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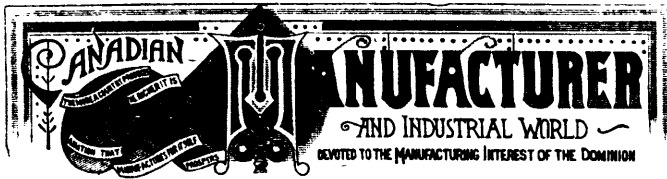
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THE LABOR CONGRESS AND PROTECTION.

At the recent Dominion Trades and Labor Congress at Ottawa a resolution was carried almost unanimously, only one delegate voting against it, to the effect that the system of expending public money in aiding and encouraging emigration to this country of mechanics and laborers is a gross injustice to the people of Canada, and more especially to the working classes; and that it is the duty of the Government to abolish the same. The denunciation also extended to other classes of emigrants, in which was included "paupers, indigents, orphans and children of vicious and tainted and criminal tendencies"; and of the immigration of these we have already spoken, and will speak again.

In the discussion on the resolution one delegate declared: "There are three men now offering for every job"; that "workmen are entitled to Protection as well as others"; another delegate: "Unskilled workmen are hurt more than any others by immigrants. If an immigrating mechanic cannot get employment at his trade he seeks employment side by side with the unskilled laborer. If immigrants came here of their own free will they would make good citizens, but for the Government to offer dishonest inducements is something disgraceful." He said he had voted for the N.P., but now his views were changing. "Where the manufacturers were protected the workingmen should get some Protection. The manufacturers were protected, but were the wages of the members of the Builders' Laborers' Union protected? No, the Government looked after the manufacturers alone." Another delegate asked: "Why, if there is a surplus in the treasury, the Government do not assist those Canadians who are without bread, work or home?" He did not want any immigration whatever at the public expense. He would have free immigration encouraged, but he protested against throw-

ing our own working people out of employment by bringing in undesirable immigrants. Another delegate pointed to the fact that there are large numbers of idle men walking the streets of Toronto. Those of them who came out as farm laborers generally floated into the cities, at least for a large part of the year. "This question," said he, "is a burning one among unskilled labor in Toronto." Another delegate, representing a plasterers union, said that of the 300 men he represented not more than sixty had been employed during the past winter; that for four months he and others had been idle, and when Spring came his union had to assist some of its members out of the country. Said he: "If we had less immigration we would have less emigration."

These expressions are exceedingly inconsistent, and we have reproduced them to indicate one direction in which the opponents of Protection are working, and the tools with which they are working. The fact is not denied that there are many unemployed mechanics and laborers in Toronto and other Canadian cities; that increasing these numbers naturally decreases their chances of employment, and that it is to be regretted that such a condition exists. That this condition is due in whole or in part to our system of Protection we deny; and we assert with equal vehemence that the evil is due in large part to these idle laborers themselves.

We have intimated that these idle laborers and their trades unions, some of them, are being made tools of by the opponents of Protection. This is evident from the fact that anti-Protection orators and newspapers are constantly urging their contention upon workingmen, endeavoring thereby to carry their allegiance and votes to the Free Trade party. As an evidence of this we call attention to a recent editorial in the *Toronto Globe* on the Labor Congress in which it says:

The notion that a high tariff implies better treatment and higher wages for the artisan has been pretty thoroughly dispelled of late, both in this country and in the United States. Here are a few facts which workingmen should keep in mind when the advocates of Protection appeal to them:

(1) Wages in Canada are higher in the unprotected than in the protected industries.

(2) Wages in Great Britain, which is Free Trade, are higher than the wages in any of the Protectionist countries of Europe.

(3) The tendency of Protection as we have it in the double row of custom houses along the frontier, is to prevent the development of many sources of wealth within Canada, and consequently to restrict the demand for labor; whilst, on the other hand, it tends directly to augment the price of the necessaries and conveniences of life, and therefore to diminish the purchasing power of wages.

(4) The policy of the Dominion Government in employing large appropriations of public money in inducing immigrants to come to Canada may or may not be justifiable from the point of view of the public interest. It is obvious, however, that the policy is a wholly illogical one for a Protectionist Government to pursue. The artisan is taxed for a fund designed, if not actually to provide assisted passages at any rate to promote in an indirect way competition with his own labor in a market where mills and factories are frequently shut down in obedience to the decrees of the combines in control.

In answer to this we urge the contention that there are no unprotected industries in Canada but as the *Globe* bases its remarks upon the language used by some of the delegates to the Labor Congress, from which we have made liberal quotations, we assume that the "unprotected industries" alluded to

are those in which many of these delegates are employed—plasterers, carpenters, bricklayers, builders' laborers, etc., where the products of such work as they are employed in, are non-movable, and for that reason were not enumerated in the tariff schedules. So also when it alludes to "protected industries," we take it the allusion is to such industries as foundries, machine shops iron works, wood-working establishments, etc. Now the *Globe* knows that it is guilty of misrepresentation and deception when it says that wages in Canada are higher in such an unprotected industry as house building, than in such a protected industry as steam engine building. If wages are higher in such "unprotected industries," as were represented at the Labor Congress, why do these laborers protest against Protection as some of them and the *Globe* do? Injudicious immigration may unfavorably affect them, but Protection cannot.

As to wages being higher in Free Trade Britain than in any of the Protectionist countries of Europe, there is this to say: There is no contention or dispute in which this statement has any bearing, neither does it have any relevance whatever in considering the policy of Protection as prevailing in Canada, and affecting the laboring classes employed in the *Globe's* unprotected industries. It is to be noticed and remembered that among the kickers against Protection in the Labor Congress there were none employed in any of the *Globe's* protected industries; and as far as the reports go, these employees are all well satisfied with the political situation. But a comparison is in order as regards wages in Free Trade Britain and Protection Canada; and the fact that a large and steady stream of emigrants pours from Free Trade Britain towards the Protectionist countries of America proves the untenability of the *Globe's* position. If this were not so what were the labor delegates talking about? Whatever assisted immigration Canada has ever participated in has been to bring people from Britain; and these people would never have left that country if they had received better wages there than here.

The *Globe's* third contention is to the effect that the tendency of Protection is to prevent the development of house building in Canada, one of our many sources of wealth, and consequently to restrict the demand for labor employed in house building. This is absurd. Every man employed in the building trades knows that the tendency of Protection is to develop the manufacturing and also the agricultural industries of the country; and this means not only factories, workshops, warehouses, offices, etc., but also farm houses, barns, granaries, elevators, etc.; and in consequent extension of such lines of railroads, station houses, freight sheds, etc., all of which are immovable fixtures, and for that reason are not included in the tariff schedules; as also locomotives, passenger coaches and freight cars, the manufacture of which is protected, and which are employed in the traffic growing out of the products of the industries which give so much employment to these laborers. These laborers understand that without Protection these building operations would not be carried on; and if they were not carried on there would be very little work for them. The *Globe's* contention that Protection augments the price of the necessaries and conveniences of life to laborers employed in the unprotected industries, thereby diminishing the purchasing power of wages, induces the

enquiry. "Where would the wages come from without activity in these industries, and how could there be any activity in them without Protection?"

While the *Globe* seemingly takes great interest in the cause of these kicking laboring men, seeking to increase their unjust and unreasonable objections to Protection and to further immigration, we beg to call their attention to what this Jesuit says about immigration. It says: "The policy of the Dominion Government in inducing immigrants to come to Canada may or may not be justifiable from the point of view of the public interest." Will some laboring man ask the *Globe* the direct question and demand a categorical answer thereto, Yes or No, if it is in favor of the Dominion Government inducing immigrants to come to Canada? If it is not, then laboring men, such as these represented at the recent Congress, whose views we have published in the beginning of this article, may reasonably conclude that, as far as that question is concerned, the *Globe* is their staunch and true friend. Why should the *Globe* hesitate to answer such a question? If it refuses to answer them it stultifies itself, and the workingmen will know how to appreciate its anxiety on their account.

But we can prove by the editorial utterances of the *Globe* itself that it is in favor of just such immigration as the workingmen protest against. Recently, discussing the question of Britain fixing prices for the rest of the world regardless of the cost of production, it said:

John Bull is not a sentimental person—he wants to get everything at the lowest figure, and will purchase the cheapest article. In order to enlarge our business with him, therefore, it is necessary not only that we should develop our agricultural lands by securing population from the outside, but that we should be able to undersell all competitors. Of late years what are known as cheap labor countries (such as China and India) have been repairing to his market with all sorts of products. If we wish to increase our trade, then, we must cut prices to the lowest notch. Unfortunately the N.P. stands in the way. It exalts the price of everything the farmer has to buy, that is, makes everything dearer than it ought to be, and than it is in most of the countries referred to (such as China and India), so that the cost of producing food products is augmented, and to that extent we are disabled at the start in the fierce struggle for the survival of the cheapest.

Do the laboring classes in Canada know what the *Globe* means by "securing population from the outside" so that we can be able to undersell all competitors in the British market, and to start fair with the "cheap labor countries" of the world in "the fierce struggle for the survival of the cheapest"? The *Globe* itself tells us: "The price of labor and the cost of living are ridiculously low as compared with the same items in Canada." Wages for labor on Canadian farms average about a dollar a day—laborers employed in the building trades know about how much they get, and we know, and the *Globe* knows that the ordinary price of labor in India is ridiculously low, averaging less than ten cents a day. The Labor Congress protested against the employment of Chinese laborers in mines, suggesting that a penalty of \$500 be imposed for each offence against the owners of mines in which Chinese labor might be employed; and the *Globe* advocates cheap labor—cheap enough to enable Canada to compete with India in the British market. This is a specimen of the sincerity of the *Globe* for the industrial interests of Canada. It tries to foment discontent in Canadian workmen against the N.P. because the Government

as it says, advocates immigration, and it tries to foment discontent in Canadian farmers against the N.P., because the policy of the N.P. is against the introduction of the cheap labor of China and India.

NATURAL INDUSTRIES.

THE value of a parrot is based upon the number of words the bird may be able to speak, and if it can use a large number of words in several languages, it will command a greater value than if it is minus that accomplishment. The fact that the parrot can call the name of Deity with fluency and frequency adds still further to its value.

There are men, even here in Toronto, who seem to pride themselves upon their ability to talk volubly, if not intelligently; and it is to be observed that although their utterances may not be in a multiplicity of languages, yet they are nothing more nor less than jargon that not even themselves may understand; and it is not infrequent that what they think is the value of their jargon is increased by untimely and irrelevant allusions to sacred characters.

In a recent issue of a Toronto contemporary is a letter written by Mr. Stapleton Caldecott, in which he thinks he attempts to demolish the N.P.; and in doing so he makes use of phrases and expressions that would put a parrot to the blush. For instance, he alludes to a writer who, he says, "defends the imposition of class taxation upon the remarkable ground that but for this taxation Canadian manufacturers could not live, because where goods are manufactured by large mills running upon special lines they can be made so much cheaper and better; or, in other words, the natural industries of Canada are to be taxed and handicapped in the race, because certain monopolists desire to have this market surrounded by a Chinese wall to prevent the laboring sons of toil deriving the full advantage that results from making goods in special lines and in large quantities." This is a long sentence; but the meaning of it is, we take it, that Canadian manufacturers should not be allowed the benefits of tariff protection if they operate large mills running upon special lines that can be produced at less cost in that way than under other circumstances. Mr. Caldecott's objection, however, does not extend to foreign manufacturers who operate large mills in special lines; and it is the products of these foreign mills that he desires to have free access to the Canadian market to the exclusion of the home product.

Mr. Caldecott does not explain what he means by the expressions "natural industries of Canada" and their being "taxed and handicapped" by monopolists who desire to surround Canada with a Chinese wall. While the long sentence is considerably involved, it is difficult to evolve any lucid idea of what is meant by "natural industries." Is the term to be considered as contradistinctive of "unnatural industries?" Will Mr. Caldecott enlighten the world as to what are the "natural industries" of a country, and also the "unnatural industries"? If a parrot should, in its jargon, utter the phrase "natural industries," no matter how well educated it might be, we would doubt its ability to give a sensible definition in answer. But when Mr. Caldecott uses that phrase we suppose he is able to inform the world the meaning of it. No

doubt Mr. Caldecott would be pleased to create the impression that "unnatural industries" are those which exist by and through Protection; but if he describes "natural industries" as those that are not protected, the definition will not be accepted as satisfactory. He must explain what they are, why they are "natural," and if their nature would become changed under a change in the fiscal policy of the Government.

The beauty, lucidity and excellence of Mr. Caldecott's letter appear in characters of refulgent light when he gets off the following:

"Is it not a pitiful sight to see, at the close of the nineteenth century, a mighty nation like our neighbors and cousins across the line spending the time of their (supposed) most sagacious men devising plans to prevent man trading with his fellow-man in utter subversion both of economic truth and Christ's grand definition of who is our neighbor and the brotherhood of man the whole wide world over?" It will be absolutely heartless in Mr. Caldecott if he does not explain this sentence. No doubt our American cousins will wince under the sarcasm hurled at them; but what the gentleman should explain, if he can, is how he came into possession of the fact that Christ ever objected to Protection in any form; that He would, if on earth, object to the N.P.; or that He would favor the fad of Mr. Caldecott? To save immense mental strain this may be answered in sections. Also this: What has Christ's grand definition of the "brotherhood of man" got to do with the fiscal policy of Canada? This may be answered in sections also.

This thing of ringing the sacred name of Christ into political discussions is nauseating and should be abated. It is not becoming in any man to endeavor to make political capital by such means. Does Mr. Caldecott place Christ in the breach between Protection and Free Trade? Does he draw the line there? Shame that such clap-trap is resorted to.

A parrot wouldn't do so.

INABILITY TO COMPETE.

It is a noticeable phase of the political discussion now going on, that the advocates of Reciprocity and Annexation are constantly urging that Canada and Canadians will be better off if our lot is cast with that of the United States. They tell us that because of their peculiar advantages of business, particularly those of their manufacturing industries, whatever we may require in those lines can be had of our American neighbors of better quality and at cheaper prices than what they can be produced for in Canada. They tell us that we should do well to send across the line our raw products, such as iron ores, lumber, coal, etc., allowing our neighbors to do all our manufacturing for us; and to receive from them all the manufactures we require. That we should become an agricultural people entirely, confining our industrial pursuits to the growing of grain and other farm products; the felling of timber; the mining of ores and coal, and the catching of fish. They contend that these are "indigenous" and "natural" industries, although this is not strictly true; and they contend that most or all of the other industries of the country are "protected" or "exotic" in their character, and therefore should not be encouraged. They say that "indigenous" industries only should be

encouraged, and that all exotic industries should be discouraged. Under such a policy the country would grow rich; made rich by the vast volume of trade that would follow. All transportation lines would be kept fully employed hauling our indigenous raw products out of the country, and hauling in all our supplies from abroad. This would give us a maximum foreign trade, which, they say, is the measure of a country's prosperity. They tell us that the internal trade of a country is of no special value to it, indeed the hauling of wheat from Manitoba to Toronto for manufacture into flour for food for the people, and the bringing over of steamer loads and train loads of fruits and vegetables from the Niagara Peninsula for the same purpose, is not to be considered of any more weight in measuring the prosperity of Canada than would be the trade between the corner grocery and the pantry of the consumer.

Of course this argument is exceedingly absurd; and any person who desired to analyze it would so find it; but it answers a purpose for those who use it.

The object of these arguments is to discourage all other but these so-called "indigenous" industries in Canada, thereby suppressing all feelings of independence in the people, and leading them to look to another people as being superior in their ability to produce manufactures of first class quality at low prices. Of course there is no patriotism in this; but the advocates of this policy are not patriots, and whether they desire to sell out their country or not, the inevitable and final result of it would be Annexation to the United States. Unrestricted Reciprocity is a step, and a long one, in that direction. If these Annexationists are honest they should declare that this is what they aim at. An open foe to Canada's autonomy and final independent nationality is more to be respected in advocating Annexation than a secret enemy who seeks to compass the same end by the more disreputable and insidious methods of Unrestricted Reciprocity.

Another feature of the situation is that wherein these Annexationists tell us that the N. P. is an incubus that bears down and depresses every industrial interest in the country; that the tariff is a burden too grievous to be borne, and that the best way to become relieved of its weight is—not by Free Trade with all the world, but with the United States. They neglect to state the fact, and it is a fact, that the American Tariff is at least fifty per cent. higher than the Canadian tariff; and that if we have Unrestricted Reciprocity, or Commercial Union, or Annexation, the lower duties of the Canadian tariff will have to give way to the higher duties of the American tariff.

Canadians should not lose sight of this. They should ask themselves "Why should Canada remove the tariff barrier entirely as affecting the United States?" "Why should Canada accept the American tariff as the standard?" "Why should Canada impose the high American tariff upon all imports from Britain, in preference to the present low Canadian tariff?" They should remember that the United States attained the acme of its prosperity and wealth under Protection; and that what that policy did for that country it will do for Canada if persevered in. All mechanical industries are much older and better matured there than here, and it should be remembered that even now that country does not deem it safe or prudent to relax its tariff safeguards and allow the free competition of the cheaper labor countries of Europe. If Protection is a good

thing for America it is a good thing for Canada, and if America will not surrender it, neither will Canada surrender it.

The Annexationists are gloating in ghoulish glee over the fact that a concern who several months ago engaged in manufacturing umbrellas in Toronto, and said to be the only works of the kind in the county, had come to grief. They exultingly point to it as a proof that this was an exotic that ought not to have been undertaken, and the prancing around the defunct enterprise reminds one of the orgies practised by savage cannibals around a victim who was to be roasted and eaten. They conceal the fact that the system of tariff protection had absolutely nothing to do with the financial trouble that befell the company, that there was not capital enough in it to carry it on, and that dissensions in the personnel of it was the immediate cause of its disruption. The goods produced were all first class and gave entire satisfaction to the trade, both as regarded quality and price; and these enemies of Canadian enterprise might and should have known that although imported umbrellas are liable to a duty of thirty-five per cent., yet the article manufactured by this concern were sold considerably cheaper than what imported umbrellas of same quality could be sold for. It is absurd to claim or believe that any umbrella factory would ever be established in Toronto under Reciprocity with the United States.

The whole question resolves itself into this: Whether it is desirable to establish and maintain diversified manufacturing industries in Canada. If we are ever to be commercially independent of the rest of the world; if we are to manufacture here in Canada any of the thousand things we need in our everyday life, it will have to be by and through Protection. It is no disgrace to say that at this time, under existing circumstances, we are unable to compete with the older manufacturing countries, and Canadians will not allow themselves to be diverted in their allegiance to the N. P. by sneers in that direction.

INDIGENOUS INDUSTRIES.

THE phrase "indigenous industries" is time and again paraded by Annexation orators and journals as descriptive of the industries which they say would flourish in Canada were protection withdrawn. It is unmeaning, however; for an indigenous industry is one that is a peculiarity of the country and a native of the soil; and if it does not possess these features it is an exotic. Now what are Canada's really indigenous industries? The mining of coal and ore, the felling of timber and the capturing of fish and animals, and perhaps the tilling of the soil are embraced in the category; and all these may be indigenous to other countries also. Exotic industries include the manufacture of timber into lumber and of ore into iron; the preservation of fish; the conversion of skins into furs and leather, and the manufacture of grain into bread; and they also include the manufacture of about everything else that is manufactured.

The Toronto *Globe*, however, ventures to enumerate some industries as "indigenous" which are assuredly exotic. In discussing the tariff and gloating over the failures of an umbrella factory it says:

If Free Trade with the States had proved fatal to this infant, the operations might have been inconvenienced by

temporary lack of employment, and the owner might have suffered a little in pocket; but with these exceptions there would have been a very distinct gain all round. Instead of an umbrella factory we should probably have furniture factories, for we possess an abundance of wood; boot and shoe factories, for we have cheap hides and cheap bark; pulp factories, for we have plenty of white woods; and other industries adapted to our economic position, each and all with a continental market before it. The mineral wealth of Hastings and of Lake Superior could then be turned to account. The wharves of Toronto would regain their old appearance with the advent of a free coasting trade; and in all likelihood shipbuilding would take root. The malting of barley, as well as the growing of it, would become profitable. And on the top of all we would get cheaper umbrellas. The infant industry policy entices and forces capital and labor into the least profitable branches of production, whilst the restriction to which we are subjected by the American tariff prevents us from developing our best resources and providing employment for our people. It would be better, even without continental Free Trade, to close the exotic industries which have no reason for existing other than the N.P. and pension all hands out of the public chest, than to pay the enormous tribute in men and money which they exact. Those who say that we could not maintain indigenous industries, such as the ones enumerated above, in the face of American competition, slander the brains and enterprise of the country, and ignore its superiority to the United States in respect of many natural advantages.

We herein have it on record what "indigenous industries" are, or what the *Globe* says they are: furniture factories, boot and shoe factories, pulp factories, the malting of barley and shipbuilding. But how supremely ridiculous in the *Globe* to give that character to these industries. None of them are any more "indigenous" to Canada than umbrella making, or any other exotics. It might be said that the aboriginal Indians are indigenous to Canada, but white men certainly are not: and it is barely permissible to apply the term to such occupations as the Indians may have been engaged in when the white man settled in the country. The white man was and is an exotic, and all the trades and industries that he introduced were and are also exotics. When the white man first settled in Canada did he find the Indian engaged in the manufacture of furniture, boots and shoes, wood pulp, the malting of barley and the building of ships? If so, then these industries might be called "indigenous"; but if they are the outgrowth of the civilization of the white man—if they were introduced by him, then they certainly are not "indigenous" but "exotic industries."

We are told that Free Trade with the United States would prove fatal to such exotic industries as umbrella making, but that it would secure the establishment on a firm base of certain other exotic industries. Why? What is there about Free Trade that would do more for these industries in Canada than it has ever done for them in the United States? The manufacturing industries of that country are held up to us as being of a superior character, far above anything that we have or can have in Canada unless we have Free Trade with it. Why Free Trade with the United States as a means to the more secure establishment of these industries here? Did the United States

establish such industries by means of Free Trade? The *Globe* knows better; and it also knows that that country, as far as these industries are concerned, is farther away from Free Trade than ever—that they became established only by and through Protection, and that that Protection is fifty per cent. greater than Canadian Protection. If the above enumerated industries are "indigenous" to Canada, and if they will be made permanent and profitable by Free Trade with the United States, it might be supposed that they were indigenous to that country, and had been made permanent and profitable there by Free Trade; but as we have shown, neither of these suggestions are correct.

The conclusion then is that the *Globe* wilfully misrepresents facts, and from these misrepresentations draws conclusions impossible to be arrived at in any other way. In fact its argument fails and falls a stillborn abortion.

The fact is pointed out that many Canadians have distinguished themselves in different walks in life in the United States and that certain Canadian manufacturers carry on industries on both sides of the frontier with a considerable measure of success; which being the case, the *Globe* enquires "why should any except certain spoon-fed manufacturers dread American competition on fair and equal terms? As we have repeatedly shown, this and the other arguments of the Annexationists is to depreciate Canada and Canadians and to force political union with the United States. Annexation is the aim and object; and in working in this direction the Annexationists do all they can to influence American legislation hostile to Canada. We are to be squeezed and coerced into Annexation. If these un-Canadian Canadians loved their country; if they desired to see it maintain its independence; if they wanted to see it grow to be the rival in greatness and prosperity of the United States, they would not do as they now do. They might desire to change the personnel of the Government—to have rotation in office—to rotate the other fellows out and to rotate themselves in, but they would never do it at the sacrifice of the autonomy and dignity of Canada. The United States is a great nation: but Canada may also become equally great; and this greatness lies before us in the near future, and will be attained if unfaithful souls do not thwart her. If this greatness is to be achieved, it will not be by truckling to the United States, nor a surrender of our well defined policy. It is true that certain of our manufacturers have established branches of their industries in the United States; but this does not make them advocates of Free Trade with that country, in fact, many of them are numbered among the most ardent supporters of the N.P. It is a slur and insult gratuitously cast upon all Canadian manufacturers supporters of the N.P. to speak of them as "spoon-fed" and as "dreading American competition." Are not these competing American manufacturers also "spoon-fed," if that is what is meant by the advocates of Protection? And do they not also dread British and German and French competition? Why does the *Globe* cast slurs upon Canadian manufacturers and have nothing but fulsome praise for American manufacturers? Why does it prate about "indigenous industries?"

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EDITORIAL NOTES.

THE philanthropists who are trying to better the dwellings of the poor will have to turn their attention to rural districts as well as to crowded cities. In an English village near Bridgewater an old laborer, with his wife, two daughters, and eleven children belonging to the daughters, were herded in a hovel containing one room 14 ft. by 9 ft. and 6 ft. 6 in. high; another 12 ft by 9 ft. and a garret above, reached by a ladder. The only water supply was from a neighboring ditch into which the sewage of the premises ran.—*Toronto Globe*.

And this in Free Trade Britain. Surely Free Trade is no blessing to the poor farmers in Britain. Protection is what they need.

COMMENTING on the New York labor troubles, the *Toledo Blade* gives the following list of weekly wages paid to the operatives in some of the English trades:—Bricklayers, \$7.68; masons, \$7.68; carpenters, \$7.66; plasterers, \$7.80; hod-carriers, \$4.94; bakers, \$6.17; blacksmiths, \$7.37; cigar-makers, \$6.07; bookbinders, \$6.77; printers, \$7.17; street railway employes, \$6 00; teachers \$12 for men and \$7.70 for women; common laborers, \$4.70. This is where Free Trade is doing its perfect work; and it is this exceedingly low rate of pay to working people that makes it possible for British manufacturers to undersell countries where working people are paid higher wages, as in Canada. Protection is what working people need in Canada.

THE area of land at present occupied by the Toronto Industrial Exhibition Association, is found to be entirely too small to afford the buildings necessary to cover all the exhibits that offer, and to afford suitable accommodations for the three hundred thousand visitors who went to the Fair to see them. There is not a building on the grounds sufficiently large to meet the demands made upon it for exhibition purposes; and the grounds themselves are not sufficiently extensive to allow the enlargement of the buildings, or the erection of additional ones, leaving the vast concourses of people comfortable elbow room. The grounds should be extended to at least twice the present area, and this extension should be to the east, along the lake front. By all means let the Fair grounds be enlarged.

THE Fair of the Toronto Industrial Exhibition Association which closed this week was the most successful ever held. There was but one day on which the receipts were not larger than on any corresponding day in any previous year, and the falling off on that day was owing to the exceedingly inclemency of the weather. During the ten days of the continuance of the Fair, the receipts amounted to \$69,840 against \$57,691 last year, an increase of over \$12,000. The exhibition of this year was decidedly the most successful in the history of the Association. Under the auspices of the present Association their first fair was held in 1879, when the receipts amounted to \$26,960, and during the twelve years since then, including that year, the receipts have aggregated nearly a half million dollars—to be exact \$489,948. As large as the attendance was last year, the increased receipts this year indicate that at least 300,000 persons visited the grounds during the continuance of the Fair.

THE United States did an enormous foreign trade during the past fiscal year. The total value of its exports and imports for the twelve months was \$1,649,192,014. Large as this amount is, however, it is small compared with that of the United Kingdom's foreign trade. In fact it is not as large by \$140,000,000 as the total exports and imports of the latter country for the first six months of this year alone. And yet the population of the United Kingdom is smaller by 40 per cent. than that of the United States.—*Mail*.

What's the matter now? The *Mail* is always telling that Protection and foreign trade are antagonistic: that if a nation wants to sell abroad it must also buy abroad, and this cannot be successfully done unless Free Trade prevails. But here it tells us that the United States actually does "an enormous foreign trade." Yes, yes. With a population almost double that of Great Britain, the manufacturers of the United States find it to their interest to first supply their home market before looking for foreign markets. A population of 64,000,000 require large quantities of manufactures.

THE Free Trade papers are constantly telling that the purchasing power of a day's wages is greater in Britain than on this side of the Atlantic. We have repeatedly shown that the average workman in Canada and the United States not only gets higher wages than the British workman, but that he lives better, getting more food, more clothing and better accommodations for his money. Additional evidence of a part of this statement is afforded in a fact stated by Mr. J. R. Dodge, Statistician of the United States Department of Agriculture, in an address recently delivered by him at Indianapolis. He stated that "the average per capita consumption of meat in the United States is probably not less than 175 pounds per annum. Of other civilized nations, only Great Britain exceeded 100 pounds, and many of them scarcely averaged fifty pounds." In many European countries the laboring classes seldom have meat oftener than once a week, while in Canada there are few families but have that article on their tables every day, and in many instances oftener than once a day.

OUR respected contemporary, *Farm Machinery*, begs the question in alluding to what we recently said about the hard lot of Dakota farmers. No matter how much American journals may dislike to face the fact of the distress prevailing among farmers in Dakota, the matter is patent to the whole world, and charging us with having neglected to allude at the same time to barren lands that are to be found along some of the Dominion railroads, will not conceal or alter it. Our contemporary probably unintentionally misunderstood what we said about the Dominion Minister of Agriculture having sent an agent to Dakota to arrange for a migration of farmers to Canada. These suffering farmers were Canadians who had been induced to go to Dakota; and having met disaster there, in common with many others, asked and received assistance from their Government to get back to Canada. This was commendable, not discreditable, as all will admit. It may be that "fertile soil does not have to seek settlers"; if the soil of Dakota is fertile its tornados, whirlwinds, drouths and hail storms are not salubrious, and more than counterbalance all the advantages the State has to offer, else why the migration? We call the attention of our contemporary to the fact that the

recently gathered wheat crop of Manitoba is much larger than ever, and the yield per acre much larger than in Dakota or any other state of the American Union.

SPEAKING of the migration of French Canadians from Quebec to New England, a Toronto paper says the movement is an economic one—that “the French find it more advantageous to work in New England factories than to cultivate the soil at home under existing conditions.” The soil and climate of Quebec are as desirable as are those in New England, and the migration is not to find opportunities to follow agricultural pursuits, but work in factories. And yet the Free Trade papers tell the people of Quebec that they should seek their living by growing wheat for the English market rather than by working in factories in Canada. The more factories there are in Canada, the more work the people of Quebec will have to do at home in them, instead of seeking employment in New England. The prosperity of the people of Quebec lies in increasing the number of consumers of farm produce. This can be accomplished by the multiplication of factories, and the multiplication of factories can be accomplished only through the influence of Protection. The nation that manufactures for itself prospers.

It is a pity the Labor Congress cannot see its way to discuss the numerous economic questions involved in the Federal tariff. It would find that the incidence of taxes on wages, though artfully concealed, is heavier than the incidence on the incomes of the rich—that it is a tariff which scourges the poor man and gives him absolutely nothing in return.—*Toronto Globe*.

This is a development of a part of the scheme of the Grit party to capture the labor vote. With rare good judgment the labor organizations have steadily refused to amalgamate with either of the political parties, holding themselves free and untrammelled to criticize in any direction. That they have accomplished much good for themselves through this independent course is evident. These organizations embrace men of all political parties; and if the Labor Congress had seen its way to enter upon a general discussion of economic questions involved in the tariff, the occasion would have been the death-knell of its influence and value. Laboring men, labor unions and the Labor Congress know how to value the *Globe's* interested advice. Whenever any portion of the labor organizations sink their distinctive character as non-partisans and avow themselves Free Traders, the same hour would find other portions of them taking similar action in favor of Protection. Evidently such a split could but be disastrous to labor interests, and therefore should be avoided. Meanwhile laboring men will decline accepting the *Globe's* opinion, that the incidence of tariff duties upon wages is heavier than that on the incomes of the rich. They know this to be false.

EVERY season shows marked improvement in the binding machines and mowers offered to Canadian farmers, and simplicity and strength in the parts where it is most required, are marked features. The knotter has always been a source of trouble in the harvest field, but we know that the binders for 1891 will embody a simplicity in the construction of this important adjunct which will be hailed with pleasure. The prices of binders are now down to the ordinary cost of a reaper some years ago, which places this wonderful labor-saving machine within the reach of all.

SPECIAL ADVERTISEMENTS.

Advertisements will be accepted for this location at the rate of two cents a word for the first insertion, and one cent for each subsequent insertion.

TISDALE'S BRANTFORD IRON STABLE FITTINGS.—We lose no job we can figure upon. Catalogue sent free. The B. G. Tisdale Co., Brantford, Canada.

FOR SALE.—Plant for making Washers, consisting of power press, with full set of dies, small shears and tumbling barrel. This is the only washer making machinery in Toronto. Apply to 10 and 12 Pearl Street, Toronto.

A DYER.—Blue vats and fancy colors in wool and piece. Fast carriage green cloths, tricots, flannels, etc., etc. Am at present engaged in the States, but desirous of coming to Canada. Address, GUBELINUS, this paper.

FOR SALE.—In town east of Toronto, Two Set Woolen Mill, fully equipped and in good running order; never-failing water-power, main building stone, 50x150 feet, three stories; picker house, brick, 24x30, two stories; railway and water convenient for shipping, will sell with or without machinery. For further particulars address this office.

FACTORY TO LET.—Ten years lease; containing about 11,000 feet of floor space, fitted up complete with engine, boilers, shafting, steam heating, gas light and water service fixtures throughout; adjoining building can be had if desired; five floors, each 30x110, with hoist. Apply to Samuel May & Co., 111 Adelaide Street west, Toronto.

FOR SALE in Kent County, Michigan, the Buchanan Mill property consisting of a first class lumbering mill the extensive water power in connection with it including the entire power furnished by the river with real estate on both sides of sixteen acres, situate one mile from Main Street of Lowell, a rich farming country surrounding an excellent location for paper mill, furniture factory, woolen mill and the many uses that require power. Also a splendid home and farm of 87½ acres with buildings, fruit, evergreens, etc. For further information call at the premises of JAS. R. BUCHANAN, Lowell, Michigan.

TO MANUFACTURERS.—The Town of Thorald, Welland County, Ontario, is a splendid site for manufactures of all kinds, and reasonable encouragement will always be given for the settlement of bona fide industries. It is situated on the boundary between the Counties of Lincoln and Welland; population, 3,000; lighted by electricity (public and private circuits); electric street railway connection with the City of St. Catharines, four miles distant; nine miles from Niagara Falls; the New and Old Welland Canals, also the Welland (G.T.R.) and Niagara Central Railways, all run through the town; water power from the canal; bonded debt small; situation, on the brow of the mountain; overlooking Lake Ontario, most picturesque; public health not excelled; five churches; first-class High school, also two Public and one Separate school. Any information desired will be cheerfully given by application to JAMES LAWSON, Mayor.

MANUFACTURING PROFITS IN GREAT BRITAIN.

THOSE who are opposed to the protective tariff system are fond of holding up our manufacturers to public view as monsters of greed, as self-aggrandizing appropriators of enormous profits wrung from victimized consumers rendered helpless by Act of Congress, and as proper objects upon whom to expend scorn and execration. When, in times of prosperity, some of our manufacturers are able to declare a dividend of ten to twelve per cent., they are singled out for abuse and denounced without stint as "robber barons," "tariff pets," "a privileged class," until it might be supposed that, instead of being bulwarks of strength to the nation, they are rapacious enemies of society. But we never hear from these noisy and persistent objectors any complaint about the marvellous gains which are not uncommon among British manufacturers. For example, *London Engineering*, last month (August 8th) contained the following notice: "The high rates of iron have shown themselves in a remarkable way, in connection with the Consett Iron Co., Limited, which, with a paid-up capital of £700,000, made a net profit of £366,000 for the year ending June; 33½ per cent. is paid in dividends, leaving a balance of £134,000, which is applied for enlarging works and buying collieries. In 1889, 20 per cent. was paid. In regard to another corporation, the *American Manufacturer's English Letter* made this statement: "The report of the directors of Henry Bessemer & Co., Sheffield shows a net profit for the year of £37,138. The directors recommend the payment of a dividend of 20s. per share, which, with the 20s. per share paid in July last, makes a dividend of 25 per cent. for the year. They also recommend writing off £5,000 from the improvements and additions account. This will leave a balance of £23,216 to be carried forward to next year. This report is considered very satisfactory. Brown & Bayley's steel works have just declared a dividend at the rate of 17½ per cent., making, with the interim amount of 7½ per cent. already paid, a splendid total dividend of 25 per cent. for the year." About the same date the *London Iron and Steel Trades Review* made these announcements: "Bell's Asbestos Co., Limited, have declared an interim dividend of 10s. per share (free of income tax) for the half year ended 30th June last, being at the rate of 20 per cent. per annum. The annual report of Sandwell Park Colliery Co., West Bromwich, shows that during the past year a profit of nearly £31,000 has been earned making, with the balance brought forward, about £34,000 available for dividend. The directors recommend the payment of 10 per cent. per annum dividend, with a bonus of 10s. per share, equal to a total dividend of 20 per cent., besides carrying £6,000 forward. During the past two years the company's £10 shares have advanced from £9 to £19, or 110 per cent."

Here is plenty of unadulterated food for reflection on the part of the tariff howlers, whose sensitive souls are harrowed to the very core whenever 10 to 12 per cent. dividends are declared by manufacturers in the United States. If those rates of profit are evidences of hands of greed thrust by the Act of Congress into the pockets of the people, how much greater must be the plundered helplessness of the British consumers, under the blessed policy of so-called Free Trade! To make the contrast still worse, those lords of the rolling mill and earls of the trip-hammer, while reveling in such enormous gains, pay their toiling slaves of British Free Trade such a pittance of compensation as to be a mere apology for American wages in contrast with the comfort wages received by American workmen in the same lines of production, illustrated, for instance, by \$1.70 per ton paid to the puddler in England against the \$5.50 paid to the puddler in Pennsylvania. Companioned with the high profits of British mill owners are degradation and privation and wretchedness among the toilers, while the consorts of American dividends are for the workers largeness of life, including plenty to eat and to wear, and a surplus from earnings to deposit in the savings bank. These radical differences in the purchasing power and other conditions of the great mass of consumers in England and in the United States are prime factors of the tariff problem which the professional and chronic remonstrants against the Protective system never take into their calculations, simply because the set purpose of these agitators is not, as they claim, the ascertainment and the vindication of the truth, but victory by hook or by crook for their own dear selves, without any consideration whatever for the evil consequences to other people. Their science of political economy is a science based upon assumptions, usually false assumptions, which reinforce their designs far more satisfactory than could any range of solid facts drawn from either individual or national experience. To reason with such anti-protectionists, hoping to enlighten their minds and change their views, is to cast pearls before swine. All that can be done is to counteract their efforts by public exposure of their hypocritical pretenses, their unfounded assertions,

their adroit plausibilities and their brazen lies, while watching diligently to frustrate emissaries who cross the Atlantic to our shores with bribes in their hands to tempt unscrupulous men to betray their trusts — *Industrial World*.

CANADIAN MANUFACTURERS' ASSOCIATION.

A GENERAL meeting of the Canadian Manufacturers' Association was held in their office in the Press Building at the Fair Grounds, on Thursday afternoon last. Mr. Bennett Rosamond, President of the Association, occupied the chair, and in the absence of Mr. Frederic Nicholls, the Secretary, Mr. J. J. Cassidey acted in that capacity. Mr. W. K. McNaught, First Vice-President, read a letter from Mr. Nicholls explaining and regretting his absence.

Mr. R. W. Elliot, Chairman of the Executive Committee, reported that his committee were ready for action regarding the testimonials to Secretary Nicholls and Treasurer Booth, voted at the last general meeting of the Association. He then read the following address:

FREDERIC NICHOLLS, Esq.,

Secretary of the Canadian Manufacturers' Association.

DEAR SIR,—The Canadian Manufacturers' Association desire to express to you their sense of the value of the services you have rendered not only to our Association, but to the Dominion of Canada at large, and to put upon record the fact that at all times you have been able, willing and ready to formulate and publish the views of the Association in regard to finding and establishing diversified employment for all those who, by nativity, imperial birthright or choice are at home in this Dominion.

Our Association are aware that it has been no light task to you to undertake and successfully carry out all that you have assumed in this direction, and transpiring events demonstrate the necessity for all prudent and patriotic men to stand together in defence of the common interests of our country. These events emphasize the fact that all members of the body politic are as closely and intimately bound together in these interests as are our physical frames. We must all suffer or rejoice in common.

Our Association is composed of men who are veritable pioneers in Canadian industrial enterprises, seeking, it is true, both fame and fortune, but they are inimical to no other Canadian industrial interests.

Feeling that you have done, and will continue to do, most important work for our and the general welfare, and knowing that this work has been wholly unrequited, we ask you to accept this address and testimonial, accompanied with our fervent wishes for the health and prosperity of yourself and family.

Signed in behalf of the Canadian Manufacturers' Association:

BENNETT ROSAMOND,
President.

GEORGE BOOTH,
Treasurer.

R. W. ELLIOT,
Chairman Executive Committee.

Mr. J. J. Cassidey, editor of the *CANADIAN MANUFACTURER*, responded for Mr. Nicholls as follows:

Mr. Chairman and Gentlemen of the Canadian Manufacturers' Association,—It is my duty to state that Mr. Frederic Nicholls, your Secretary, and the intended recipient of this valuable address and testimonial, is absent from Toronto, and that I am called upon to act in his behalf. When this meeting was called Mr. Nicholls expected and intended to be present, but other duties have called him away.

As you state in your address, we are all aware of the fervid and indefatigable manner in which Mr. Nicholls has always responded to any calls this Association may have made upon him to render service in behalf of our members and of Canadian manufacturers generally. Peculiarly fitted and adapted to look after these interests, he has for years, and long before his connection with your Association, studied and mastered the intricate questions involved, and now he is considered one of the best tariff experts in Canada; and I state, what we all know, that whenever it has been made his duty to approach the Government on behalf of this Association to make requests and offer suggestions on tariff matters wherein Canadian manufacturers were affected, he has always been most courteously received, his requests and suggestions treated with the utmost consideration, and there have been but very few instances where they have not been complied with. It has always been his pleasure to render your Association this service free and without fee or reward. He has always been the Association's most attentive and considerate servant, and in being this it has been to him a labor of love.

As a member of this Association I am glad that Mr. Nicholls has been honored in the bestowal of this testimonial. As his friend, I accept it at your hands for him, and assure you that he will appreciate it and always value it as a precious souvenir of the delightful association he has always enjoyed with you. In behalf of Mr. Nicholls I thank you for this valuable token of your confidence and esteem.

Mr. Rosamond, on behalf of the Association, then presented to Mr. Booth, their treasurer, a beautifully engrossed and illuminated and richly framed testimonial, the text of which is as follows:

GEORGE BOOTH, Esq.,

Treasurer of the Canadian Manufacturers' Association.

DEAR SIR,—The Canadian Manufacturers' Association desire to express to you their high appreciation of the faithfulness and zeal displayed by you in their service as their treasurer. They recognize the fact that for a number of years past you have, at the expense of valuable time devoted to their service, performed the duties of treasurer of this Association, and not only in this, but in many other directions, you have been most active in promoting the objects for which this Association was organized.

The Association wish to express their sentiments regarding your services by presenting you with this testimonial, which cannot be but a faint reflex of their feelings. It is but a tribute to one who has won their esteem and highest regard; and in offering you this address they couple with it the best wishes of the Association for your future happiness and welfare.

(Signed)

BENNETT ROSAMOND,
President.

FREDERIC NICHOLLS,
Secretary.

In acknowledging the testimonial presented to him, Mr. Booth said:

Gentlemen of the Association,—I am very pleased to accept at your hands this very handsome testimonial. It is a beautiful specimen of artistic work. The kindly words you have caused to be placed thereon carry in their formation an expression of evident sincerity which I appreciate, and for which I thank you. I consider it a privilege that my name has been associated with the executive of the Canadian Manufacturers' Association from its inception, and the honor of serving in the important position of treasurer of an Association which has wielded so powerful an influence in moulding the thought and forming the public opinion that inaugurated and has sustained a national policy that has been the means of building up the manufacturing industries of our country, has amply requited me for any extra duty I may have performed.

But, after all, I am pleased to receive this beautiful souvenir as a memento from the Association, expressing their feelings regarding my humble services. It will tend to make me more enthusiastic for the welfare of our Association; and with the leadership of our valued secretary, Mr. Nicholls, I have no doubt, when an emergency arises, we shall again be able to make our influence felt and assist in establishing even more firmly than heretofore the fact that Canada shall prosper not only as an agricultural but a manufacturing country, and that beneath the "old flag" to which we all owe allegiance.

The following resolutions were carried unanimously:

Resolved, That the Canadian Manufacturers' Association hereby recognize the courtesy extended to them by the Toronto Industrial Fair Association in assigning them the exceedingly comfortable and convenient office room occupied by them during the continuance of the present Fair.

Resolved, That this Association offer their congratulations to the Fair Association upon the unbounded success their Fair has achieved, knowing that this could have resulted only through the able and skilful management and attention that has been bestowed upon it by its officers, servants and friends.

Resolved, That this Association recognize the fact that the Toronto Fair, with its large and representative displays of the handiwork of Canadian manufacturers and Canadian skilled artisans and workmen, is performing a great and meritorious work in instructing the people of this country, and also visitors from abroad, concerning the greatness and importance of this Dominion, and that we are on the high road to manufacturing independence.

Resolved, That a copy of these resolutions be transmitted to the Toronto Industrial Fair Association.

The testimonial to Mr. Nicholls included a handsome album, in which the address is inscribed and illuminated, and a very valuable gold hunting case watch, with descriptive inscription engraved thereon, and a gold watch chain.

CARPET making is just now a little slack, but the prospects for fall trade are becoming better. It is strange that Canadians do not call for better grades of carpet than they do, as manufacturers have demonstrated that we can produce designs and styles which would be a credit to any country. The Elora carpet was a proof of this, but the demand for low goods proved a damper to all ambition in that line.

The Industrial Exhibition.

THE Toronto Industrial Exhibition for 1890 closes to-day, after a most successful season. Last week the weather was unpropitious on several days, to the annoyance and disgust of all concerned, and the gate receipts fell considerably short of what they did during the corresponding week last year. On Saturday, however, the weather became delightfully clear and cool, and new life and vigor were imparted to everything and everybody. During the current week the grounds have been thronged day after day, and the success of the occasion is fully up to any previous event. The displays in the Main Building were very fine, many new ones having been shown, and about all the old familiar ones occupying their accustomed places. A few years ago the Annex was built to accommodate the overflow from the Main Building, but now this has become overcrowded, and it is evident another building, and a large one, too, is required. Other buildings have been so overcrowded as to force some of the exhibits from them into the Annex, and this latter, really not large enough now to accommodate the classes of exhibits for which it was originally intended, is forced to accept some of the overflow from the Stove Building. Stoves, furnaces, ranges and heating apparatus are bulky, and require much space for attractive displays, and are rather out of place in the Annex. The Stove Building, as we have shown, was full to overflow, and all the old-time exhibitors were there. Some of the displays of heating apparatus were in operation, demonstrating how they are managed, and the advantages of them. This building should be increased to twice or three times its present size. Machinery Hall, too, is too small now to allow of machinery men showing their exhibits to the best advantage. There is plenty of available space contiguous to this building to allow of its much needed enlargement. Agricultural Hall was as full as ever of farm implements and agricultural machinery; and the displays there could but convince all beholders that the Canadian manufacturers of these lines of goods understand their business thoroughly, and produce machinery equal to the very best manufactured any where else in the world. The building of the Carriage Department was as well and attractively filled as ever; and an inspection of these exhibits proves that Canada can and does produce all sorts of pleasure and riding carriages, draft and farm wagons, lorries, carts, sleighs, sleds, etc., as fine in finish and as serviceable in all respects as the most exacting could require. All the other departments were well filled; and the exhibits shown in other than the departmental buildings were more numerous than ever. A great many exhibitors have their own pavilions and kiosks on the grounds. These are all of beautiful architectural appearance, and reflect much credit upon their owners. The Fair management are to be congratulated upon the success they have met with in making the Exhibition for 1890 the great success it has proven itself to be.

TORONTO SILVER PLATE COMPANY.

THE Toronto Silver Plate Company, of this city, made their usual beautiful display of artistic plate in a very handsome plate glass show case located near the eastern entrance to the Main Building. This display included about every thing in that line desirable to be found in use in all the families of the land—the high and the low, the rich and the poor. This display attracted the unbounded interest and admiration of the ladies—it was intended to have that effect, and it accomplished the object. And not the ladies only, but also the gentlemen and the young people; and from them could at all times be heard ejaculations, exclamations, admiration points, adjectives and pleasant remarks generally concerning it. Although the exhibit was exceedingly beautiful, it was all the more interesting from the fact that every article of it was manufactured here in Toronto, and the result of Canadian enterprise, Canadian capital, Canadian artists and Canadian workmen. The designs of these goods are not old and obsolete, but entirely new and fresh, and appealed to the artistic and aesthetic tastes of all beholders.

The business of this company is very large. It was started but a few years ago in a small and unpretentious way. The field, at that time, was an untried one in this country, and the competition from British and American manufacturers was fierce and persistent. But

in starting this enterprise the promoters of it determined that they would allow nothing but strictly first class goods to go out of their establishment, and they have observed this rule ever since. It was determined that all their products should be artistic in design and as perfect in workmanship as any made in even the most renowned establishments anywhere in the world; that the designs and patterns on which their goods were constructed should be perfectly new, and not reproductions of the discarded and obsolete wares of other countries.

CHRISTIE, BROWN & CO.

MESSRS. CHRISTIE, BROWN & Co., biscuit manufacturers, Toronto, occupied their usual space in the west nave of the Main Building, where they made a more beautiful and comprehensive display of their products than ever before. The peculiarity of their exhibit consisted in the triangular shape of the glass cartons in which their specimens were enclosed. These cartons extended from floor to ceiling, the arrangement permitting the visitor to see on two sides of the cartons the varied contents, and the labels indicating the names.

This concern manufacture more than four hundred different varieties of biscuit, which includes every variety in that line that is known to the business. To enable them to do this they have what is undoubtedly the most extensive and best equipped bakery in Canada, giving employment to more than two hundred hands. A branch warehouse is established in Montreal, for the convenience of the trade in Quebec and the lower Provinces, the Ontario, Manitoba and British Columbia trade being supplied from this city.

Mr. William Christie is one of the oldest manufacturers in Toronto, having first engaged in the business in 1851. Many years ago, in the days of the old Provincial Exhibition, Mr. Christie made an exhibit of his products at that fair, for which he was awarded a first prize; and ever since that time he has exhibited at the succeeding fairs, and the products of his factory have always been of the very highest character. The goods are always made of the very best and finest materials, selected especially for purity and delicacy of flavor.

The goods that are shown from year to year at the Toronto Exhibition are of the same lines of products that excited so much admiration at the Colonial and Indian Exhibition in London, England, a few years ago, which display was awarded a diploma and commemorative bronze medal.

As above stated, Mr. Christie engaged in this manufacturing business in Toronto in 1851. In 1868 he associated Mr. Alexander Brown with him, under the firm name of Christie, Brown & Co.; and although Mr. Brown has since died, the firm name has never been changed. Their works were first located in Yonge street, but in 1872 they were removed to more commodious quarters in Francis street; and in 1874 they purchased the land, and erected their present works, which are at the intersection of Duke and Frederick streets. The buildings are of brick, three stories high, and cover an area of one hundred and thirty feet square.

JOHN GILLIES & CO.

MESSRS. JOHN GILLIES & Co., Carleton Place, Ont., displayed in Machinery Hall a beautiful steam yacht, the machinery of which embodied the Acme automatic coal oil fuel device. The Acme engine, it is claimed, used for propelling pleasure launches, occupies very much smaller space than other engines, the fuel oil being kept in a reservoir in the bow of the boat, the feed pipe from it passing beneath the floor to the engine. It requires but a few minutes to get up steam. The fuel and water are supplied automatically, and the quantity of either to be used can be adjusted to suit. Any intelligent person can operate this engine. The hull of the boat is constructed of the best materials, well seasoned, and put together in a skillful and workmanlike manner. These yachts are exceedingly beautiful and graceful on the water, and go at a good rate of speed. The larger sizes of them have enclosed cabins which render them exceedingly comfortable for parties who may not desire to camp upon the shore. The smaller sizes are equipped with canvas coverings and side curtains. During the past season Messrs. Gillies & Co. sold a great many of these pleasure yachts, and they are now in use in season on all the boating waters of Canada. They are not very expensive, are easily handled, and can be readily housed when the boating season is over.

GALT FOUNDRY, ENGINE AND MACHINE WORKS.

Messrs. Cowan & Co., proprietors of the Galt Foundry, Engine and Machine Works, owing to an over-pressure of work in hand, were unable to send any of their machines or machinery for display at the Exhibition.

Included in the lines of machinery manufactured by this concern is the Harris-Corliss steam engine, which they make a speciality of building. The firm claim for this engine that it is the most perfect cut-off made; that for economy of fuel, regulation of speed and accessibility of all its parts, it has many imitators but no equals; that while many engines of this class have been invented, tried and abandoned, the Harris-Corliss has steadily gained in public favor, and is now without a successful rival. Some of the advantages of this engine, to which special attention is directed, are: The steam is admitted to the cylinder at boiler pressure; the governor is an independent mechanism; no part of the regulating mechanism enters the steam chest, thereby being out of sight; regularity under varying loads; recessed valve seats; stop motion on regulator, which effectually stops the engine should the regulator by any means cease to perform its work; easy adjustment of valves, and new and improved pillow blocks.

For planing and saw mills Messrs. Cowan & Co build a substantial and simple slide valve engine, so that they can furnish at short notice a complete outfit of engine, boiler, shafting, hangers, pulleys, etc., and every sort of wood working machinery. All of their wood working machines are built with iron frames of sufficient weight, are accurately and well fitted, and embody every valuable improvement suggested by practical experience. To ensure entire satisfaction every machine is put in operation and thoroughly tested before leaving the works. The boilers are always subjected to a thorough hydrostatic test before being sent out; and many of these are in use in some of the largest mills and factories in the country.

THE BRANDON MANUFACTURING COMPANY.

The old and reliable Brandon Manufacturing Company, of Toronto, made their usual display in the Annex Building, showing specimens of their products, including broom racks, barrows, carts, clothes horses, commodes, churns, folding steps, broom handles, ladders, tinners' mallets, piano stools, wood house furnishing goods in great variety, shoo fly rockers, snow shovels, sleds, sleighs, saw horses, towel racks, vegetable slicers, washboards, wood and iron axle wagons, wagon seats, etc.

The Company inform us that they have recently made a number of changes in the construction of their children's sleighs, which enable them to offer to the trade a large variety of styles at prices which they say will defy competition, while the general excellence of the workmanship and materials, and their elegance of finish, which have characterized these goods heretofore will be fully maintained. They have facilities for manufacturing on a larger scale than ever before, are in a position to promptly fill all orders, and are turning out very superior goods at prices lower than ever.

There is probably no store in Canada handling such goods as the Brandon Manufacturing Company produce but what have on sale more or less of the articles manufactured by them. They are known to be artistic in their design, made of good and well-seasoned materials, beautifully ornamented and perfect in every respect.

An article that excited no little attention was a Democrat cutter. In this beautiful and serviceable vehicle there are two seats, both upholstered; the body is made flaring with panel sides, wide arm rests and dashboard, the body being handsomely painted, the panels being painted in contrasting colors. It is striped and well finished throughout, and has bent tongue fastened with iron braces and rods. Another noticeable article was the Union churn, one of the most popular and serviceable churns in the market. It is made in four sizes, the smallest being suitable for from one to two cows, and the largest for from ten to twelve.

CLARE BROTHERS & CO.

Messrs. CLARE BROTHERS & CO., of Preston, Ont., occupied a very large space in the Stove Building, as they always do, showing a large variety of the heating apparatus manufactured by them. Included in this display were their Pleasant Home and Tubular Dome, made in four sizes, and Marvel and Steel Dome in five sizes, all of these lines being either brick set or portable; Comfort, in two sizes; a combination hot air and hot water heater in five

sizes, and sanitary heater in twelve sizes, all adapted for burning coal; the Hilborn furnace, in eight sizes, and the Maple Leaf in two sizes, these latter being wood burners. All these heaters are constructed from latest patterns, all original and made specially for the Canadian market, and none of them reproductions of stale American patterns. They are all powerful heaters, remarkably easy of management, and celebrated for economy, durability and cleanliness.

A speciality to which this firm direct attention is the Pluto boiler manufactured by them. This boiler has been thoroughly tried and tested, and has given excellent satisfaction not only in Ontario but in the fiercer climate of Manitoba. It embodies the following advantages: It is sectional in all its parts; the size can easily be increased or diminished; less joints than other boilers of its class, and will burn any kind of fuel—hard or soft coal, wood or coke.

GALT MACHINE KNIFE WORKS.

MR. PETER HAY, proprietor of the Galt Machine Knife Works, Galt, Ont., made his usual comprehensive display in the Main Building of specimens of the machine knives manufactured by him. These included every variety of knives for planing, moulding, tenoning and mitring machines; knives for stave cutting and jointing machines; cheese box and veneer knives; shingle machine knives; morticing and matching knives; leather splitting and paper-cutting knives; straw knives and straw-cutting machine knives, etc. Mr. Hay also manufactures any sort of knife to order that may be called for. The very superior and uniform quality of the knives sent out from the Galt Machine Knife Works is attested by the constantly increasing number of persons who use them, and these knives are to be found in about every factory and workshop not only in Ontario, but from Halifax to Vancouver. These users appreciate the aim of Mr. Hay to furnish only the best goods in this special line of manufacture; and in ordering goods from this factory the buyer may be assured that he will always obtain only a strictly first-class article, for no other sort is turned out. With thorough skill, always the very best materials, careful manipulation and long experience in catering to the wants of the trade in this line of goods, Mr. Hay is producing tools equal to the best made anywhere else in the world, and at prices that compare favorably with those of other manufacturers.

GOLDIE & McCULLOCH.

Messrs. GOLDIE & McCULLOCH, of Galt, Ont., made a fine exhibit in Machinery Hall. One of their Wheelock automatic cut-off steam engines of eighty horse power was employed in driving the electric plant of the Ball Electric Light Company, of Toronto. This plant included four dynamos, which furnished light for the Main Building and other buildings, and for the open air lighting of the Fair Grounds. They also had in operation a sixty-horse power tandem compound Wheelock engine, which attracted a great deal of attention from engineers and other judges of fine machinery. This engine was built for the Central Bridge Works, of Peterboro', Ont., and was placed on exhibition here through the courtesy of Mr. W. H. Law, the proprietor of the Peterboro' works. We are informed that this is the first tandem compound steam engine ever exhibited at this Fair. They are now in great demand, and Messrs. Goldie & McCulloch are now engaged in the construction of several such to fill orders. There are quite a number of these engines in operation in Toronto and elsewhere in Canada, some of which are placed as follows: Ireland National Food Company, Toronto, one 100-horse power; Metropolitan Street Railway Company, Toronto, one 150-horse power; Forbes Woolen Company, Hespeler, Ont., two 150-horse power each; Hespeler Woolen Mills, Hespeler, Ont., one 125-horse power; Cobourg Woolen Company, Cobourg, Ont., one 250-horse power; Messrs. A. Harris, Son & Co., Brantford, Ont., one 300-horse power; and the Don Paper Mills Company, near Toronto, one 150-horse power. Other concerns using these compound Wheelock engines are Messrs. John Wright & Son, Owen Sound, Ont.; Messrs. B. Greening & Co., Hamilton, Ont.; Mr. William Partlo, Ingersoll, Ont.; and English Portland Cement Company, Marlbank, Ont.

Messrs. Goldie & McCulloch also exhibited a Boyd brick machine, manufactured by them, and for which they are having a large demand; also a number of specimen brick made in this machine. These brick are perfect in make and shape, and equal to any pressed brick on the market. The machine is operated on the semi-dry process, and recently Messrs. Goldie & McCulloch have

fitted up and furnished machinery, including engines, boilers, etc., for the following firms:—Toronto Press Brick & Terra Cotta Company, Milton; Dr. D. Robertson, Milton; Ontario Press Brick & Terra Cotta Company, Campbellville; Messrs. Freeman Bros., Burlington, Ont., and Wm. Tallman & Son, Beamsville, Ont. In Canada and the United States, since Feb. 1st, last, over 100 machines have been sold, a very good result in so short a time, showing that the Boyd brick press about controls the semi-dry process of brick manufacture.

Other machinery exhibited by Messrs. Goldie & McCulloch included a large variety of wood-working machinery—tenoning machines of different sizes, blind slat machines, buzz planers, upright shapers, moulding machines and saw tables; planing machines, both single and double surfacers; planing and matching machines, etc.

THE "DOHERTY" HOT WATER BOILERS.

The Doherty Manufacturing Co., of Sarnia, Ont., who have secured patent on their new Hot Water Boiler, the "IDEAL," made a fine display in the Annex Building this year. Their Boilers should be seen by all who think of having any heating done this fall. For quickness of circulation, with economy of fuel, none can touch the "Doherty."

THE BELL ORGAN AND PIANO COMPANY.

SINCE the Exhibition of last year the old and well-known house of W. Bell & Co., of Guelph, Ont., has been merged into a stock company with a very large capital, much of it owned by English capitalists, under the name of the Bell Organ and Piano Company. For the first time the new concern exhibited this year at the Great Toronto Fair, occupying the prominent location held for so many years by Messrs. W. Bell & Co., near the east entrance of the Main Building, where they made a most beautiful display of specimens of organs and pianos manufactured by them. None of these instruments, however, were made for the occasion, but were all taken promiscuously from the company's warehouses, and represent just what the company are sending out to customers every day in filling orders.

Mr. William Bell, the head of this concern, began the manufacture of musical instruments about twenty-seven years ago, when his output for the year was some twenty-five instruments, mostly melodeons. Discovering that there was a good prospective demand for this class of goods, Mr. Bell pushed it vigorously; but the big growth of the business began a dozen years ago—in 1878—since which time its growth has been all that could have been hoped for it; for it has now become as large and important as that of any similar concern on the American continent. The company's factories at Guelph, which include two very large buildings, have a floor space equivalent to eight and a half acres. These factories are equipped with full outfits of the very best and most modern machines, machinery and appliances, and give employment to over five hundred hands.

A little more than two years ago, Messrs. Bell & Co. began the manufacture of first-class pianos in connection with their manufacture of organs; and at the Toronto Exhibition of 1888 they displayed for the first time specimens of these elegant instruments. The reputation of the Bell organ having been so well established, it was comparatively easy work to introduce their pianos; and since that time the sale of them has been phenomenally large. These pianos are not of the cheap variety with which the market is unfortunately flooded; neither are they forced upon the market at slaughter prices, regardless of cost. In their construction they are strictly first-class in every respect, and they readily commend themselves to those who know what the requirements of a really first-class instrument are. The pianos shown in the Exhibition this year were marvels of beauty, by which is meant beauty of materials, of design, of workmanship, of finish and of excellence as musical instruments.

The organs shown were in a dozen or more different sizes and styles, the range of purposes of their construction being from the modest little affair that makes glad the home of the humble to the beautiful parlor organ for the wealthy and the still larger instrument for the church and lecture hall.

The business of this concern extends to almost every habitable portion of the globe. Their average shipments to Europe, distributed through their agency at London, Eng., of which Mr. W. J. Bell, of the firm, has charge, averages from eight to ten carloads per month; and to the Australian market, about twenty-five carloads

a year, a large and increasing trade also being had with Mexico, Central and South America and South Africa.

Mr. J. W. Scott, the Toronto representative of the Bell Organ and Piano Company, had charge of their display at the Fair.

Owing to the growth of their business and the increased requirements of their factory, this concern are offering for sale a Sander-two-drum sandpapering machine, made by Messrs. Goldie & McCulloch, and which is just the thing for a medium-sized cabinet works. It is adapted for wood polishing upon flat surfaces in the manufacture of furniture, sewing-machines, pianos, organs, etc. It weighs about 3,000 pounds, has many points of excellence and can be seen in operation at the Bell factory at Guelph.

BOOTH & SONS.

MESSRS. BOOTH & SONS, Toronto, manufacturers of leading lines in plumbers' supplies, coppersmiths and brass founders, and importers of sanitary earthenware, etc., had a fine display of some of their products in the Annex Building, which excited much attention from housekeepers, architects, and those interested in the perfect sanitation of houses. A defective system of drainage, the imperfect operation of a closet, or the leakage of a sink, are sources of great danger in any home, and sooner or later will bring calamity and cost. On the other hand, a proper system of drainage, connected with a closet, meeting fully the judgment of the best sanitary engineers, an effective bath and sink, are things contributing at once to the comfort, convenience and health of a household. One specialty which Messrs. Booth & Sons handle chiefly is the modern sanitary closet with Parker's patent tip-over wash-out attached. This latter arrangement is undoubtedly the best thing in the market and combines these advantages: It is certain and instantaneous in operation; although economical in the use of water, the washout is perfect; it cannot overflow; not liable to get out of order; the slightest touch of a pull, even by a child, operates it. Nothing could be more complete than a closet so arranged, and the extent to which they have been accepted by the trade and public alike is the very best proof of superiority. It may be mentioned that Messrs. Booth & Sons are engaged in perfecting a bath, having points of excellence beyond anything now to be had, and which will be in keeping with the perfect character of all the other articles for which they have won so enviable a name. In their exhibit there is also a magnificent collection of hot water urns for use in hotels, restaurants and saloons, besides a general display of fine coppersmiths' work. Altogether more than ordinary interest attaches to an exhibit having so much in it to do with protection of the public health and the increase of home comforts and conveniences.

P. W. ELLIS & CO.

MESSRS. P. W. ELLIS & Co., manufacturing jewelers, 31 Wellington Street east and 40 Front Street east, are proprietors of what is probably the largest jewelry manufacturing establishment in Canada. They do not confine themselves to the production of any particular lines of goods, but they pay especial attention to a few of the more important ones, they being importers of precious, semi-precious and imitation stones, diamonds and pearls being specialties. They inform us that the increasing desire of the public to select choice gems, and direct the mounting of them according to their individual tastes and ideas, has developed a very extensive special order business with them.

They desire the jewelry trade to bear in mind that theirs is a supply house in which may be obtained every requisite necessary in the watch and jewelry trade, including a complete assorted stock of jewels, both loose and mounted; settings of all sorts, which, with a well-equipped factory and a staff of competent artists and designers, places the trade in a position to satisfy all the various requirements of their customers.

They also handle every requisite in the way of tools and machinery necessary in the repairing of watches, jewelry, etc.; and they desire every watchmaker, jeweler, engraver and journeyman engaged in the working of fine metals to know and remember their address, and to send to them for their illustrated circular and price list relating to lathes, attachments, tools, furnishings, etc.

Messrs. P. W. Ellis & Co. did not make an exhibit at the Fair, as they have a permanent exhibition of their own, which would require quite as large a building as that they now occupy wherein to display their goods and show the process of their production; and their goods are not of a character to be exposed at the Fair or other public place without an observance of the precautions that surround them where they now are.

WATEROUS ENGINE WORKS COMPANY.

THE Waterous Engine Works Company, of Brantford, Ont., made an exceedingly interesting exhibit in Machinery Hall, where the centre of attraction was the beautiful No. 2 steam fire engine manufactured by them. The machine, as far as appearances go, was perfect in every respect, the greatest pains having been bestowed upon both its construction and finish; and while this latter feature attracted a great deal of attention, it differed in no wise from any and all of the machines turned out by this company. One of these Waterous steam fire engines was subjected to a very severe test a few months ago, at Montreal, under the direction of the chief of the fire department; and in reporting upon it the chief stated that in six and a half minutes from the lighting of the fire a stream of water was being thrown 118 feet, and in two minutes more, with a steam pressure of 85 pounds, a stream was being thrown 147 feet. For twenty minutes a steady pressure of 90 pounds of steam was held while throwing a stream of water over 150 feet. We learn that within the past ten months this company have sold fourteen outfits of fire engines, hose reels, ladder trucks, etc., to different Canadian towns.

Another interesting exhibit made by the Waterous Engine Works Company was at and in the west end of Agricultural Machinery Hall. Noticeable among these exhibits were a French burr chopping mill driven by a 12-horse power Champion steam engine, and capable of grinding sixty bushels of grain per hour. These Champion engines are made in three sizes—twelve, sixteen and twenty horse-power—and are specially adapted for doing farm work. Another machine shown was a Smallwood shingle mill with a capacity to cut 30,000 shingles per day.

The company were not able this year, owing to a rush of business, to put on exhibition as large a collection of their manufactures as they would otherwise have done, but that shown was amply sufficient to indicate the great resources of their works.

SAMUEL MAY & CO.

MESSRS. SAMUEL MAY & Co, manufacturers of billiard tables and furniture, Toronto, made a beautiful exhibit in the Annex Building of some of their products. This firm are well and favorably known throughout the Dominion as manufacturers of first-class English and American billiard and pool tables of all sizes, ivory and celluloid billiard and pool balls, fine inlaid cues, superior cushions, ten pin balls and pins, bowling green bowls and dealers in everything appertaining to the games of billiards, pool, American ten pins, bagatelle and bowls.

They exhibit this year a fine lot of billiard material and a beautiful 6x12 table (English style). This table is manufactured in the very best manner of polished mahogany, with eight legs, slate bed 1½ inch thick, and the latest improved English cushions, extra low and very quick, with beautiful pocket handles and shields of burnished brass and the finest quality of cloth and pocket nets. The cues are made of rosewood, mahogany, cocoa-bola, ebony and Amaranth, beautifully polished and tipped with the finest quality of French cue leathers. This is the only billiard exhibit at the fair, but Messrs. May & Co. are showing a fine lot of tables of various styles and sizes at their city warerooms, 111 Adelaide Street West, where all lovers of the noble game of billiards are invited to call and test their new invention, the "Club" cushion, a most superior cushion, recently introduced by them for the French and American carom game.

THE PURE GOLD MANUFACTURING COMPANY.

MESSRS. A. JARDINE & Co., proprietors of the Pure Gold Manufacturing Company, Toronto, made an exceedingly fine display of their products in the Main Building, in which were included baking powder, spices, extracts, coffees, electric borax, New Process soap, Diamond French blacking, powdered herbs, Peerless washing compound, and many other of the company's specialties, all of the labels of which contained the trade mark and cabalistic words "Pure Gold." This is one of the largest manufacturing concerns in Canada producing these lines of goods: and they are to be found in every grocery and supply store in the country. The name "Pure Gold" upon every package sent out of their factory is a guarantee of the excellence and purity of the contents. Most of the specialties manufactured by this concern are made by processes peculiarly their own, and the component parts of them are of the best quality obtainable, and are always tested as to strength and purity, and

compounded with the care and precision the apothecary bestows upon the compounding of prescriptions. The bottled goods put up by the Pure Gold Manufacturing Company, and displayed in their elegant plate glass show case, excited special admiration. These included all manner of flavoring extracts—about forty different flavors—and were fair samples of the goods as sent out by the concern to their customers.

An interesting feature of the company's exhibit was an immense telescope, sixteen feet long and two feet diameter, mounted and directed towards the southern sky. Of course every visitor who came along desired to gaze awhile, and every one was afforded the opportunity. The prevalence of sun light, or electric light, did not interfere with the astronomical observer reading plainly in the distant heavens the legend "Pure Gold Baking Powder the Best in the World." Of course every one obeys the injunction.

CROMPTON CORSET COMPANY.

THE Crompton Corset Company Toronto, made their usually fine display in the Main Building, which included more than a dozen styles of corsets, some of which were beautifully ornamented with lace and needlework, the prices ranging from twenty-five cents to as many dollars. This is one of the largest corset manufacturing concerns in Canada, and gives employment to several hundred hands. Their factory on York Street is a model of neatness, and is illuminated throughout by incandescent electric lights.

SHURLEY & DIETRICH.

MESSRS. SHURLEY & DIETRICH, Galt, Ont., proprietors of the Maple Leaf Saw Works, presented a most attractive display of saws in the Main Building. The exhibit occupied a large wall space, the background being covered with black velvet, upon which was arranged a large variety of specimens of the goods manufactured by them, and including every possible saw required by loggers, saw mill men and all other characters of works. The maple leaf is the distinguishing trade mark stamped upon all saws manufactured by Messrs. Shurley & Dietrich; and this is also a guarantee of the genuineness of the article. These gentlemen are expert practical workmen who understand their business in all its branches and details, and who have built up probably the largest and most important saw factories in Canada, they being sole proprietors of a secret chemical process of tempering.

MORSE SOAP COMPANY.

THE Morse Soap Company, Toronto, of which Messrs. John Taylor & Co., are proprietors, made a very attractive exhibit on the ground floor of the Main Building. There was a soap making machine in full view and operation, driven by a steam engine, in which many of the processes of soap making were shown, including that by which the well known Morse's mottled soap is produced. Moving machinery is always an attractive object, and this exhibit was surrounded at all times with interested spectators, many of whom carried away cakes of delightfully perfumed toilet soap that they had themselves seen manufactured. This concern manufactures most of the perfumes they use in their business, imparting odors to their toilet soaps, included in which are White Rose, Jockey Club, White Heliotrope, Wood-Violet, Persian Bouquet, White Clover, etc.

T. FANE & CO.

PROMINENT among the many notable exhibits in the Annex Building was the exceedingly fine display of bicycles, tricycles and safeties shown by Messrs. T. Fane & Co., Toronto. This firm have gained name and fame from the general excellence of such machines as the "Comet," "Rational," "Safetys," etc., manufactured by them. Their work is not only entirely of Canadian manufacture, but is all made right here in the city of Toronto; this alone being a sufficiently good guarantee of the merits of their machines. Mr. G. M. Wells, the representative of Messrs. Fane & Co., was in charge of their exhibit, and was untiring in his efforts in pointing out the good qualities of the different machines to the visitors of the Fair.

BUCK'S STOVE WORKS.

MR. WILLIAM BUCK, proprietor of Buck's Stove Works, Brantford, Ont., presented his usual extensive display of cook stoves and ranges, hall, parlor and heating stoves, parlor grates and furnaces and registers, for heating and ventilating. The display occupied over a hundred feet in length on the north side of the Stove Building.

The particular specimens that seemed to attract most attention were the Happy Thought ranges, shown in forty-eight different styles, the Radiant Home hall and parlor heating stoves, the Richelieu four hole range, with water fount, and with and without reservoir, and the Garnet hot air furnace, portable and brick set, in four sizes, with or without the Bigley hot water heater attachment.

Regarding the Happy Thought range, they are fitted with an unobstructable damper by which the draft from the range to the chimney is controlled perfectly. They are fitted with what is claimed as the genuine duplex grate, by which the ash is separated from the fire without dust or waste, thus always guaranteeing a clear, bright fire without poking or scraping. It is also fitted with a most powerful water front, enabling by it the heating of bath and dining-room, as well as a large supply of hot water for bath and kitchen purposes. These ranges are adapted to the burning of wood, coal or gas for fuel.

The Radiant Home square base heater is made in four sizes of single heaters, two sizes single heater with oven, four sizes double heater, and two sizes double heater with oven. They are all fitted with the Radiant Home duplex grate and firepot, which can only be used in this stove. A noticeable convenience in this grate and firepot consists in the ability to separate the ash from the fire by but one simple movement and without dust, waste or the escape of coal gas. They are fitted with a large central hot air flue, leading from the base up between the ascending and descending draft flues. By this means the cold air is removed from the floor, and passing up through this hot air flue, is equally distributed throughout the room or building in which they are placed.

The Richelieu is a beautiful four hole range, fitted with hot water front, and is specially adapted for small kitchens. It is fitted with duplex grate, is a perfect water heater, is made in two sizes, and burns day and night. The arrangement of the dampers in the Richelieu fitted with reservoir is such that the heating of the oven is not affected.

The Garnet hot air furnace is adapted to the heating of large or small buildings, and can be placed in a six foot basement. There is a large ash pit with sifter attachment; the shape of the firepot prevents the coal remaining around the grate unburned; the shape of the grate enables the ashes to pass away without sticking to the sides, and the combined advantages of the grate and firepot guarantee a bright fire without dust or waste. The dome is very large, affording a great amount of heating surface. The radiator, made in both cast iron and steel, has eight large tubes through which the air must pass in going to the registers. There is a large feed door, at the back of which is an arrangement which secures the combustion in the furnace of all the gas generated; which means a saving of twenty-five per cent. in all the fuel used.

METALLIC ROOFING COMPANY.

The Metallic Roofing Company, of Toronto, occupied a conspicuous stand near the west entrance of Agricultural Hall, where they displayed a variety of the Eastlake metallic shingles manufactured by them. This concern has been in existence but a few years, but during that time they have built up a very large trade, their goods going to all quarters of the country. The Eastlake shingle, because of its excellence and durability, has been received with great favor by Toronto architects, a great many of the buildings recently erected here being covered with them. The Toronto Exhibition Association have caused them to be placed upon many of the buildings recently erected upon the Fair Grounds, including the Natural History building, the Grand Trunk Railway station, the gate offices at Strachan Avenue and Dufferin Street, Floral Hall, Press Bureau, Model Stables, ladies retiring parlors, new dog house, etc., and a number of the private kiosks on the grounds are also covered with them. This article is specially adapted to use on factories, foundries, workshops, farm buildings, store houses, theatres and public buildings, elevators, railway stations, etc. All the principal railway companies have adopted it for their buildings in preference to all other styles or make of roofing. It is light, durable, fire proof and easily and quickly applied. Purchasers are cautioned that the trade mark "Eastlake" is plainly stamped upon every case and package.

JOHN BERTRAM & SONS.

MESSRS. JOHN BERTRAM & SONS, of Dundas, Ont., made one of their characteristic exhibits in Machinery Hall, included in which were two 24-inch lathes, one 16-inch lathe, one speed lathe, and a punching and shearing machine. The firm had built a number of other machines for this Exhibition, but customers wanted and would have them, and they were sold before the opening of the Fair. One of these machines which Messrs. Bertram were not able to exhibit was a large iron planer made to accommodate work twelve feet long, forty inches wide and thirty inches high. This machine was sold to Messrs. R. W. King & Co., manufacturers of steam heating apparatus, Georgetown, Ont., for their new works now being erected in Montreal. Another machine which had been intended for this Exhibition, but which it was impossible to bring, was a one thousand pound steam hammer, which was claimed by Messrs. Joyce & McKenzie, and which has been sent to their works at Petrolia, Ont.

Messrs. Bertram & Sons inform us that their works are being driven to their utmost capacity in manufacturing new tools and remodelling old. Recently in this latter line they have remodelled fifty-four new and improved tools, consisting of swing lathes, from 44 inches down to the 10-inch; new and improved drills, from 36 inches down to 15-inch; iron planers, from taking in 8 feet square, 25 feet table and weighing 27 tons, down to the 20x20 inch and 5 feet table; Acme bolt cutters, all sizes up to the 2-inch, with one, two, three or four heads; shaping machines, with 24-inch and 16-inch stroke; boiler-makers' punches, with 40-inch throat and weighing 25 tons down to the small punch, 8-inch throat, for agricultural machinery works, and various other special tools, consisting of driving wheel lathes for locomotive shops, steam hammers from 300 pounds weight up to 2,000 pounds, etc.

In wood-working machinery some of their recent products include Whitney planers and surfacers, from 26 inches to 30 inches. This machine is in large demand in furniture factories where smooth work rapidly done is required. Regarding the morticing and moulding machines made by this concern, we are informed that they are in such great demand that they are to be found in operation in nearly every wood-working shop in the country. As an evidence of the popularity of these tools with those who understand the necessity of having the best at all times, it may be stated that during the Exhibition Messrs Bertram accepted a large order for such tools from the Northern Pacific and Manitoba Railway Company, to be placed in their new shops now in course of construction at Winnipeg, Man., this one order alone including over twenty machines. The firm make a speciality of manufacturing the "Acme" bolt cutter, and it is made in sizes to accommodate work from one-half inch to one and a half inches diameter. The "Acme" is esteemed a general favorite in railroad and other machine shops. All the planers manufactured by this firm have a return motion three times the speed of the forward motion, the belts being operated by automatic shifters, by which one belt is shifted entirely and completely before the other is operated. The workmanship and finish of all the tools turned out by this concern is fully up to the standard of those shown at the Exhibition.

We are informed that Messrs. Bertram & Sons will make an extensive exhibit of specimens of the iron and wood-working tools manufactured by them at the forthcoming Exhibition in St. John, N.B.

WILLIAM DOHERTY & CO.

MESSRS. WILLIAM DOHERTY & Co., manufacturers of fine organs, Clinton, Ont., occupied their usual space in the Main Building, and made a most attractive display of some of their instruments. One of these was a double bank pipe top organ, which, it is claimed, is the largest reed organ made in Canada. Everything about this instrument was up to the highest standard in material, workmanship and finish; and in the quality, depth and richness of its tone, and of the power and range of its harmonies, it was all that could be desired. The design of it was artistic, the proportions pleasing and the outline bold and striking.

Regarding the construction and merit of the instruments manufactured by this firm, superiority is claimed on the following points: Brilliance, volume, fluty and sympathetic quality of tone, quickness of response, thorough workmanship and superior quality of materials. It is capable of sustained tones, the tones are not all of the same quality, and, as various colors are desirable to please the eye, so different varieties of tone are necessary for the ear; it is easily played upon; it is not liable to get out of tune; it is practically indestructible, and the price is such as to place it within the reach of nearly every family.

THE DODGE WOOD SPLIT PULLEY COMPANY.

The display made by the Dodge Wood Split Pulley Company, of Toronto, but whose extensive factory is at West Toronto Junction, near this city, was one of the most interesting shown in Machinery Hall. It illustrates the advantages claimed for wood pulleys over iron, and of rope transmission of power under very many circumstances over belting.

The main exhibit shown embodied the transmission of fifty horse power by means of five turns of a tallow laid manilla rope, of three-quarters of an inch diameter, from the main line shaft to a counter shaft, from which power was taken to drive the dynamos operated by the Ball Electric Light Company for illuminating the buildings and grounds of the Exhibition. The perfection of this system of rope transmission of power was clearly demonstrated in the remarkable steadiness and regularity with which this electric light system was operated, for it was an unbounded success.

All users of machinery are interested in the economic transmission of power from the engine, or source of power, to the machinery to be operated by it. There are many methods for such transmission, including belting of leather, rubber, etc.; wire ropes, link chains and other devices. For general and ordinary purposes of transmission there is, perhaps, no better method known than the Dodge system; and there are features of it where it could not be substituted by any other method, such as where the driven shaft is at right angles with the driver; where the drive is perpendicular, particularly when it is in quarter twist and perpendicular; where the driver and driven are close together; for long drives, such as across a stream, over intervening buildings, etc. In transmitting power from an engine to a line shaft there is a uniform, steady strain, without flapping, jerking, stretching, slipping, or other loss of power, and it is claimed for it that an engine thus equipped will do twenty-five per cent. more work on the same consumption of fuel than with any other arrangement.

In a previous issue of this journal an illustrated description was given of the large new factory of this company at West Toronto Junction, and of a rope transmission of power as used in these works. In this transmission the engine has two driving pulleys. The small one is seventy-two inches in diameter with eight ropes, which drives a large Sturtevant blower. The large pulley is 153 inches in diameter, with rim of hard maple, grooved to carry eleven wraps of $\frac{3}{4}$ inch tallow-laid manilla rope, the connection being with a sixty-three inch grooved wood pulley on a three and a half inch main shaft, 250 feet long, from which is transmitted power to all the machinery in the building. The engine is 100 horse-power, the rope travel is 5,000 feet per minute, and the pull on the rope is only one and a half per cent. of its breaking strain, while it is safe to use ten per cent.

These wood split pulleys manufactured by this company, are made in sizes to suit all possible demands, iron centre pulleys, where it is desired to have such, to be placed directly on the shaft of the driving engine, wood arms and centres, with the Dodge patent bushing, for service on driven shaft; smooth face pulley, where leather or rubber belting is to be used, and grooved faces where the transmission of power is to be by manilla rope. Pulleys are made in all sizes, ranging from a few inches in diameter, and for use with narrow belts, up to many feet in diameter, one having recently been made at this factory to receive transmission of power from a leather belt forty-eight inches wide, and the pulley used in these works for the transmission of power from the engine to the main line of shafting, and which is driven up to 125 revolutions per minute, is thirteen feet diameter. It is claimed for these pulleys that they transmit from twenty-five to sixty per cent. more power than iron rim pulleys of same size and similar tension. The patent compress fastening, for securing these wood hub pulleys to the shafting, is guaranteed to hold stronger than set screws, and, unlike key fastening, preserves the balance of the pulley on the shaft.

This company have established agencies and depots for their pulleys in all the principal cities and towns of the Dominion, and are represented by the most prominent hardware and machinery houses from Halifax to Vancouver. They have also established business connections with one of the largest machinery houses in London, Eng., and they have just filled an initial order from them for two car loads of split pulleys. The company's prospect for a fine foreign trade are exceedingly bright. They are now manufacturing about three hundred split pulleys per week, the capacity of their works being double that quantity. The original Dodge Manufacturing Company, of Mishawaka, Indiana, who are engaged in the manufacture of these pulleys, are now turning out four hundred of them per day, regularly.

The Dodge Wood Split Pulley Company inform us that they are fitting up an extensive warehouse in Toronto, where full stocks of

their pulleys will be kept and from which orders for ordinary sizes can be filled without delay. They have just published an illustrated catalogue descriptive of their goods, including a price list, which they will be pleased to send on application.

They are liberal users of space in the CANADIAN MANUFACTURER, where they are calling special attention to their system of long power drives by their system of rope transmission, and which those interested would do well to study.

C. T. BRANDON MANUFACTURING COMPANY.

The C. T. Brandon Manufacturing Company, of Toronto, of which Mr. C. T. Brandon is the manager, is a new concern recently come into existence, and whose factory and place of business is at 1012 Yonge street. This concern made a beautiful exhibit in the south end of the Annex Building, included in which were several lines of baby carriages, the willow work of which, as far as newness of style, elegance of appearance and perfect artistic workmanship are concerned, rendered them the equal of any seen in the best stores in New York and other American cities. The upholstering of these dainty little vehicles was beautiful, and in some of them quite expensive enough so to satisfy the taste and desire of the most fastidious of young mothers. A special feature of these carriages is the running gear, and this is of such construction that they combine elasticity with strength and exceeding lightness—features that will commend them not only to the trade but to all who know what these qualifications mean in such an article.

This Company are, we are informed, the only manufacturers in Canada who make this particular style of wheel, and they place it not only on their fine baby carriages but also upon all the wheel vehicles they make. This includes all sorts of children's toys—doll carriages, carts and wagons; toys of similar description for larger children; children's velocipedes, etc. They also make a boy's bicycle mounted upon this wheel, which is equally as strong as similar and more expensive mounts, and which will certainly receive the attention it deserves from the trade when buying stock for the approaching Christmas holidays. Other features of the exhibit included rocking horses, small school desks, reversible blackboards and a large variety of parlor games.

Mr. Brandon has large experience in catering for this class of trade, and he already has a well established reputation as a manufacturer of first-class goods.

THE BARBER & ELLIS COMPANY.

The Barber & Ellis Company, Manufacturing Stationers, Toronto, occupied a prominent position in the Main Building, in which they displayed two large show cases filled with specimens of their work, besides an overflow which occupied considerable outside space. A noticeable feature of the exhibit was the account books which the Company had manufactured for a number of the principal banks, insurance companies, hotels, commission houses, merchants and others. Most of these were really works of art, showing the high state of perfection to which the blank book manufacturing business has been brought in Canada, and all of them were of the best and most substantial character. A miniature journal was shown, full and properly ruled, full bound in Russia leather with spring back and ornamental cover, three-eighths of an inch wide by seven eighths of an inch long, containing four hundred pages.

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ROBIN & SADLER.

Messrs. ROBIN & SADLER, manufacturers of leather belting, lace leather, loom strapping and pickers, etc., made an attractive exhibit of their products in the Annex Building, included in which were specimens of their celebrated water-proof belting and dynamo belting, of which latter line they make a specialty to meet the large demands made upon them by electric light companies throughout the country. In this direction this concern furnished all the leather belting required in the equipment of the two large electric light stations of the Royal Electric Light Company, of Montreal, recently erected in that city. The main driving belts required in this equipment are said to be the largest of the kind in the Dominion. Three of these belts are thirty-eight inches wide each, two of them thirty-two inches wide and one twenty-eight inches wide, all of double thickness and of the most substantial character.

Other large orders for belting recently filled by Messrs. Robin & Sadler included an equipment for the Montmorency Cotton Mills, at Montmorency Falls, near the city of Quebec, among the largest of these belts being a double one twenty-four inches wide; and an equipment for the large planing mills of Messrs. J. B. Smith & Sons, on Strachan Avenue, this city. The main driving belt supplied to this establishment is eighty feet long, twenty inches wide and double thickness, put into position and made endless at the mill. It contains no rivets, sewing or other fastening except the cement which holds the parts together. Messrs. Robin & Sadler say that belts made in this manner are exceedingly smooth in their running, and that they will transmit more power than belts made in any other manner, owing to their obtaining closer contact with the surface of the pulleys. They recently placed a similar twenty-inch double belt for the Crossen Car Works, at Cobourg, Ont.

The attention of manufacturers is directed to the advantages to be derived in the use of the Robin & Sadler water-proof belting. This belting is made in both heavy and light double leather, of the best material, fastened together with water proof cement and brass wire screws, the entire belt being thoroughly saturated with a preparation that renders it perfectly water-proof. Machinery owners

are advised that they will find this water-proof belting especially adapted for use in damp places.

Regarding the belt dressing manufactured by Messrs. Robin & Sadler, they say that, having long felt the necessity of supplying their customers with a proper belt dressing, and having long studied the question, with their knowledge and experience in the manufacture of belt leather, have succeeded in preparing a dressing that they can confidently offer to users of leather belting. They say that much of the belt oils on the market cause the belt upon which it is used to become sticky and spongy, by penetrating and destroying the fibre of the leather, while most belt grease is of a sticky, resinous nature, that gums upon the surface of the belt, and is very injurious to it. The Robin & Sadler dressing is free from these objections, for, while making the belt pliable and smooth on the surface, so as to come into close contact with the pulley, it will not saturate or gum the leather, and, as but a very small quantity is required to produce gratifying results, it will be, we are told, twenty-five per cent. cheaper than other preparations. It is especially recommended for use on all belts that are run at a high rate of speed, such as electric dynamo belts, etc.

Mr. George W. Sadler, the sole proprietor of the concern, is a thoroughly practical belting manufacturer, having worked at the business with some of the best concerns in the United States. In 1874 he became manager of the leather belting business of Messrs. L. J. Campbell & Co., at Montreal; in 1876 he became associated with Mr. Thomas Robin, his late partner, and the new firm took over the business that Mr. Sadler had previously managed. Mr. Robin died in 1884, since which time Mr. Sadler has continued the business solely on his own account, but under the old name of Robin and Sadler. Mr. Sadler's tannery is at Stanbridge East, Quebec, said to be the largest in the Dominion making a specialty of manufacturing belting leather, his leather belting factory in Montreal being one of the largest in the country. The demand for the belting made by this concern has increased rapidly ever since the inception of the business; and in 1885 the Ontario trade was of such large proportions as to demand the establishment of the Toronto branch house. Mr. Sadler always avails himself of the exhibitions in the larger business centres of the country to make attractive displays of his products, not only to show his goods, but also to assist in bringing Canadian manufactures prominently to the attention of Canadian consumers.

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JAMAICA EXHIBITION, 1891.

AN EXHIBITION will be held in Kingston, Jamaica, in January, 1891, of Island products, manufactures and works of art, together with exhibits of works of art, machinery and industrial and agricultural products from Great Britain, other countries and colonies.

In view of the geographical relation of the Island of Jamaica with the sea ports of Canada, and the nature and extent of the imports of Jamaica, as well as the products of the Island, the Government of Canada accepted an invitation of the Government of Jamaica to participate in such Exhibition, with a view of obtaining an extension of markets for the products and manufactures of Canada.

The Canadian Government will undertake to pay freight of all approved exhibits. Entries must be made not later than September 30th next; and the latest date at which exhibits can be sent forward from Halifax, N.S., or St. John, N.B., will be about October 20th, as all exhibits must be in Jamaica early in December.

Mr. Adam Brown, M.P., has been appointed Honorary Commissioner to represent Canada at the Exhibition.

Forms of application and general information can be obtained on application to the Honorary Commissioner, Hon. Adam Brown, at Hamilton, Ont., Mr. H. B. Small, Secretary Department of Agriculture, Ottawa, or Mr. Frederic Nicholls, Secretary Canadian Manufacturers' Association, Toronto.

By order of the Minister of Agriculture. H. B. SMALL, Secretary Dept. of Agriculture. Ottawa, July 24, 1890.

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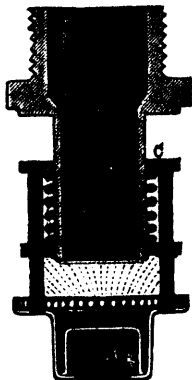
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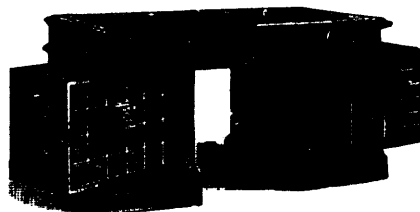
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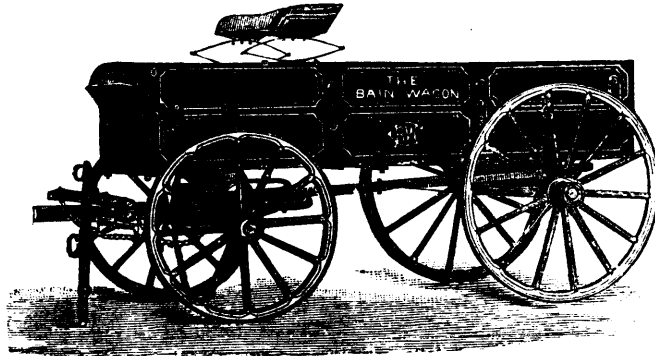
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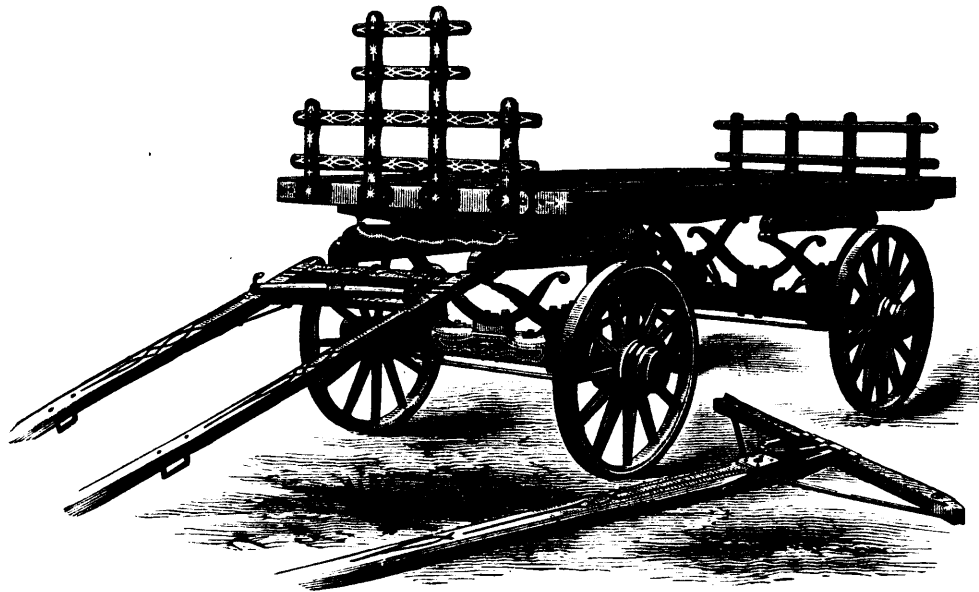
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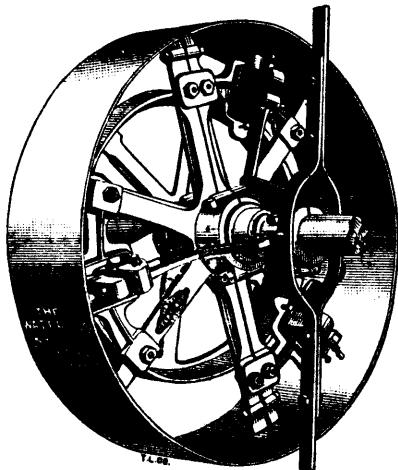
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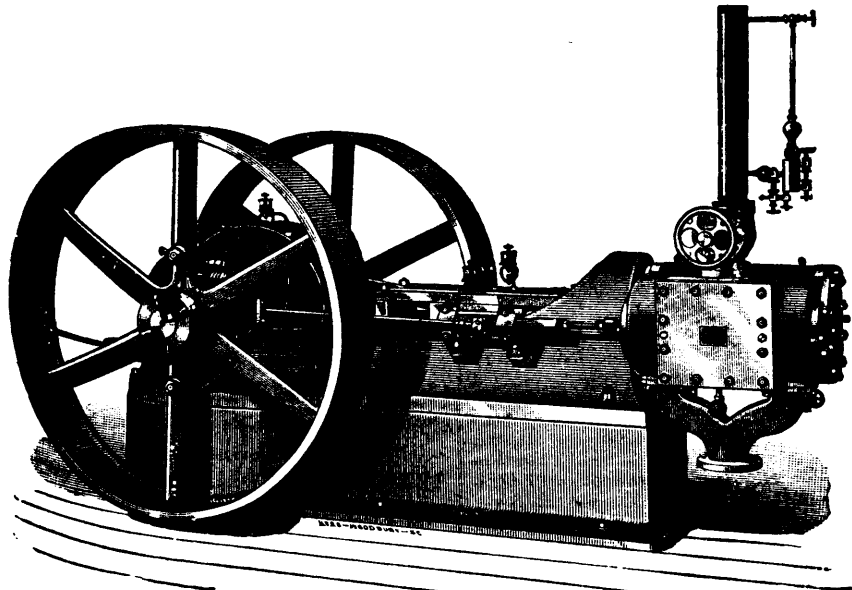
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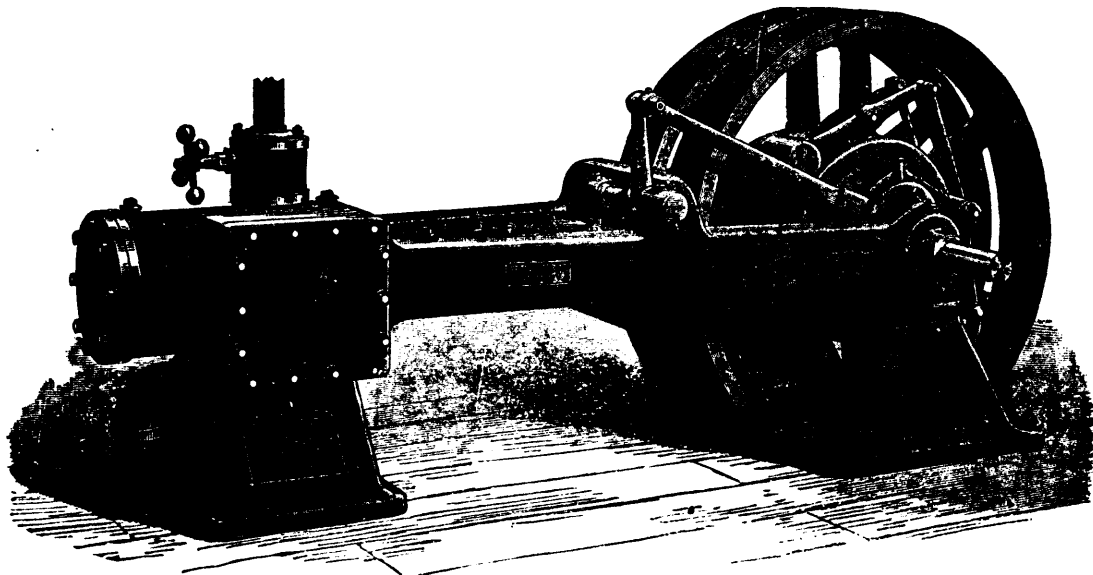
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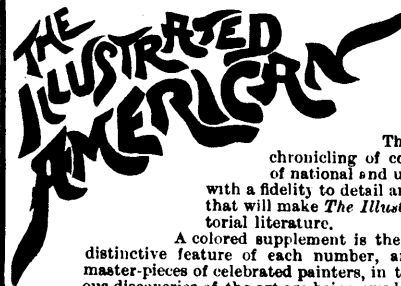
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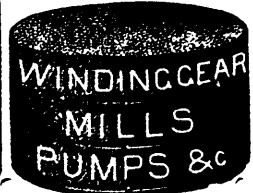
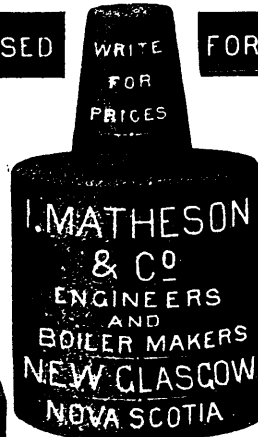
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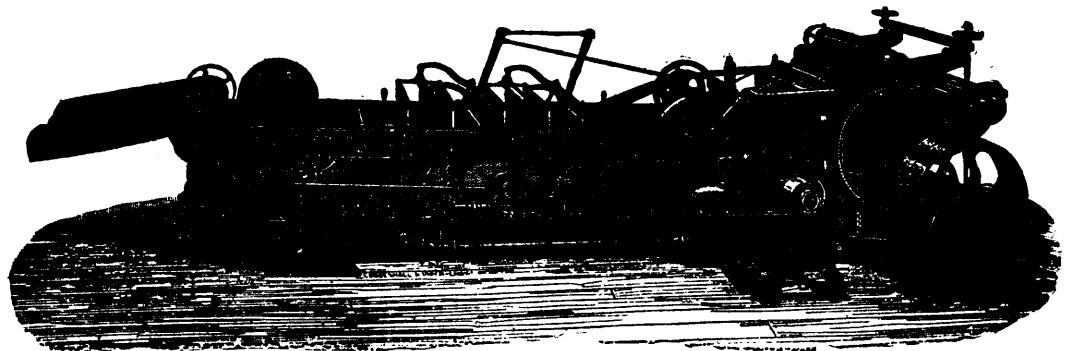
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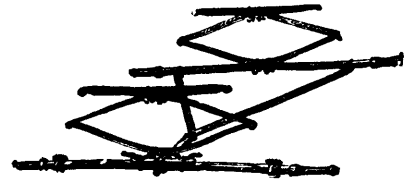
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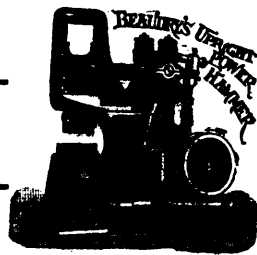
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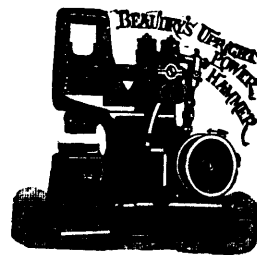
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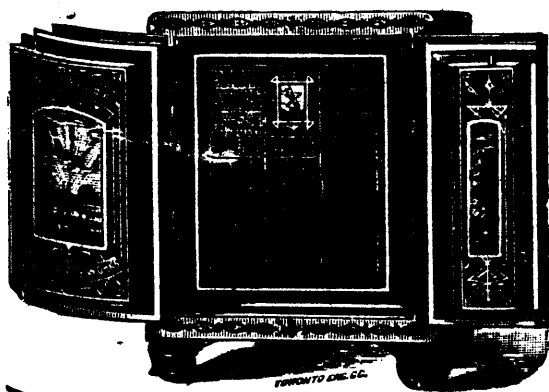


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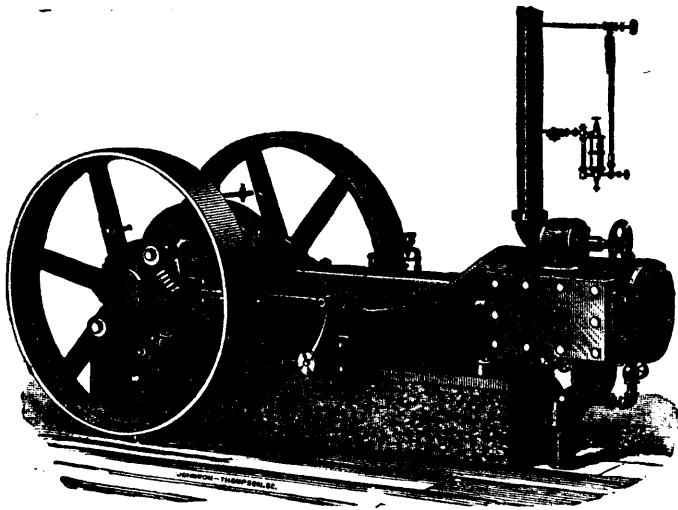
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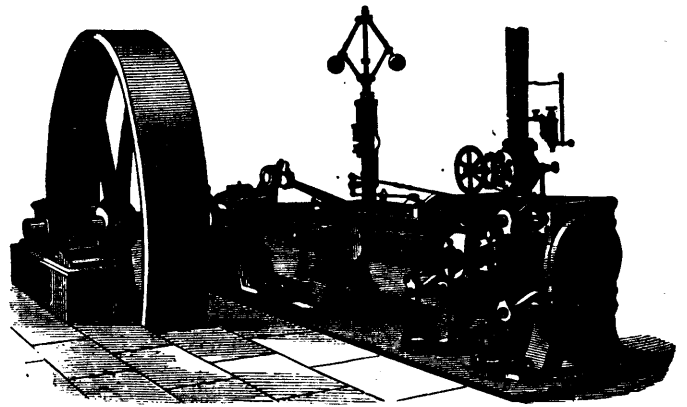
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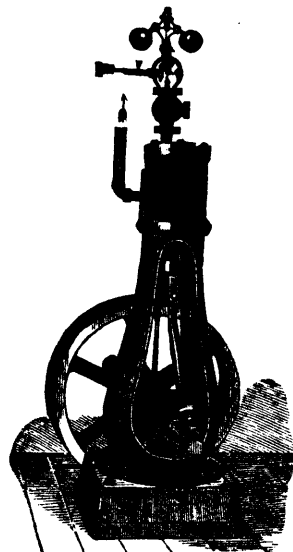
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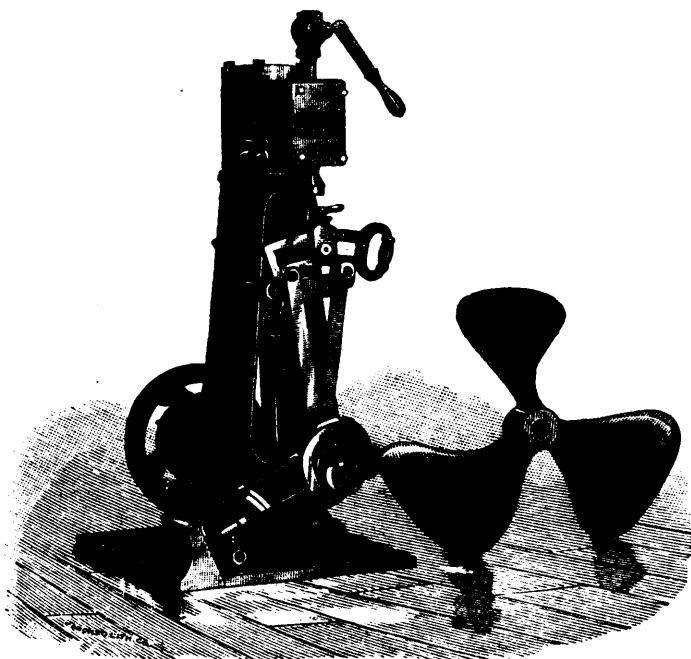
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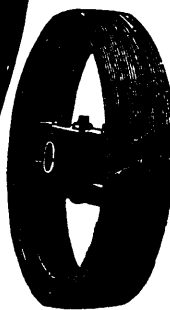
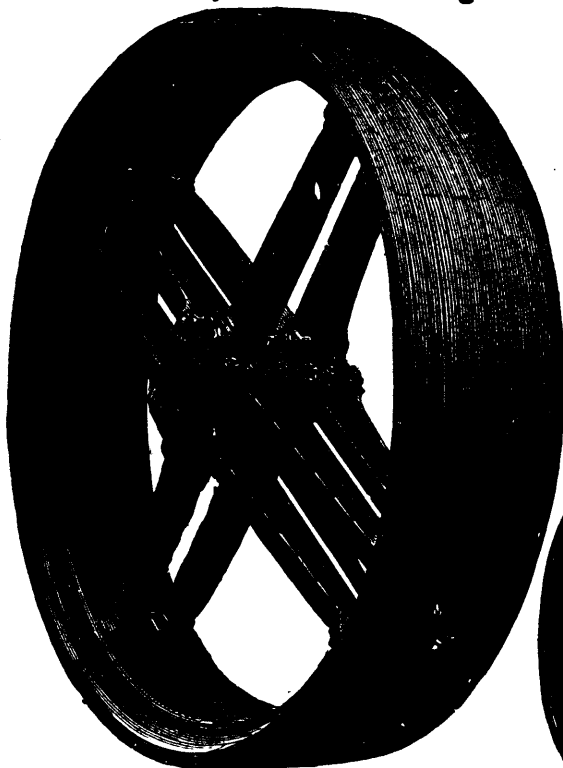
EVERY PULLEY WARRANTED.



We will furnish a Pulley for any service for 30 days free of charge, if it does not meet the warranty. Prices as low as any other good Pulley. Send for Catalogue, Price List & Guarantee

70 PER CENT. LIGHTER THAN CAST IRON

And 50 per cent. Lighter than Wrought Iron or Steel Pulleys.



READ THE FOLLOWING.

NORTHWESTERN MANUFACTURING & CAR COMPANY,
SHATTO & DENNIS, MINNEAPOLIS, MINN. STILLWATER, MINN., August 15, 1884.
Gentlemen: You ask why we use the Dodge Patent Pulley. I answer because we consider them the cheapest, most convenient and satisfactory in all particulars.
Yours truly,
S. R. STIMSON, General Manager.

OFFICE OF NEWTON WAGON CO.,
C. L. RICE, AGENT, CHICAGO, ILL. BATAVIA, ILL., Feb. 17, 1885.
Dear Sir: Replying to your favor, will say that after using the Dodge Wood Split Pulley for a year or more we are satisfied they are a good thing, if not the best Pulley made, and shall use them hereafter in preference to any other we know of.
Yours truly,
NEWTON WAGON CO.

We have sold these pulleys for one year, and they have been put to every kind of service, and their popularity is wonderful. We refer to the following users for proof of the above statements: Pillsbury & Hulbert Elevator Co., Minneapolis; K. M. Pratt & Co., Elevators; Northern Pacific Elevator Co.; The Pacific Elevator Co.; Minneapolis Harvester Works; Minneapolis School Furniture Co.; M. & St. L. R. R. Co.; Willford & Northway; Washburn, Crosby & Co.; St. Paul Electric Light Co.; St. Paul Roller Mill Co.; Minneapolis Brick Co.; N. W. Mfg. & Car Co., Stillwater, Minn., and very many others.
SHATTO & DENNIS, MINNEAPOLIS MINN.

THE WORLD'S INDUSTRIAL AND COTTON CENTENNIAL EXPOSITION,
W. H. DODGE, PREST. NEW ORLEANS, March 19, 1885.
DODGE MFG. CO., MISHAWAKA, IND.
Dear Sir: I have a number of your Patent Wood Split Pulleys in use here at the Worlds Fair and Cotton Centennial Exposition, driving Dynamos for Electric Lighting. They are doing heavy work, and are held upon the shaft by the compression of wood on iron. They hold firmly, and do not slip. I have watched with a great deal of interest the many Pulleys of your make running at this Exposition; and I think them the best Pulley I have ever seen. I believe them to possess the following points of merit over any other Pulley: All Pulleys being split or in halves; best belt surface; best shaft fastening; best method of utilizing Pulleys to shafts of different sizes; best balance; lightest on the shaft; strong, and I believe durable. I heartily recommend them.
Yours very truly,
S. H. GILMAN,
Chief Consulting Engineer.

Waste of Power.

According to the best scientific authority it costs one horse power to keep in motion one ton of metal or weight; thus for every unnecessary 2,000 pounds weight on your line shaft, cost you one horse power. To maintain a horse power costs from \$25 to \$125 per year. Any manufacturer who will take the pains to investigate the unnecessary weight by Heavy Iron Pulleys, *too tight belts, etc.*, will be surprised to find the enormous waste of power consumed in this manner. **60,000 Dodge Patent Wood Split Pulleys** now in use. Our capacity being now equal to 100 Pulleys per day, we shall hereafter keep in stock for immediate shipment all sizes.

Send for Illustrated Circular and Reference List.

THE DODGE WOOD SPLIT PULLEY CO.,

TORONTO.

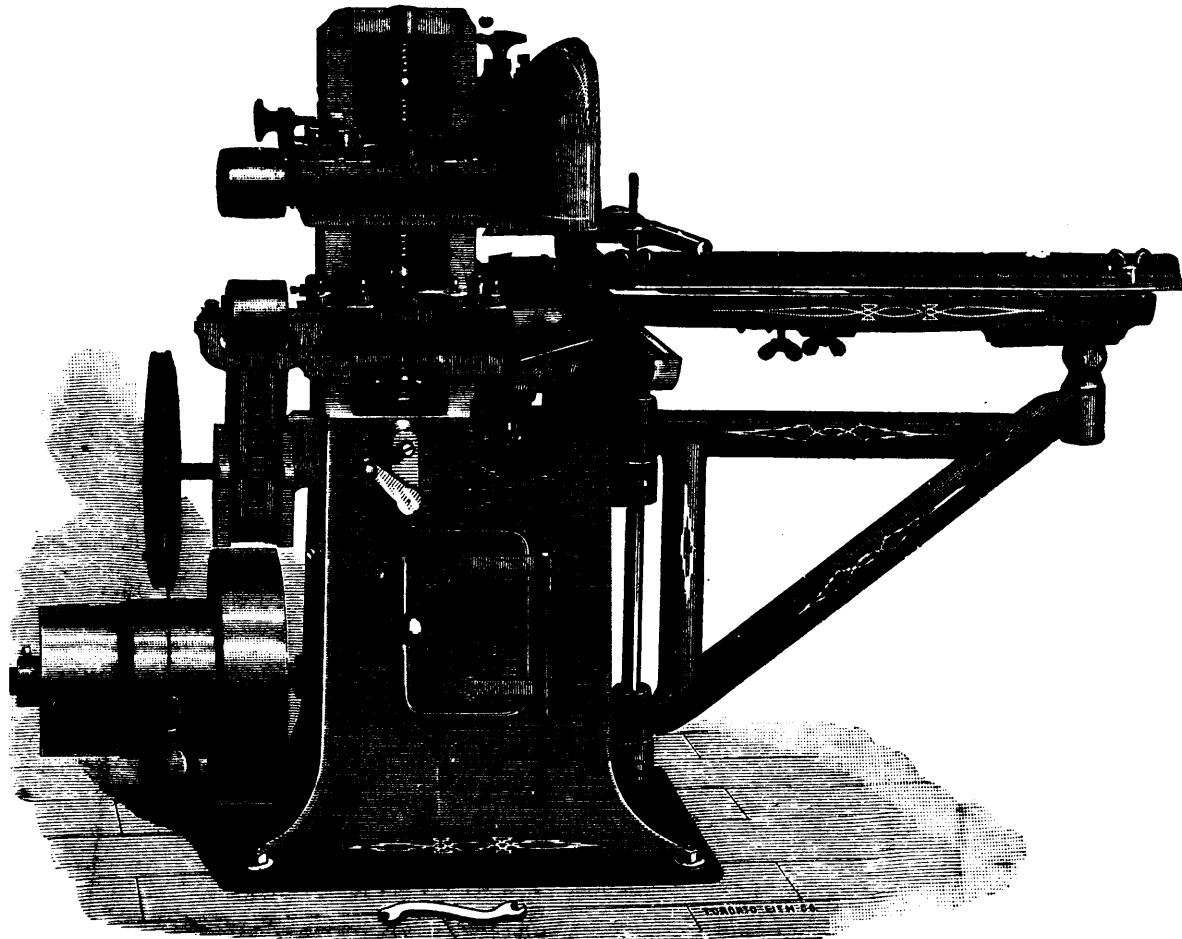
P.O. BOX 333.

TELEPHONE 2080.

TAKE NOTICE:—Our List of Prices for the DODGE PATENT WOOD SPLIT-PULLEYS is for ALL SPLIT-PULLEYS.

We beg you will note this fact when comparing our List with others which are for SOLID RIM, and NOT for Pulleys in HALVES.

NEW AND IMPROVED
Pedestal Tenon Machine.



This is an entirely new style of Tenon Machine. The frame is cast in one piece, and the working parts stand solidly on a pedestal, avoiding all vibration.

The Cutter and Cope Heads are connected and are moved all together, or separately, as required. The Upper Head and Boxes also adjust horizontally to suit shoulder of tenon, the Cope Knives moving with the Heads to prevent re-adjustment.

A special feature in this machine is the Bed, or Carriage, which is at once light and strong. The outer end works on rollers and is moved very easily.

In cutting the tenon the Bed and Carriage move entirely past the Heads and Cutters, the operator having full control of the work. It has also the advantage of leaving the Heads and Cope Knives clear, and of ready access by the operator.

The Carriage is so arranged that it cannot tip over the Slides nor be thrown into the Cutters, and is also supplied with extension bar for long stuff, as in all Tenoning Machines.

This Machine is supplied with single or double Copes, as ordered, and for furniture work it is without Copes, and with an adjustable cut-off Saw.

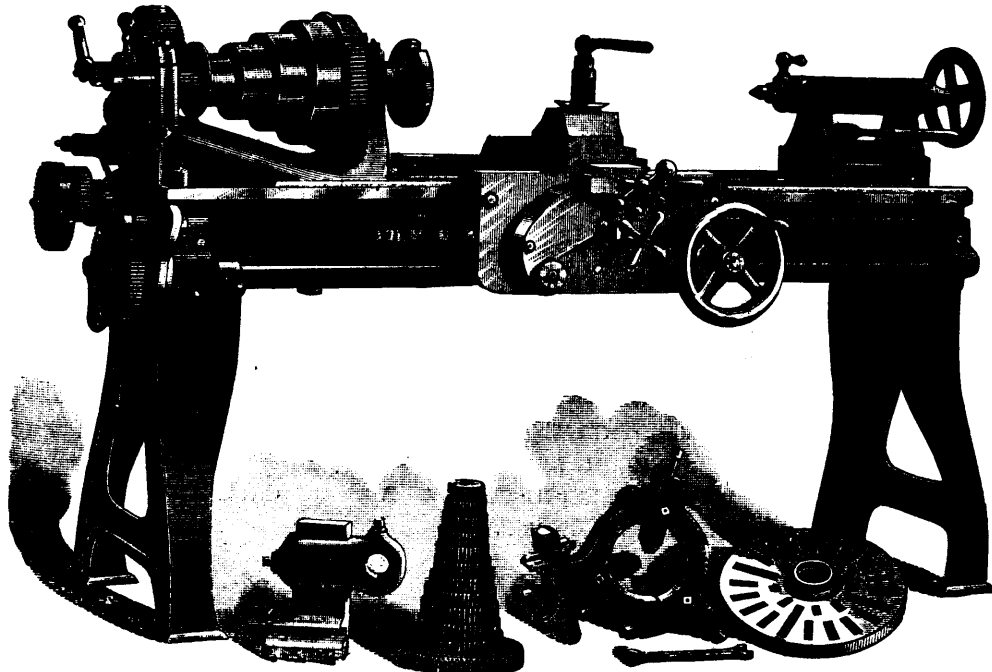
COWAN & CO.

"Galt Foundry" Engine and Machine Works, GALT, ONTARIO, CANADA.

Canada Tool Works,

John Bertram & Sons,

DUNDAS, ONT.



16-in. LATHE.

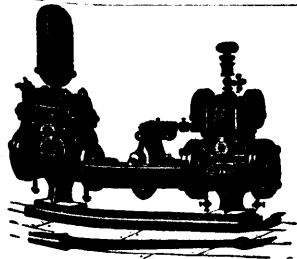
Manufacturers
of
Machinists' Tools
and
**Woodworking
Machinery.**

LATHES,
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BOLT
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MACHINES,
MATCHERS
MOULDERS,
TENONERS
BAND SAWS,
MORTICERS,
SAW BENCHES

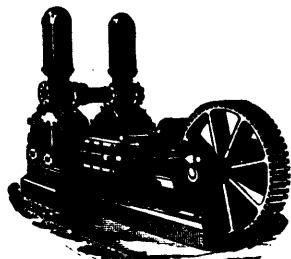
Locomotive and Car Machinery, Special Machinery, Price List and Photographs on application.

Warerooms: Permanent Exhibition, Toronto; Polson Engine Co., 38 Yonge St.; Machinery Supply Ass'n, Montreal.

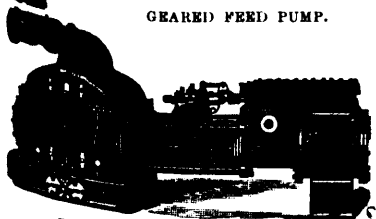
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BOILER FEED PUMP.



GEARED FEED PUMP.



DUPLEX COMPOUND ENGINE

BUILDERS OF

SINGLE AND DUPLEX

Steam and Power

Pumping Machinery



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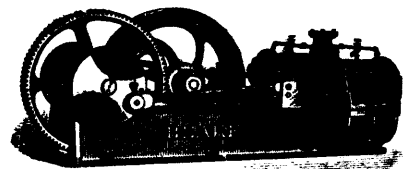
FEDERAL STREET

NEW YORK

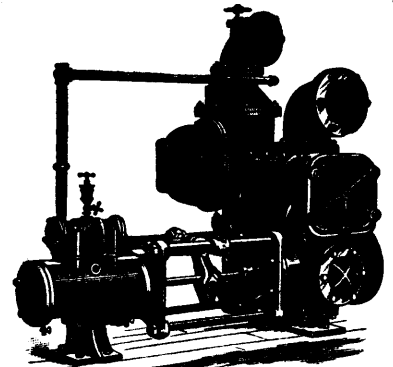
95 & 97 LIBERTY STREET.

SEND FOR ILLUSTRATED CATALOGUE.

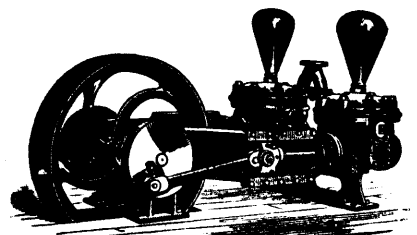
These goods may be seen at the Permanent Exhibition 63 to 69 Front Street West, Toronto.



AIR COMPRESSOR.



AIR PUMP AND CONDENSOR.



BELT PUMP.

Nova Scotia Steel Co., Limited,

NEW GLASGOW, NOVA SCOTIA

(Only Steel Works in Canada),

MANUFACTURERS OF

Hammered *and* Rolled Steel

MADE BY THE

SIEMENS-MARTIN (OPEN HEARTH) PROCESS.

ROUND MACHINERY STEEL for Shafting, Spindles, etc. MILD STEEL for Rivets, Bolts, Thresher Teeth and many purposes where Norway Iron is now used.

SPECIAL SECTION PLOW BEAMS, MILD STEEL CENTRE AND SOLID MOULD BOARDS,
COULTER STEEL HARROW DISCS,
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STEEL NAIL PLATE.

 *Binder Bars, Z and other Special Sections.*

STEEL MOWER BARS.

Particular attention given to the manufacture of Rake, Cultivator and Harrow Teeth, and other Agricultural Spring Steel Forgings.



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WHERE MANY SIZES MAY BE SEEN IN STOCK.

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 Mantles, Over Mantles and Mirrors in Finest Hardwoods. Mouldings, Picture
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CLOSE PRICES. LIBERAL TERMS.

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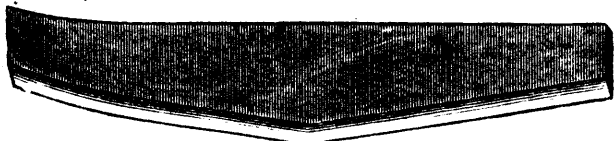
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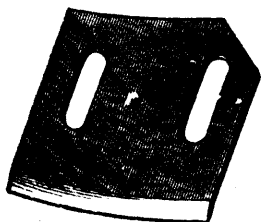


MOULDING, TENONING

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And other irregular shapes.



Cheese-box and Veneer, Paper Cutting, Leather Splitting and any special knife made
 to order. SEND FOR PRICE LIST. ALL WORK WARRANTED.

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Star Brand—BEAM WARP.

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First Prize, Silver Medals, for Beam Warps and Denims
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For Sale Cheap.

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ELECTRIC - LIGHT - PLANT

FOR SALE AT LOW PRICE:

All in good order, but recently replaced by the RELIANCE SYSTEM.

- Two 25-Light Ball Dynamos, Mica Insulation. Almost as good as new
- One 15-Light American Dynamo, in good order.
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Apply for the above or for new plant to

THE RELIANCE ELECTRIC MFG CO., Ltd.
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HICKORY PULLEYS.

We make only hardwood bent rim spoke arm split pulley; only small split pulley; only split loose pulley with oilless bearings; only wooden hangers, in the market.



Send for discounts and circulars.

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MENASHA, Wis.

W. S. McGregor, Manufacturers' Agent AND BROKER

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Correspondence solicited with Manufacturers desiring representative in Toronto and East.



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CASTINGS TO ORDER

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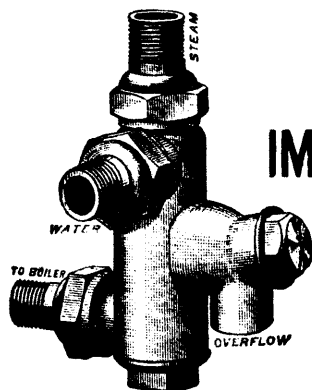
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Agricultural Implements

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Also CARRIAGE HARDWARE.

SMITH'S FALLS,
Ontario, Canada.



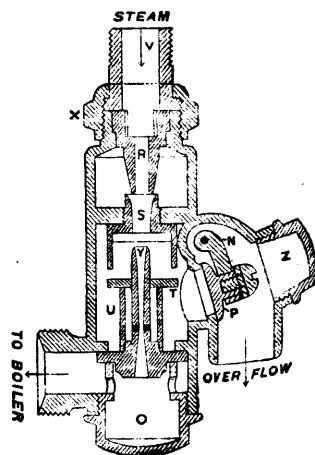
FEED YOUR BOILER WITH A PENBERTHY IMPROVED AUTOMATIC INJECTOR.

10,000 IN USE IN CANADA.

Cheaper than a Pump, takes up Less Room and
Feeds the Boiler with Water at
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SIMPLE, ECONOMICAL AND DURABLE.

And the Only Absolutely Automatic Injector in the Dominion.



PROMINENT FEATURES ARE: They start at about 25 lbs. steam pressure and work to 150 lbs. Lift water up to 20 feet, and work from a head as well. They require little watching, as, being automatic, they restart if feed to boiler is broken by air or sudden jarring. The parts are interchangeable and can be removed without uncoupling machine. Send for pamphlet to **PENBERTHY INJECTOR CO.,** Detroit, Mich. Factory at Windsor, Ont. Handled largely also by Waterous Engine Works Co., Limited, Brantford; J. H. Taylor, Montreal; S. J. Shaw, Quebec; Park Bros., Chatham; McDonald & Co., Limited, Halifax, N.S.; A. R. Williams, Toronto.