 1892 it is 4,123. The municipality is prepared to offer inducements to a good man.

THE new town of Carnduff, N. W., has added to her already large grain storing capacity another warehouse erected by Mr. Sproat. There are six grain dealers: Ironside, representing N. Bawlf; R. McGuire, for the Lake of the Woods; W. A. Smith, for Kollin & Armitage; James Sproat, for J. K. McLennan, and A. N. Shaw, for Harris & Grant. The average delivery of wheat is from 1,000 bushels upwards and it is of an excellent quality.

A NEW claimant for prominence as a wheat city of the Northwest is Hamiota, Manitoba. The country now tributary to Hamiota formerly was the chief support of Virden, Oak Lake, Rapid City and Shoal Lake. There are several township-south of Hamiota which are equal for wheat-raising to any in the province, while to the north the country is excellent for mixed farming. The building of the Great Northwest Central Railway has had much to do with this progress.

THE Lake of the Woods Milling Co., is preparing for an active season in extending its operations. The Keewatin mill is being increased in capacity between 300 and 300 barrels, to 1,800 barrels per day. The Portage mill is being supplied with a new plant throughout, and will be increased to 600 barrels, or double its former capacity. The company also proposes erecting ten or twelve new elevators this year, with the object of doing a shipping trade in grain, as well as a milling business.

A PECULIAR and fatal accident occurred at Essex, Ont., on the 2nd inst., by which Laurence Wigle, aged thirteen, lost his life. He was playing in Green's warehouse, where men were employed in removing grain from a large bin. Climbing to the top he jumped in, thinking to have a slide on the swiftly disappearing grain. In a moment he was drawn into a mass and not until his feet appeared coming through the spout fifteen minutes later was it known where he was. Life was extinct when he was recovered.

ACCORDING to the annual report of the Winnipeg Grain and Produce Exchange the estimate placed upon the wheat yield of the province for the past year is 21,000,000 bushels. This is nearly double the crop of the preceding year, which, up to that time, was the largest on record. The grain storage capacity west of Lake Superior, on, or adjacent to, lines of rail, is now 10,366,800 bushels, of which more than 9,000,000 were provided by the C.P.R. There are in the province forty-two flour mills, with a total daily capacity of 7,455 barrels, and three oatmeal mills, which jointly can turn out 300 barrels daily.

MR. McKAY, of Indian Head Experimental Farm, delivered a lecture in the agricultural hall, Grenfell, Man., on the 1st inst., in which he gave an interesting account of some of the principal lines of work carried on at his farm. His remarks on sown and frozen seed were listened to with attention. His candid opinion that more money would be made in the long run if the farmers did not try to do too much, consequently put in a good deal of grain too late, was heartily endorsed. His opinion of Ladoga is now below zero and his advice is to stick to the Red Fife until some new variety is unquestionably proved to be an improvement.

THE Manitoba department of agriculture has arranged for a system of grain exchange by which farmers throughout the country may secure a supply of seed wheat free of cost. Those who wish to take advantage of this arrangement will have to send in a quantity of wheat, the amount they require for sowing, and state from what part of the country they would like to procure a supply of seed, and the department will forward to them by freight what they require. The grain will be received at, and shipped from a warehouse in the city, which will be in charge of a competent man. The grain to be exchanged must be up to the standard called for by the Winnipeg grain exchange, and will have to pass the inspection of the Winnipeg grain inspector. The object of this exchange, is to give the farmers an opportunity of procuring fresh and sound seed and to further the efforts now being made to eradicate the smut evil. Consignments of wheat sent under this arrangement will be carried free by the C.P.R., M. & N.W., and probably the N.P., and G.N.W.C., and should be addressed to the care of the Department of Agriculture, Winnipeg.

THE piling for the foundation of the new Allis mill at West Superior will probably be completed this week.

A FLOUR war has been raging at Blunt, S.D., the price in four days having dropped 80c. per 100 lbs., being quoted at \$2 per sack of 100 lbs.

THE Dundee Courier's Calcutta correspondent says that the jute crop in India is exhausted and that the total shipments to Europe will not exceed 1,650,000 bales, which is nearly 1,000,000 bales short of last year's shipments.

BOTH France and Belgium report frost killing of the winter-wheat plant. In France the damage is estimated at ten per cent. in some of the northern departments. Russian rye and wheat crop conditions are reported bad in many provinces.

RHOEK ISLAND is to build an "Old Stone Mill" at Chicago as a part of its exhibit at the world's fair in 1893. It will be an exact copy and of similar size as that which has added so much to the general attractiveness and historical interest of Newport.

THE Board of Agriculture of Great Britain reports a decrease of wheat-growing area in Scotland of fourteen per cent., in Wales ten per cent., in the southwest of England nine and one-half per cent., and in the rest of England two per cent. The decline is mainly in districts where the crop is grown under less favorable circumstances.

THE effect of reciprocity upon American export flour trade is seen in the increased imports, during January, by Cuba. The imports at Havana from the United States were 62,371 sacks, against 2,720 sacks during January, 1891. The imports from Spain during January, 1891, amounted to 38,490 bags, but none was imported during the same month of this year.

THE grain production of Wisconsin is confined largely to barley, corn and oats, and the wheat acreage is being reduced, stock and dairy farming being in favor. The drought, however, has cut down the yield of coarse grains, and dairymen have been compelled to import corn, oats and milfeed. As an illustration of this, it may be mentioned that Westfield, in Marquette county, received thirty carloads of feed last month.

ACCORDING to the Bombay Gazette there are good reasons for believing that the extraordinary activity which marked the export of India wheat in the last campaign will be witnessed again this year. The rainfall in the central provinces has been exceptionally beneficial, and the appearance of the crop is satisfactory in the regions traversed by the great Indian Peninsular and the Nagpur-Bengal lines. Considerable sales have already been made, and March, April and May will certainly bring re-outroubled animation in transactions before the European and American crops are harvested.

A MILLER, writing from Queensland, expresses the opinion that his colony will soon compete with the others as a milling centre. He says that the southern colonies have certainly got a start both in wheat-growing and in milling machinery, but that Queensland is coming up fast, that the farmers are satisfied with their crops this year, and that more land will be put under wheat next season. Southern millers, he says, are making inquiries about North Queensland, and he speaks of several new mills starting in North and Western Queensland. He thinks the Queensland wheat is as good as that grown elsewhere, but complains that the farmers are careless, and allow a good deal of barley and oats to get mixed with the grain.

J. H. JOHNSON, the owner of a fifty-barrel flour mill at Blackely, Minn., and a devotee of Farmers' Alliance doctrines, has created a good deal of comment in this neighborhood by issuing a letter to the farmers urging them to organize a Farmers' Alliance Milling Association. He has printed and circulated thousands of his three-column document, the burden of which is to show that the farmers of the Dakotas and Minnesota have lost \$28,000,000 on the wheat of the last crop up to the month of December, 1891. He then proceeds to show the farmers their folly in not building their own mills and thereby securing \$1.00 a bushel for their wheat, with a ton of feed per hundred bushels, together with some minor advantages. Any community that can deliver 75,000 bushels of wheat, he says, can thereby keep a fifty-barrel mill running for a year, and the mill can be built for almost \$7,000. That, Mr. Johnson says, will secure \$1.00 a bushel for every bushel of wheat raised by the shareholders. Mr. Johnson would allow fifty cents a barrel for the handling of the flour, and the agents he would allow to dispose of it would be the farmers' sons.



The particular purpose of this department is to create an increased market for Canadian mill products—flour, oatmeal, cornmeal, rolled oats, pot barley, horse meal, split peas, etc.—at home and abroad. The interests of the miller who grinds the grain will have thoughtful consideration. Any matter that is likely to lead to an improvement of conditions in the local market of any of the various provinces of the Dominion will be carefully considered in this department. A close study will be made of the foreign markets with the aim of further developing the Canadian export trade. The MILLER each month covers very effectively the field of flour handlers and buyers of mill products, not only within the borders of the Canadian Confederation, but in Newfoundland and the West Indies, Great Britain and other European centres. This department will be made valuable to them in discussions of the conditions of the market in this country, reliable market data, the manufacture of mill products, methods of transportation and shipping intelligence in its bearings and relationship to the milling industries. We invite correspondence from millers, shippers and buyers on any matter touching these important questions.

NEWFOUNDLAND MATTERS.

WE cannot report that any immediate and certain progress has been made in the settlement of the Newfoundland troubles since the issue of the February MILLER. The outlook, however, is some brighter now than then. The activity of the executive of the Dominion Millers' Association, together with that of the Boards of Trade, of Montreal, Halifax, Winnipeg, Toronto and other business centres, is having an influence on the Government. They realize, as never before, that important commercial interests will be seriously jeopardized by any delay.

During the month two meetings of the executive of the Dominion Millers' Association have been held, fully attended by the members. The question in all its bearings was dispassionately discussed. Whilst everyone felt that no time could be lost in securing a settlement of the difficulty, yet anything that would seem to partake of imprudence, or that would lead to greater complications in the future, preventing, possibly, a satisfactory settlement for all time to come, was with one voice discouraged.

A suggestion of the Montreal Board of Trade to ask the Canadian Government to endeavor to arrange a modus vivendi, whereunder the trade in certain products in Canada and Newfoundland may be maintained until the questions at issue between the two Governments are settled, was favorably considered by the executive and they decided to co-operate with Montreal and other boards willing to press the matter on the Government from this view. On the 10th inst. a deputation consisting of J. T. Morris and A. Kingman, Montreal; W. Scott, Ottawa, and the following representatives of the Dominion Millers' Association—Ed. Peplow, Peterboro; J. D. Saunby and C. B. Hunt, London; A. H. Baird, Paris; M. McLaughlin, Jno. Brown and C. B. Watts, Toronto, visited Ottawa with this object in view. In a measure the visit was fruitless, as an intimation was received from the First Minister early in the day, before the deputation went up to Parliament Hill, that it was desired by the Government that they should not make any reference to the Newfoundland difficulty, for the reason that to bring pressure to bear at the present moment on the Government would only afford a pretext to the Newfoundland Government for delaying the settlement, with the expectation that the Dominion would finally be compelled to grant all the concessions for which the Newfoundland Government is anxious. The deputation deferred to the request of the Premier, but not without expectations that the Government would pursue the matter with the vigor and dispatch that the urgency of the circumstances demand. This is the position of affairs at the present writing.

The Minister of Fisheries in answer to a question from Mr. White, of Shelburne, N. S., referring to an address delivered before the Halifax Board of Trade by Hon. A. W. Harvey, member of the Government of Newfoundland, said that the whole matter in its different relations was under consideration by the Government, and that all papers and correspondence would be brought before the House at an early day. Mr. Harvey in his address made this statement: "If the Canadian duties on Newfoundland fish are removed the Newfoundland duties on Canadian products will come off automatically." The

Halifax Board of Trade were one with Montreal and Toronto in the suggestion of a modus vivendi as a solution of the troubles in the meantime.

Mr. Sam Hughes, member for South Victoria, has moved for a return showing the quantity of Canadian flour exported to Newfoundland in 1890 and 1891; the law and regulations of the Newfoundland Government relating to the importation of flour, and the quantities of Canadian cattle, beef, pork, hogs and cheese exported to Newfoundland in 1890 and 1891; and also for a return of correspondence showing the action taken by the Canadian Government to secure the admission of Canadian flour into Newfoundland under fair regulations. Hon. Mr. Tupper in answer said that both questions were touched in the correspondence which would all be brought down in one return.

The longer a settlement is delayed the more serious the case becomes for Canadian millers. American millers, as might be expected, are bidding for the trade, and using the circumstance of the antagonistic duty on our flour for whatever it may be worth. Here is an extract from a letter written by an Iowa miller, and received by a Montreal exporter, who shipped largely to Newfoundland: "I write to ascertain what the prospects will be to get our flour in Newfoundland trade the coming season, as I note in the papers they have put a heavy duty on Canadian flour of \$1.05 per barrel as against 30 cents on American. I send you samples."

Millers would act wisely by writing their representatives in the Commons and have them fully prepared to discuss the question when it comes before the House.

FOREIGN FLOUR CHANGES.

A trade contemporary, the Market Record, has an article in a recent issue pointing out the change that has come over the flour markets of Great Britain. The time was when "Great Britain was the greatest outside market for Hungarian flour, but that is lost." Immense quantities of fine patents have been sent over from America and the consumption of fine Hungarian flour has been greatly affected. These Hungarian flours have met with serious competition in France also, as well as other countries on the continent. The whole world is disappointed in the price of wheat and this is the cause of the trouble.

"The Deth millers," says the Record, "expected too much and their flour has not sold as usual in the United Kingdom, nor has it moved well in other foreign countries. They reduced their prices reluctantly this month, without attracting much attention to their flour from abroad. Hungarian millers were much as Minnesota millers were when the local markets were forced up on small wheat production at home, with the expectation that the world would be swung on local hinges. Hungary is tasting the agony we did not relish in 1882, but had to swallow, for the price of wheat had been worked up where it had to stay for apparent reasons. A reduction of output to home wants is perhaps the only way out of it for them. Are not these changes suggestive of possibilities for Canadian flour?"

A TRACING BUREAU WANTED.

Prompt shipments and equally prompt transportation are vital to a successful and satisfactory export trade. Canadian millers are thorough going business men and orders placed in their hands can be sure of immediate attention. Unfortunately, perhaps, they cannot travel with the flour after it has left the mill. They have to rely on others for expedition in transportation, and this is too often the most sluggish part of the business. For years they have had to contend against delays in transit and at the seaboard. It cannot be said that they have yet overcome all difficulties, though it may be that things are not just as bad as they used to be.

The question was before the executive of the Dominion Millers' Association a few weeks ago, when a letter was read from the Secretaries of the Millers' Tracing Bureau, of the United States. This bureau was organized during July, 1891. Its first month's accounts were not closed until August 31, therefore the end of January, 1892, would constitute its first six months' existence. During that time 282,823 sacks of export flour had been traced for members, the average number per month showing a gradual increase, and at present amounting to

about 250,000. The bureau during this time had proven rather more than self-supporting.

It was stated in the letter from Secretary Barry that the average time for shipments from the date of leaving the mill until the flour left the sea-board was now from seventeen to twenty days, which was an undoubted improvement on the old order of affairs. The American officer intimated that the National Association would be glad to make any practicable arrangements with the Canadian Association that would be instrumental in adapting the methods of the bureau to the shipment of flour from Canadian ports. This plan has been advocated by the MILLER in previous issues, and from the courteous and fraternal tone of Mr. Barry's letter, it does not seem unlikely that a satisfactory and useful scheme may be worked out. As every miller knows, the matter is of sufficient importance to make it worth a vigorous effort by Canadian millers.

CANADIAN V. AMERICAN MILLERS.

The following letter signed "Hayne," Bridgen, Ont., is from the well-known miller of that town. All millers may not agree with Mr. Hayne in his statement of the difficulties that he believes handicap Canadian milling interests, but it will be admitted that from his side of the discussion he makes some strong points. We should be glad to hear from other millers on the question, and in the multitude of counsel, we are told, will be found a proportion, little or big, of wisdom. Trade interests at any time are more likely to suffer from indifference than too free a discussion of its affairs by its own members:

SIR, In these days of protection and free trade talk it is well to consider the position of Canadian millers and that of our American competitors in the markets of Britain. Under the present protection arrangement we have undoubtedly an advantage in the provincial markets, and the advantage would be much more marked if our manufacturing capacity were not double or treble the home demand. As it is now, the exporter of wheat has an advantage over the miller, and is consequently nearly always able to pay more, relatively, for wheat than the manufactured article will bring, and while the present, or any surplus of crop prevails, such will be the case. To illustrate the market, or at least our controlling market, for mill meal, bran and shorts, is the Eastern or Middle States, and to put our freeds into that market means about \$2.50 per ton between actual duty and entry charges. Well, how does this work? Take, for instance, a mill of 300 barrel capacity; for argument's sake we will say it uses 1,000 bushels wheat per diem. The yield on this wheat will be about eighteen pounds to the bushel, or nine tons per day; nine tons at \$2.50 means \$22.50, and for the export trade about two cents per 100 pounds on the flour manufactured for duty on the cotton sacks in which it is shipped, which will equal about \$1 more in all. If the American miller were buying wheat the same as the Canadian, and selling flour in the same market, an American would be able to realize about \$30 per day more than the Canadian for running his mill, and many of us would be glad to make the half of that amount in the trade. Now, \$30 per 1,000 bushels is three cents per bushel, and in order to compete in the world's markets the Canadian miller must buy his wheat from the farmer for three cents per bushel less than the American, in similar position as to freights. But the Canadian shipper of wheat for export is in exactly the same position as the American shipper; consequently in his export business, whether to Jamaica or Jerusalem, and our present trade position as to milling against the world, with perhaps one of the best locations in America, the largest Canadian manufacturing industry is, for all purposes of profit, handicapped out of the race. Scarcely anyone will be found to say that the millers of Canada are deficient in energy or pluck, but there seems very little use in our sending a representative to Europe, or the Government the best-looking man in Canada to Jamaica, until they make an effort to relieve this important trade from the disabilities under which it labors. As well try to rear an ice bridge across the falls of Niagara in the month of July. Brother millers, especially you who are near the throne, speak out.

BRIDGEN, Ont., March 9, 1892.

HAYNE.

TRANSPORTATION TOPICS.

A deputation from the Canadian Marine Association has interviewed the Government, pressing upon them the necessity of refusing to rescind the order in council passed last year prohibiting American vessels carrying grain to Montreal from transshipping at Odensburgh instead of at Kingston. An effort is being made in certain quarters to have this order rescinded, but the delegates, after their interview, were not very hopeful that their protest will be heeded. The delegates also urged the advisability of at once deepening the St. Lawrence canals to a uniform depth with the Welland.

The success of the whaleback steamer in making the voyage from Duluth to Liverpool has excited remarkable attention in ship-building circles. Experts and capitalists in St. Louis talk of a plan which may result in the shipment of grain from that city directly to Europe. It is believed that vessels of the whaleback class can get to

Europe by way of the Mississippi river and the Gulf of Mexico. An order has been given for the construction of one such vessel.

Owners of Canadian boats, not without just cause, complain of the large quantities of grain that are being carried over American water-ways. Already much has been deviated from the St. Lawrence route, and not a little Manitoba grain has been chartered for the opening of navigation from Port Arthur via Buffalo and New York. Last year between two and three million bushels of Canadian grain were exported via Buffalo, and it is said that American forwarders are underbidding the Canadians in the competition for the business again this season. Vessel owners are now asking 3s. 9d. per quarter from this port at open water to London and Glasgow and 4s. to Bristol, and it is said that freight room can be obtained at New York and Boston at 2s. 4d. to 2s. 6d. to London and Glasgow, and 1s. 6d. to 1s. 9d. to Liverpool.

OATMEAL CONSUMPTION.

Americans are disposed to dispute the claim of the natives of Scotland, as the greatest consumers of oatmeal in the world. There were consumed in the United States in 1888, 475,000 barrels; this year there will be a demand for about 850,000, and some estimates place it as high as 1,000,000. A St. Louis miller is authority for the statement that: "Oatmeal is eaten everywhere now, and by everybody. In many families it is the principal dish for breakfast. I know one bright and healthy young man who has eaten nothing at his morning meal for years except oatmeal. It is largely used to allay thirst. Engineers, firemen and others who have to work in heated rooms find that by mixing a little oatmeal with their water they can slacken their thirst with a small quantity of liquid."

THE FLOUR MARKET.

It is not possible to report anything but a dull market for the past month. The output of the Minneapolis mills has shown a steady decrease for some weeks. The extreme dullness has had the effect of causing three large mills in that city, representing about 5,000 bbls. daily, to close down, and before the month is out others will likely stop running.

Foreign trade is very dull. The Mark Lane Express of 14th says: "American flour was pressed for sale at 26s. California flour was quoted at 31s." The Bulletin of the Dominion Millers' Association of 15th inst. says of export flour: "Some sales of 85 patents 27s. 6d., Liverpool; and 80 patents, at equal to \$4.40, f.o.b. in wood."

Home markets are quiet. Toronto: Slightly firmer. Straight roller flour is nominal at \$4 to \$4.10, and extra at \$3.90. Ontario patents at \$4.70 to \$4.90. Millers' Bulletin says of Ontario flour, bran, etc.: "Large sales of 90 patents at \$4.25 to \$4.30, and 85 patents at \$4.40, f. o. b. for Lower Provinces. Shorts, \$12.50 to \$14, and bran, \$12.50 to \$14.50. Good enquiry for bran from States."

Montreal: Sales limited to local dealers. Patent spring, \$5 to \$5.20; patent winter, \$5 to \$5.10; straight roller, \$4.50 to \$4.65; extra, \$4.15 to \$4.30; superfine, \$3.90 to \$4.05; fine, \$3.30 to \$3.65; strong bakers', \$4.40 to \$5.

Winnipeg, Man.: Jobbing prices to the local trade in broken lots are as follows per 100 pounds: Patents, \$2.40; strong bakers', \$2.20; second, do. \$1.70 to \$2; XXXX, \$1.20 to \$1.40; superfine, \$1.10 to \$1.15. Less than 100 pound sacks 5c. extra per hundred. These prices are for well known brands. Some brands selling under quotations. Millstuff: Prices are irregular, and there is a wide range of quotations. Bran has been quoted at \$9.50, and even \$9 per ton, in ten ton lots, while up to \$10 and \$11 is quoted for smaller lots, to the local trade, with shorts held \$2 per ton higher. The lower quotations on bran would indicate the value at country mills, in car lots, at \$6 to \$6.50 per ton. Meals: Jobbers are selling mostly at \$2.50 for rolled oats and granulated meal, and \$2.40 for standard per sack. Some brands of standard are quoted at \$2.30, and granulated at \$2.40. Oil cake, in bags, \$20 per ton; oil cake meal, \$23 per ton, these prices for five ton lots; cornmeal is held at \$1.95 to \$2 per 100 pounds. Split peas, \$2.50 to \$2.60 per 100 lbs. Beans, \$1.75 to \$2 per bushel. Pot barley, \$2.65 per 100.



Office of the CANADIAN MILLER,
March 15, 1892.

THE GENERAL SURVEY.

THE term "unsettledness" was used in describing the conditions of the markets a month ago. We can hardly say that conditions are any more settled at the present writing; if disposed to play on the word we would say that the disposition in prices is to become decidedly settled—downwards. On the 11th inst., the lowest prices of the season were recorded on 'Change, and the market has since been completely demoralized. The Chicago market closed at present writing with prices nearly five cents lower than for the previous week. The March report of the United States Government, showing stocks of wheat in farmers' hands of 171,000,000 bushels, has had much to do with this sudden weakening of the market. A year ago the stocks were 112,000,000 bushels, two years ago 156,000,000, and in 1885 the aggregate was 169,000,000. When we take into consideration the immense export of the year, which is placed at 205,000,000 bushels, the seriousness of the situation will be apparent to even a casual observer of market conditions. There can hardly be any doubt that the estimated crop yield of 612,000,000 is not over generous and that the developments of the future may show the figures for the season to have been in excess of this estimate. The fact is patent to everyone that the market is over-loaded at all points, and where any increase of price is to come from, to help out the individual grain man who is overstocked, is a conundrum that gives begging a solution these days.

Under these conditions enquiry as to the growing crop is fraught with more than usual interest. Advices from Europe tell of milder weather in such important grain-raising countries as Germany, France, England and Hungary. The colder weather that had prevailed is reported to have done less or more injury to the winter grain. Rumanian prospects were called favorable according to latest advices. The south of Russia seems to be menaced, excepting in the Caucasus, and the later cables from France show some alarm for the outcome in portions of that country, although reports continue favorable in most parts. The soft weather permitted progress in England with good prospects. Frost, it is said, did slight injury in Germany, but the prospect on the whole was favorable. India does not promise the large exports obtained from the preceding crop owing to an insufficient rainfall in some important districts, and the later report from Argentine are not so glowing as the earlier as to the amount that will probably be available for export, the later estimates cutting it down from 600,000 tons to 450,000 tons. The Australasian surplus of wheat is thought by good authorities now to be decidedly less than last year. The outlook in Asia Minor was called good, but there were fears of late frost that might prove disagreeable. In the leading States of the American Union the outlook is not better than fair. Kansas has had much fine weather lately and in view of the thin stand and weak shows fair improvement, but the freezing and thawing there, as in Missouri, did no good, and perhaps considerable harm. At least seventy-five per cent. of the later reports from Kansas show a condition fair or above. The conditions in Missouri are probably much the same as in Kansas, although it is generally spoken of as less promising. East of the Mississippi River there are spots where the fields do not look well, but in most places it is evident there has been little of any suffering since winter set in. "The full judgment," says the Market Record, "cannot be formed until the plant has had longer time to shape itself for spring advancement. Even further north, including Michigan, Nebraska and Wisconsin, where winter wheat is grown in the latter States, the prospect is thought to be good as well as in Minnesota, where there is some winter grain grown in the timber. There is a more indifferent outlook now than last year, due to poor growth in the fall." Another report says: "Illinois has about seventy-five per cent. more than last year; Indiana twenty per cent. less; Iowa about the same; Kansas about the same, and Kentucky about a half crop. Michigan will have about the same crop. Missouri reports indicate the same. Nebraska's will be twenty per cent. below last year's. New York and New Jersey's prospects were never better. Ohio reports vary widely but the average crop is assured. Pennsylvania reports a slight falling off. Tennessee will not do so well as last year. Texas has the prospect of a good crop. Washington and Wisconsin both report a good condition. Virginia will make an average crop." In our own country, so far as reports have

been received from leading grain centres, there are no discouraging features that have shown themselves.

WHEAT.

Quotations at this date are as follows: Liverpool Spring wheat, 7s. 10d. to 7s. 10½d.; red winter, 7s. 9d. to 7s. 9½d.; No. 1 Cal., 7s. 10½d. to 7s. 11½d.; No. 1 California, 7s. 7d. for May. American: Chicago March, 83c., May, 84c. Oswego White state, \$1.00; red state, \$1.01. Duluth No. 1 hard, 81½c. for March, 85½c. for May; No. 1 Northern, 79½c. for March, 83c. for May. St. Louis, 86c. March; 88½c. May; 84c., July; 83c., August. Canada: Ontario White and red, 84c. No. 1 white, 90c.; No. 2 white, 92c. Manitoba No. 1 hard, \$1.03½ this month; \$1.04, April; No. 2 hard, 97½c. Millers' Bulletin quotes: "No. 1 hard, \$1.04; No. 2 hard, 98-99c.; No. 3 hard, 90-91c.; No. 1 regular, 78c.; and No. 2 regular, 69-70c., delivered from North Bay. Also some grinding transit; No. 1 hard, \$1.05; No. 2 hard, \$1.00; No. 3 hard, 91c.; No. 2 regular, 70c.; No. 3 regular, 60c."

BARLEY.

Farmers and grain men are divided in their opinion on the merits of two rows as contrasted with six rowed barley, and an animated discussion is kept up in the newspaper press. The agitation at Washington for a reduction of the duty on barley continues, but with what result is not yet known.

The market is altogether lifeless; sales almost nil. Local prices are nominal. No. 3 extra is hardly worth 43c. at outside points. A despatch from Buffalo says: Barley—a sale of a round lot of something over 25,000 bushels was reported made at 60c. quality not quite up to No. 2 Milwaukee, and five cars fair Michigan at 57c. quoted: Fancy western, 64c. to 65c.; No. 2, 62c.; sample, 48c. to 55c.; Michigan, fair to choice, 58c. to 62c. At Albany and Oswego no trading reported. At New York the market quiet; No. 2 Milwaukee, 68c. to 69c. St. Louis Nothing doing. Chicago Barley, No. 2, at 50c.

OATS.

Some little business is doing and prices have changed little during the month. Sales have been made at 33c. in track, and outside 29c. and 30c. was asked.

PEAS.

Rather firmer prices prevailing than a month ago. Offers 60c. have been made north and west, but exporters are not disposed to give more than 58c. or 59c.

RYE.

There is really no rye market; at least, no one knows where to find any profit in it. Seventy-five cents has been quoted as a nominal value.

PERSONAL.

John Campbell, of Southwold, Ont., who had carried on a threshing business for forty years in that township, is dead, aged 71.

William Gallraith, the efficient and popular treasurer of the Dominion Millers' Association, has been elected chairman of the Board of Arbitration of the Toronto Board of Trade.

A. E. Hitchcock, a miller of Leicester, Eng., is in this country visiting Winnipeg and other points in the Northwest, and arranging for a better shipment of wheat to his mills.

The MILLER was pleased to receive a call from A. T. Sitterly, of Schenectady, N.Y., representative for S. Hones, of Silver Creek, N.Y., the extensive manufacturer of grain-cleaning machinery.

Mr. Lineda Godbe, of Guelph, Ont., has acquired the certificate of his brother, the late Thomas Godbe, securing for him membership in the Toronto Board of Trade. He received a cordial reception when introduced on 'Change.

Mr. C. S. Ruler, the capable and popular manager of the North American Mill Building Co., of Stratford, Ont., called on the MILLER when in the city a few days ago. A little lard has whispered to us that orders with Mr. Ruler's company are crowding in at so rapid a rate that the works are to be run fifteen hours a day.

THE Province of Quebec Lottery holds an anomalous position with the lawmakers of our country, being legalized by the Government of Quebec and possessing its complete protection. Recent attempts made to secure the control of the funds of the *conferm* have altogether failed, and an action brought against the institution in the courts of Quebec has been dismissed with costs. Drawings are held twice a month and extensive prizes are awarded. Secure in the legal rights awarded them by the Government of the province the management do not hesitate to give every guarantee of assured drawings and prompt and immediate payment to all winning ticket holders.

WANTED AND FOR SALE

Advertisements will be inserted in this department at the rate of 15 cents per line each insertion. When four or more consecutive insertions are ordered a discount of 25 per cent will be allowed. This notice shows the width of the line and is set in Nonpareil type. Advertisements must be received not later than the 15th of each month to insure insertion in the following issue.

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THIS Company was organized expressly for the purpose of insuring only Manufacturing Industries, Warehouses and concerns. The primary object being to give protection against loss by fire at a minimum cost consistent with absolute security. The system adopted has been to inspect all risks before acceptance, and fix the rate to be exacted equally in accordance with the hazard assumed. The very small ratio of Fire Losses referred to by the President is attributable to a marked degree of care, order and cleanliness, the most important factors to avert fire, and which must prevail in all risks assumed by this Company. The President in moving the adoption of the report, February, 1891, said:— "I have, however, much pleasure in drawing your attention to the fact that the commission income alone, as you will see by referring to the Revenue Account, exceeded the total claims for fire losses, a record, I believe, unprecedented in the history of any other fire insurance company either here or in the mother country. The names with this Company, since it was established in 1885, have already saved on the current calendar year, upwards of fifty-five thousand dollars. As no car-masters are employed, dealing directly with the insured, those desiring to avail themselves of the advantages offered by this Company will please address:

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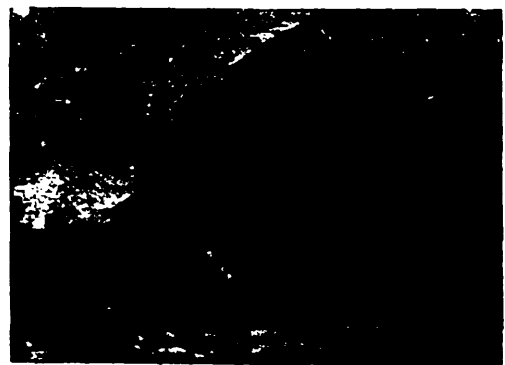
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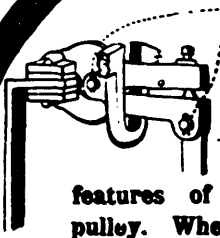
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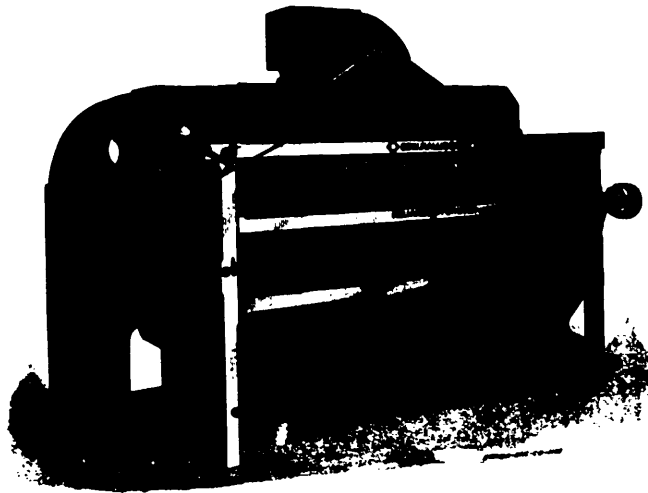
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they are one of the features of the Waterous grip pulley. When in position the grips always stay there; when necessary to detach grips, press out split keys, pull out steel pins when grips drop out. This can always be done without stopping the shaft.

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Reliance Middlings Purifier, with Tail Aspirator Attached

The Combined Reliance Air and Sieve PURIFIER

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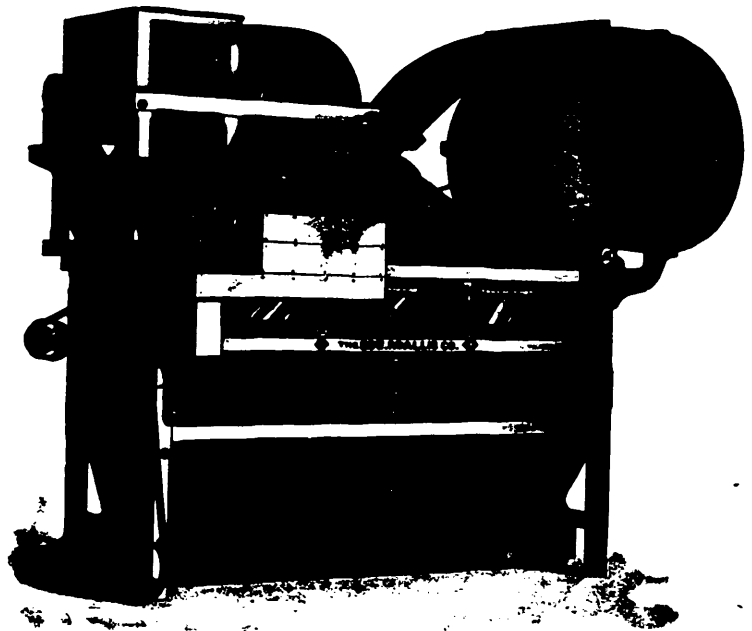
Dust Collector



THE middlings purifier illustrated in Cut No. 1 is of the Reliance patent, in a handsomely finished chest, with double conveyors of the hollow shaft Reliance patent, having reversible flights. The reciprocating sieve is operated by smooth working eccentrics and covered with Dufour bolting cloth or gritz gauze, and the cloth is kept clean by an automatically traveling brush, moving crossways of the sieve so as to avoid mixing the clean stock at the head of the sieve with the inferior middlings at the tail. An excellent cloth tightener is provided, and the air currents are controllable at will.



IN addition to the sieve purifier, we provide for the larger and more complete mills, a Gray's patent air purifier (see accompanying illustration) located on top of the sieve purifier. The air purifier receives all the middlings, fine and coarse alike, by means of which the dust and fluff are removed, and the middlings then pass to the sieve purifier, where the bran specks of the same gravity as the middlings are removed as far as is possible by mechanical means. The air purifier acts also as its own dust collector, as well as for collecting the dust from the sieve purifier.



Air Belt and Sieve Purifier Combined

DISCHARGES AIR OUT INTO THE MILL :::: DUST FROM THE AIR AND SIEVE PURIFIERS KEPT SEPARATE

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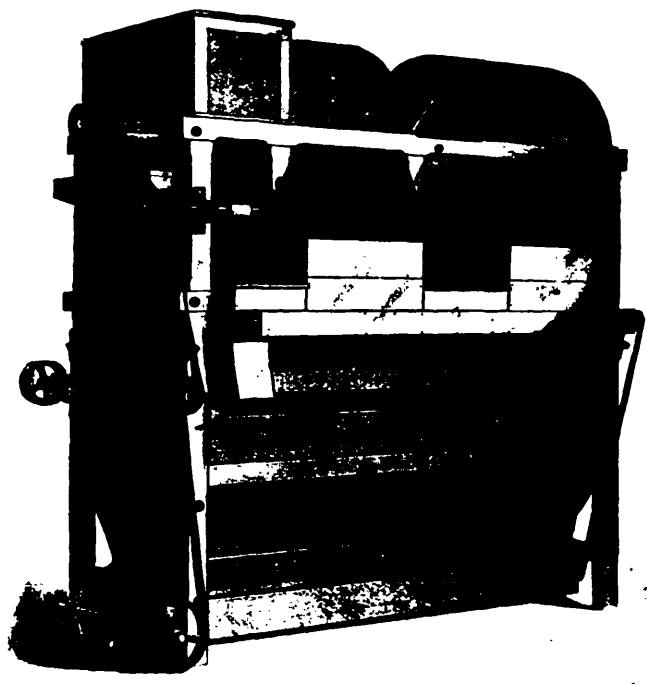
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We supply a combined Air and Sieve Purifier with a dust catcher in place of the usual purifier fan. The air is returned beneath the sieve. No air drawn from the outside. Dust from the air and the sieve purifiers discharged separately.



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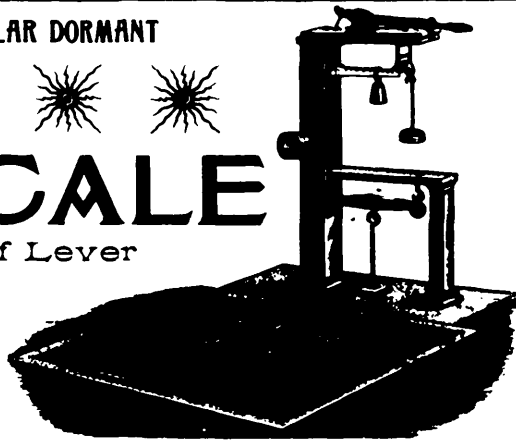


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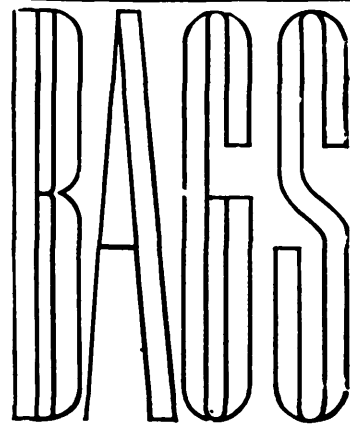
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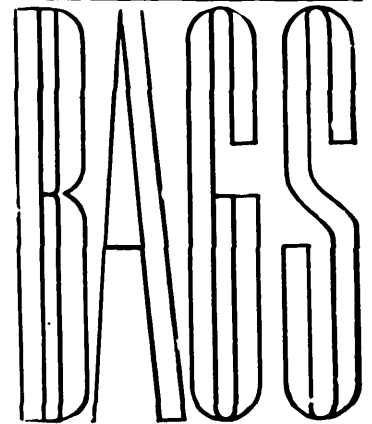
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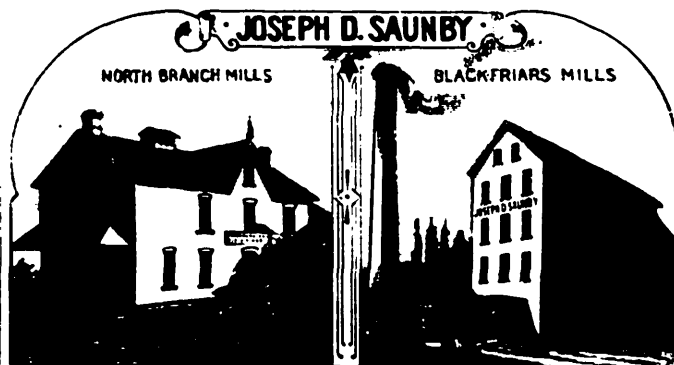
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