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THE CANADIAN MANUFACTURER

— AND INDUSTRIAL WORLD —
DEVOTED TO THE MANUFACTURING INTEREST OF THE DOMINION

Vol. 23.

TORONTO, DECEMBER 2, 1892.

No. 11.

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A.

B.

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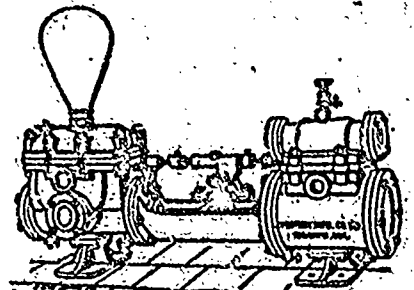
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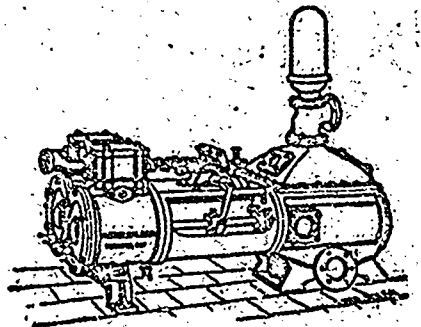
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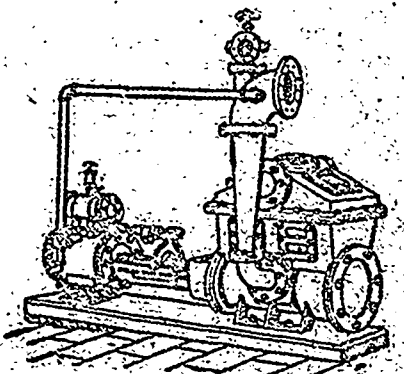


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**SUPPRESSED INFORMATION RE
 TARIFF CHANGES.**

A FEW days ago the *Empire* published an interview which its Ottawa correspondent had had with Mr. George Johnson, the Dominion statistician, regarding the election of Mr. Cleveland and the probable effects thereof upon the Canadian tariff. Mr. Johnson is reported as saying .

Cleveland will seek to readjust the tariff after a very conservative fashion. In doing this he will give Canada no favors that he does not grant to other countries. What he will do, will be to follow in the wake of Canada—reduce the United States tariff to something like the average duty imposed by Canada, and enlarge the free list in two directions, first, by increasing the free list of raw materials, and, second, by increasing the free list of manufactured and partly manufactured articles. The Government of Canada has followed this plan, and has done so especially in respect to free manufactured and partially manufactured articles. Unless one makes a study of the movements of the Government in respect to the free list, he has no idea how energetic is their action in

the direction of placing manufactured and partially manufactured articles on the free list. Scarcely a week passes without an Order in Council putting articles of this class upon the free list. Canada has, first, a free list which is constantly increasing in comparison with the dutiable list, and, second, a free list of manufactured articles, rapidly becoming larger in proportion to the total free list. It is studying this class of imports that one realizes that the policy of the Government is to add to the free list such articles as form the raw material of manufacturing, and thus develop the National Policy to the utmost without pressing upon the great body of the consumers.

It is scarcely credible that Mr. Johnson should have made the statements ascribed to him, and if he did, it is scarcely credible that the Government should have marked out and approved following the course indicated.

If Mr. Johnson or the Government can definitely state just what "raw materials" are and are not, and what "manufactured and partly manufactured articles" are and are not, he and they will place the whole civilized world under lasting obligations to them, and solve what has practically been considered an unsolvable question, by a satisfactory explanation.

But the importance of this question, great as it is, is not greater to Canadian manufacturers than the assurance that the Government are energetic in their action in the matter of placing certain articles on the free list—that scarcely a week passes without Orders in-Council being issued for this very purpose. Will Mr. Johnson have the kindness to throw some light on this subject? It used to be that, under the auspices of the Government, bulletins were issued by him probably once a month, in which all Orders-in-Council were made public, but these bulletins have been suppressed, and the public and all interested are denied knowledge of what is being done in this direction. Apologists for the Finance Minister explained during the session of Parliament that no changes in the tariff would likely be considered through a desire to avoid meddling with it one way or another, and to avoid discussion regarding it. Of course this explanation did not explain why changes in the tariff should not be made if it was right and proper to make them. It is well known that Mr. Foster received many delegations of manufacturers who explained to him why certain changes were desirable and necessary, but these manufacturers know that these weekly Orders-in-Council which Mr. Johnson speaks of have not been made in response to their applications, and that the prayers they offered up at Ottawa might quite as well have been poured into the ears of a Chinese idol so far as gracious answers to them are concerned. Very few of these petitions were for increase of duty, and many of them were for decrease, and if they had all been granted, as they should have been, the ultimate effect upon the revenue of the country would not have exceeded a few thousand dollars either way.

What, then, is the nature of those weekly tariff changes Mr. Johnson tells about? Will Mr. Johnson tell? Our columns are open to him, and our manufacturers are anxious to learn. Mr. Johnson is an old and faithful public servant who does not seek newspaper notoriety, therefore whatever he says carries weight. We hope he will tell us why the bulletins are suppressed, and what is the nature of the changes in the tariff which are being made with weekly frequency. This journal would be pleased to publish a list of them.

NICKEL—PROVINCIAL ROYALTY VS. EXPORT DUTY.

GREAT opportunities are not always presenting themselves to men, and when they appear it is not edifying to observe that the favored one failed to grasp it and, by improving it, lift himself head and shoulders above his surrounding mortals. When the death of Mr. Mackenzie created a vacancy in the House of Commons, the constituency were told by the now sitting member that great reforms were needed in the government of the country, and that he was just the man to effect them. We give Mr. Maclean credit for what he did and is doing in the way of obtaining lower fares on the railroads. In that particular he is on the right track. He showed much resolution and courage in ignoring his party and its leaders who would not take sides with him in antagonizing the railroad interests; and he has the satisfaction of knowing that the masses of the people are with him. This was a great opportunity which he made for himself, and for what he is attempting he deserves unbounded credit.

But Mr. Maclean is not as perceptive of his great opportunity in the nickel question. He is evidently fully appreciative of the situation, and feels in his conscience that something should be done whereby Canada might reap some of the benefits arising from our possession of such vast inert wealth as exists at Sudbury. He knows that the largest and most available deposit of nickel known to the world is in Canada. He knows the value of nickel as a component in the manufacture of armor plates. He knows that all the nickel used in the armor of the new American navy is produced in Canada. He knows that American capitalists own vast tracts of nickel lands at Sudbury, and that they control a very large proportion of the output—probably three-fourths of the nickel mines of that district. He knows that because of the exceedingly bulky character of the ores, and that it is more economical to treat them at the mines than elsewhere, that any labor is bestowed upon them in Canada after they are removed from the earth, and that all that is done to and with them is merely to reduce their bulk and make the transportation of them cheaper. He knows that the product of this primitive treatment, matte, is carried to work in the United States where, in the refining processes to which it is subjected, it gives employment to American capital, occupation to American workmen and freight to American railroads. He knows, too, that after this Canadian product has crossed the international boundary, no Canadian workman may follow it, expecting to obtain employment in the manipulations of it except they forswear allegiance to Canada and become American citizens. And he also knows that although he argues that the Ontario Government can benefit Canada by imposing a royalty on such nickel ore as may be raised from mines in certain localities, the mines that are now being worked, and which are producing such vast quantities of ore, and the lands covering and containing these deposits, are entirely beyond the reach and operation of the mining law of Ontario. Mr. Mowat's government may impose royalties on such mining operations as are carried on on lands over which it has control, but no such lands are now producing nickel ore in commercial quantities; and no such control is possible over the other lands. This is the situation, and Mr. Maclean knows it.

It is strange, then, that in his paper, the *World*, he should assume a position on this question ignoring some of these facts, and in advancing arguments which are palpably inconsistent, to say nothing of an exhibition of ignorance entirely inexcusable in a great daily newspaper. For instance, the *World* tells us that it is probable that when Mr. Cleveland comes into office his government will adopt a policy by which the exports of our crude nickel, in the ore or the matte, will be increased. That is just what the McKinley tariff did. Previous to the passage of that law the United States imposed a duty upon the nickel contained in either the ore or matte, but now they are free—pray how much freer could they be? It tells us, too, "the United States already has its eyes upon our Sudbury mines," and that "unless we awaken to the facts of this matter, we shall be left out in the cold by our enterprising neighbors arranging to take the crude ores or matte from our territory, and reaping a splendid harvest from supplying the world's markets with nickel steel, which we were too stupid to reap." Yes, yes: not only the eyes of the United States has been upon our Sudbury mines, but its hands are actually upon them, for the most important of them are the personal property of American citizens and Yankee corporations.

Mr. Maclean and his *World* fail to grasp the situation when he supposes that the evils he complains of can be remedied by the Ontario Government. Why should Mr. Mowat endeavor to "head off" the manufacturers of Cleveland and Pittsburgh in their efforts to develop an important industry in their country? Sneering at "the notorious Mr. Carnegie" and his "Triumphant Democracy" will not prevent him from engaging in a lawful and laudable business; nor could the interference of Mr. Mowat have any better effect. The Dominion Government alone have the authority and the power to give the industry to Canada which is now so flourishing in the United States, and to which Canada is seemingly a willing contributor. In view of the real facts of the matter we insist that Mr. Maclean and the *World* miss a great opportunity when an editorial in that journal reads as follows:—

If the Ontario Government is wise it will tell Mr. Pinkerton-Detective Carnegie and all his kin in the States that Canada is not parting with crude nickel at present, but that, if they chose, they can erect works on this side and employ as many men as they wish in their enterprises, so long as they are put on Canadian soil. * * * But although Ontario is rich, she is not so well off that she can afford to dissipate her wealth like a fool spendthrift, as she will if our mines are not made feeders to those industries for which our minerals are the raw materials.

Mr. Maclean is a member of the Dominion House of Commons and counts one in that beastly more than two-thirds majority when divisions are demanded, and because he is—because he is on the strong side—because he has already given a splendid exhibition of statesmanship in the question of reduction of railroad fares, and because he knows better, we are surprised at such an exhibition of superficialism as is displayed in the extract we have given. It is unstatesmanlike, in fact it is silly. The Dominion Government and its more than two-thirds majority have it in their power to force Mr. Carnegie and other American manufacturing capitalists to establish important industrial works in Canada. The Ontario Government

possess no such power. Then why does Mr. Maclean say to the contrary? Abuse of "Mr. Carnegie and all his kin" will not do it. Abuse is not argument. Mr. Maclean should stand above the plane of the pettifogging politician. Let him refrain from trying to hide the shortcomings of his party in this matter. He appreciates the importance a nickel industry would be to Canada. Let him do what he can to give it to us. The power to give it resides among his political friends at Ottawa, not among his political enemies of the Ontario Government.

A TARIFF ANOMALY.

IN another page will be found a description of a beautiful automatic pocket-knife manufactured by the Automatic Knife Company, Gananoque, Ont. An examination of this knife shows it to be quite equal in appearance to any similar article made in Great Britain, Germany or the United States, and of equal merit in all respects. The manufacture of fine cutlery is a new industry in Canada, and one which should be encouraged. The Gananoque concern are men of skill and intelligence, possessed of sufficient capital to make their enterprise an entire success; and it would, no doubt, soon be in condition to supply the home demand for such goods if they were accorded the benefit which the National Policy was intended to bestow. The duty upon cutlery is 25 per cent. advalorem, and the imports of cutlery of various descriptions last year were valued at nearly \$300,000. Much of the cutlery we use is made in Sheffield, but the bulk of our imports comes from Germany, where the labor of skilled cutlers commands not exceeding 75 cents per day, in many instances not more than 30 cents. The competition of cheap German cutlery in England was a fearful blow to the Sheffield trade. It is a fact that only recently, even the swords and bayonets used in the British army, were made in Germany; and it was because of this disastrous competition that the British Parliament was forced to afford protection to the trade of their own country by requiring that all such articles should be distinctly stamped and marked with words, showing that they were not of domestic production. Of course, under their fiscal system, a tariff duty could not be imposed upon German cutlery, but the requirement spoken of was a near approach to it, and afforded some measure of protection to British manufacturers, without which they would have been ruined. A similar condition prevailed in the United States up to the passage of the McKinley tariff. For years that country had been endeavoring to place its cutlery industry in a condition where it could supply the home market with really excellent goods; and the American manufacturers deserve unstinted credit for what they have done in that direction; but German goods, the product of very cheap labor, imported into that country was having a very depressing effect on the American industry, and would probably have ruined it if it had not been for the protection afforded by the McKinley tariff.

The situation in Canada may be imagined from these facts. In purchasing cutlery in this country one can never be quite sure that he is getting just what he may think he is. It does not follow that when an article bears the well-known names of Rogers or Wostenholm, or other celebrated Sheffield makers

that it even came from England, or that it did not come from Germany. Under such circumstances he must be a brave and enterprising man to attempt the manufacture of cutlery in Canada; and when such an one is found, and when an effort is made to establish such an industry, every encouragement should be afforded. That encouragement should be in the direction of affording it the greatest tariff protection consistent with our avowed policy, and in giving it its raw materials as near duty free as possible. At any rate the duty on raw materials should be lower than the duty on the finished product made abroad.

In the manufacture of such cutlery as is here alluded to, fine steel is the most valuable and essential raw material. Such steel is not made in Canada, nor is it likely to be for years to come; and whatever duty there may be imposed upon such steel it is for revenue alone. There is no industry for the tariff to protect. If the Government requires the revenue which can be raised in this manner, no manufacturer objects to having to pay it, provided the cutlery, which he may produce from the imported steel, is correspondingly protected by the tariff. But unfortunately in this matter such is not the case. The duty upon the raw material of cutlery is 30 per cent., while the duty upon finished imported cutlery is only 25 per cent. In other words, he pays more duty upon his raw material than his protection amounts to. The Gananoque company, therefore, cannot, under the circumstances, engage in the manufacture of such cutlery as is imported; and they would be entirely unable to manufacture the beautiful and excellent article to which we have alluded were it not that their patent gives them a measure of protection.

PROFIT SHARING AND PROTECTION.

Our esteemed contemporary, *The Week*, gives a very fair resume of our recent article on Profit Sharing, closing with the suggestion, "By the way, if the Canadian sugar barons could be induced to adopt it, what an accession we should have in a few years to the ranks of our men of wealth."

It is well known to our readers that this journal does not favor any system by which any class of men obtain exorbitant profits in their business unless the working men, whose brawn and muscle are necessary in the business, also obtain a fair and equitable remuneration therefor. And our objection applies equally where the question of tariff protection has a controlling influence, as in the manufacture of refined sugar in Canada under our present tariff, as in industries where the tariff does not affect, as in the operation of our railroads. Our contention is that while capital should be duly rewarded for its investment and management, labor should also be equally rewarded according to its worth and merit. We view the matter in this light because we know that a ton or a hundred tons of gold, coined into money, would be of no more value than an equal quantity or weight of mud unless the brawn and muscle of men are used in the processes of manufacture or its equivalent in producing an increment of the capital. In the case of the sugar barons and their investment, the tariff makes it possible for them to gain a very much larger profit in their business than it seems to us is a fair and equitable return for

their investment; and while we might think that the labor employed by them might, according to the ethics of profit sharing, be assigned a certain portion of the profits of the business over and above what they actually and only receive as wages, yet if the profits of the business were thus divided it would not indicate that strict justice had been done to all concerned. If the question is asked "Who all are concerned?" our reply is, "The people of Canada." The ability of the sugar refiners to obtain exorbitant profits is obtained by the operation of the tariff; and the tariff, we know, is made by the representatives of the people and supposedly in the interests of the whole country. If, then, the sugar refiners obtain an undue profit in their business, the matter cannot be equalized, as *The Week* suggests, by sharing the profits with the employees—we are not advised whether the refiners practise profit sharing or not—but with the people, and of course this can be done by such a re-arrangement of the tariff as to make it impossible for the refiners to draw from the people any more than a fair compensation for their services and investment. It is not in accord with the ethics of protection that the tariff should allow the refiners to become enormously and unduly wealthy at the expense of the people, even if they should divide a portion of their wealth with the labor which enables them to conduct their industry. It is not honestly theirs to thus divide. Neither is it according to the ethics of profit sharing that wealth thus obtained in a manufacturing industry should be thus divided. The wealth has been improperly wrung from the people, and it does not properly belong to either the sugar barons or their employes to thus divide.

The Week thinks that we look at the profit sharing question from the point of view of the employer and the capitalist, and that so far as we favor the plan we do so in the hope that it may be a means of attaching the artisan firmly to the cause of protection. We would be quite grieved if our contemporary honestly considered us so selfish. We do not close our eyes to the fact that the world is not yet perfect. We do not think that our system of tariff protection is perfect. We do not think the question of capital versus labor, and their relative shares in their joint products, has been finally or even equitably settled. But one very important question is quite firmly settled in our mind, and that is, that under whatever system we may adopt; under whatever fiscal policy we may choose, that system and that policy should look first, last and all the time to the advancement of Canadian interests and to the benefit of Canadians, leaving the rest of the world for after consideration. And herein we consider profit sharing and tariff protection very intimately connected. We have more pride in being a Canadian than we would have in being only a cosmopolitan. In our opinion the man who earns his living in Canada by the sweat of his brow, be he a farmer, a railroader, a day laborer or a mechanic, is quite as much interested in the perpetuity of protection as the manufacturer who invests his capital in workshops and factories. Yea, and perhaps more so. It is worth a great deal to the manufacturer to possess the home market, supplying the needs of the country from his own establishment; and it is worth a great deal to the country and to the labor which he employs that the factory or workshop should exist, because it gives employment to labor and causes a consumption at home of domestic products which would otherwise

be forced to seek a market abroad. But it is not the manufacturer alone who would suffer if, under the unrestricted competition of foreigners, he should find himself compelled to shut down his works and quit business. It would be a very serious matter with him, but much more so to the country. It might be suggested that in all such conflicts the weak is forced to the wall by the strong. But if the conflict must be kept up—if the home establishment must be continued in operation—it is quite evident that it can only be done by a reduction in cost of operation; and where, pray, is this reduction to be begun sooner than by reducing the remuneration to labor? Labor would be the first to receive the blow, which would immediately react upon the whole country through its inability to consume the products of the country as extensively as when wages were higher. This is the interest labor has in protection; and we view the matter from this standpoint. It is true the manufacturer would also be a sufferer; but capital can be readily transported from one country to another; and if it is driven out of Canada because of its inability to find remunerative employment in manufacturing industries, because of the competition of the cheaper labor of other countries, it would naturally plume its wings and soar away to some other country where labor is cheaper, and there become active in supplying cheap goods to an impoverished people. But Canada could not possibly be benefitted by such events. The farmer would have no nearby manufacturing town in which to dispose of his products, and so he would be forced to send them abroad; and those in what was the manufacturing town who had been his best customers, would become producers like him, and his competitors. Admitting that in some articles the cost to the farmer under protection is greater than it would be under free trade, would it not be more to his advantage to submit to this larger cost, having the ability to meet it, than to put his hands into empty pockets when desiring to purchase cheaper goods?

We submit, then, that the proper way to look at this profit sharing question is from the standpoint of the employer and capitalist, as well as from that of labor, when remembering that tariff protection is so intimately connected with it. It requires a majority of the votes of the people to sustain our system of protection; and it is plain that only those votes will be cast to sustain it that feel assured that the system is really for their best interests. The votes of the manufacturers are cast for it for obvious reasons. The votes of the farmers are cast for it because it reduces the number of competitors and assures them a much larger home market than they would otherwise have. The votes of mechanical labor are cast for it because under it their wages are larger than they would be if there was the unrestricted competition of cheaper labor in other countries to contend against. The appeal to the farmer and to the mechanical laborer against protection is that, under free trade, the cost of manufactured products would be cheaper than they can possibly be under protection. But while this is not necessarily the case, the answer to the argument is that it is better to have higher wages with which to pay for the more expensive products of protection, than to have no money with which to buy the cheaper products of free trade.

But when labor observes that most glaring absurdities exist in the operation of the tariff, and that despite the remun-

strances of friends and the denouncements of enemies those incongruities are suffered to exist; and when it is seen that a few sugar refiners are becoming millionaires; that the production of binder twine is manipulated so as to squeeze enormous profits out of the farmers; that the capital stock of cotton mills is watered to the extent of a hundred per cent. so as to obscure the fact that more money is being made out of the business than is justifiable, and that even the oil in the household lamp is taxed a hundred per cent. more than it ought to be; it is not surprising that the adverse arguments of free traders, based on these facts, are likely to affect the judgment of the voters who have heretofore upheld protection, and to cause them to seriously consider the propriety of trying another policy. It is quite time, then, that manufacturers whose greed does not blind them to the situation should join hands with labor to correct the glaring evils to which we allude. In theory the interests of the two classes are identical—why not make them absolutely so by an equitable sharing of the profits in the creation of which they are both so essential? Under existing systems whatever sharing is now done is done on horizontal lines. In the cases of sugar, binding twine, cottons and coal oil the strata of divisions which are assigned to labor are very thin and very close to the bottom of the milk pan, while that which capital appropriates is the very thick, rich cream at the top. The division should be on perpendicular lines, where all interests involved obtain a fair proportion of the cream. If this is done; if labor and capital work together in this way, protection would be established upon a rock and could not be prevailed against by the most resolute assaults of the enemy.

Protection in Canada is rapidly approaching a crisis in which the best common sense of its friends should be exercised. A policy of inaction under a blind dependence in a two-thirds majority in the House of Commons, however, is not an indication of common sense.

EDITORIAL NOTES.

"We are well pleased with our advertisement in THE CANADIAN MANUFACTURER. The paper should be patronized by every manufacturer in the Dominion." Messrs. Brown & Co., proprietors of Ontario Nut Works, Paris, Ont.

A HIGH tariff has just been condemned in the States, a tariff so extravagantly high that even strong protectionists like Mr. Blaine deemed it imprudent; and the Grit organs in Canada have raised a hue and cry against the moderate protection which exists in Canada.—*The Empire*.

THE McKinley tariff is said by recent official reports to be responsible for a diminution last year in Swiss exports to the United States of \$2,200,000.—*The Empire*.

"Extravagantly high tariff" in the United States, and "moderate protection" in Canada indeed. The "extravagant" Mr. McKinley put a duty of \$10 per ton on refined sugar, and put good brown sugar No. 16 D. S. on the poor man's breakfast table free. The "moderate" Mr. Foster put a duty of \$16 per ton on refined sugar—sixty per cent. higher than in the United States—and the poor man in Canada has no free sugar on his breakfast table, the No. 14 D. S. article being unfit for domestic consumption. The *Empire* should refrain from comparisons—they are frequently odious. And then as to the diminution of Swiss imports into the United

States; it is clear that the McKinley tariff caused the expenditure of \$2,200,000 in his own country that would otherwise have gone to strangers.

ACCORDING to the October returns, the United States owes our banks \$22,000,000. Pretty good for a country in a state of commercial atrophy.—*The Empire*.

If the *Empire* desires to investigate the matter it can be put upon the track where hundreds of thousands of dollars of Canadian wealth is lying absolutely idle and unproductive, simply because it is invested in industries which are strangled for the lack of a fair interpretation of the ethics of protection. In the instances alluded to the protection does not protect. We can mention industries where the duty on the raw material is from twenty to fifty per cent. higher than the duty on the finished product manufactured abroad. When the inquisitive capitalist discovers this situation, he does not rush into what would be disastrous manufacturing investments, but deposits his money in the bank, where he can realize a very small interest. The banks, unable to loan this money to good advantage in Canada, send it to the United States where it is in demand for investment in manufacturing and similar enterprises. Is it any wonder, then, that the Canadian owner very naturally gravitates towards where his treasure is? There is more truth than poetry in the *Empire's* sarcasm about the "commercial atrophy" of Canada. It does not see the point, perhaps, but the owners of that \$22,000,000 do.

THE *Toronto World* says: "The McKinley tariff raised the cost of living in the States." If the tariff raised the cost of living in the States, it surely operates the same way in Canada.—*Windsor Record*.

Well, no, not necessarily. If the McKinley tariff—remember that "if"—raised the cost of living in the States, it would be apt to do the same thing in Canada—if—remember that "if," too—we had the McKinley tariff in Canada. But the *Record* is herby assured, on our honor as a man, that we have not the McKinley tariff in Canada, nor anything like it. It does not follow that, because one tariff produces a certain effect, another, and a much lower tariff, will produce the same effect. If a man kills his wife after drinking a gallon of whiskey, it doesn't follow that the man who takes a single horn of whiskey must kill his wife.—*Hamilton Spectator*.

The *Spectator* assures us on its honor as a man that we have no McKinley tariff in Canada, nor anything like it. Let us see. The McKinley tariff does not impose a duty of more than a hundred per cent. on coal oil, but the Canadian tariff does. The McKinley tariff imposes a duty of only \$10 per ton on refined sugar, but the Canadian tariff imposes a duty of \$16 per ton. The raw sugar that the McKinley tariff admits free into the United States is a wholesome and cleanly article of food, while the raw sugar that the Canadian tariff admits free into this country is an unwholesome, dirty stuff that cannot be used for domestic purposes. The poor man in the United States has free sugar on his breakfast table, while the poor man in Canada finds his sugar heavily taxed. The *Spectator* had better save its honor as a man by retracting so wild an assertion.

THE value of the foreign commerce of the United States last year was \$28.58 per head of population, while the value of the foreign commerce of Canada in the same period was \$45.94 per head. The value of exports from the United States was

\$15.85 per head, and from Canada \$23.25 per head. That is a comparison of which we may well feel proud.—*Montreal Gazette*.

Perhaps not so proud as the *Gazette* would have believe. It is not to be thought that the people of Canada are greater producers or greater consumers than the people of the United States. If our per capita exports are much larger than the per capita exports of our neighbors, it is because of the greater diversity of their domestic industries they are enabled to consume a much larger proportion of what they produce; while in Canada, because we have not an equal diversity of industries, but a larger percentage of the people employed in producing exportable commodities—grain, cattle, etc.—we have a relatively larger per capita quantity of produce to send abroad. If we had the capacity to consume at home every dollar's worth of what we produce, and to produce at home every dollar's worth of what we consume, we would be much better off than what we now are, though we might have no foreign trade to brag of.

Mr. J. B. McLEAN, of the *Empire*, and who runs a printers' trade paper as well, is out in favor of a reduction or abolition of duties on patent medicines. Baking powder men and medicine men, he says, would spend thousands of dollars in advertising in Canadian papers if they could only get into the Canadian market without duty. But just why publishers of newspapers should be a privileged class their self-styled organ does not say. The protective policy ought to bear on all classes, and as the majority of Canadian papers, like the majority of Canadians, believe in it, they ought to bear their share of its burdens. If the N.P. improves the general condition of the country then it has done its work, and in upholding it the able editors must be consistent in their own business attitude toward it. Presses are taxed less than other machinery; no part of the printer's outfit is heavily taxed. The N.P. has made a lot of American houses open Canadian branches, and if we keep it up still others will have to come in—even the baking powder men. The amount of advertising business that is lost to our papers by the N.P. is not so much; it is an easy answer for the American advertiser to tell the Canadian canvasser that "We'd fill your paper if it wasn't for your tariff," and in that way to give a pleasant refusal (as far as they are concerned) when asked for business.—*Toronto World*.

WHILE this journal is and always has been a firm and consistent advocate and upholder of the National Policy, it has always strenuously contended that the tariff should be made to conform with the true theory of protection, and that it should not be used to foster any selfish ends, or to encourage any operations under the tariff which would yield unjust or exorbitant profits. And we illustrate this position by referring to the stand we have assumed regarding the sugar duties. It is a favorite cry of the free trade papers, and of those opposed to the National Policy, that the manufacturers are always demanding more protection, and that the Government dare not deny the applications for it. This is certainly not the fact. In fact, the manufacturers have asked more frequently for reductions of the tariff than for advances; and oftener still for modifications where it was apparent that inequalities existed, and that they should be removed. For reasons which no manufacturer can find out, the Government seems deaf to appeals of this character, and this indisposition to give any satisfactory reasons why, has created a feeling on the part of the

manufacturers which the friends of the Government would do well to observe. It may be that the indifference of the Government is due to the fact that there is a two thirds majority behind it in the House of Commons—if this is the fact, then it would be for the interest of the manufacturers that this beastly majority be greatly reduced. We believe in the National Policy and desire to see it administered in strict accordance with the ethics of protection. If those who were chosen by the people to sustain it are recreant to their trust, they had better vacate and allow more representative men to occupy their places. But the present protection is being slaughtered in the house of its friends.

ONE of the speakers who addressed the gathering of the unemployed in London said that the authorities were not afraid of the Socialists, but they were afraid of a body of starving men who did not care whether they lived or died. These men are able and willing to work—willing to give greater value than they receive—yet they remain in a condition of hopeless want. "Cannot that faculty of adapting means to ends which has enabled man to convert the once impassable ocean into a highway, to transport himself with a speed which leaves the swallow behind, to annihilate space in the communication of his thoughts, to convert the rocks into warmth and light and power and material for a thousand uses, to weigh the stars and analyse the sun, to make ice under the equator and bid flowers bloom in the northern winters, also teach him to overcome social difficulties and avoid social dangers?"—*Toronto Globe*.

Why should there be scores of thousands of starving men, women and children in England whose condition is so desperate that they do not care whether they live or die? Who are they and what the cause of their distress? The *Globe* preaches that agriculture is the foundation of a nation's wealth. The soil and climate of no country under the sun is better than that of England, and the agriculturists of none of them are more skilled in cultivating the land; yet we know that every year hundreds of thousands of acres of cultivatable fields go out of cultivation because the farmers cannot successfully compete with India, the United States and Russia in producing wheat. The men who worked these acres are forced into the manufacturing centres to seek employment, and when they get there they find the labor market congested and no employment to be had. Many of the factories and mills are closed or run on short time because of the competition of Germany, France, and even the United States. The free traders exclaim, "Trade must be free," and free it is. The farmers starve in one of the finest agricultural countries of the world because they have no protection. The workmen in cities starve in what is claimed to be the best equipped manufacturing country of the world because they lack protection which is not given to them. But the landowners flourish—the merchants prosper—the ships come and go—and the working classes, in their wretchedness and starvation, are in a condition of desperation where they do not care whether they live or die.

In discussing "Canadian Carpets and Protection" the *Montreal Trade Review* calls attention to the fact that when the carpet manufacturers agitate for changes in the tariff, it is not so much that they are insatiable, but that they are only endeavouring to meet the altered conditions that environ

them. The very facts that our contemporary states are sound arguments why the requests of the manufacturers for a specific duty should be granted. It tells us that a country as large as the United States has of necessity manufactories on an equally gigantic scale, and as these must have facilities suited to the demands of the most active season, they are led to work most of the year at highest pressure, disposing at or even below cost of the unused surplus, since the interest upon idle plant and trained hands would be more than the loss upon a small reduction in the price of the article manufactured. At the same time it would not do to throw the surplus into competition with the home demand, and, therefore, the surplus is slaughtered in the most convenient market—Canada. It points to the fact, heretofore alluded to in these pages, that American manufacturers lay down a carpet in Canada at forty-three cents per yard that the British manufacturer cannot profitably lay down at less than forty-eight cents, and that a most serious drawback to the Canadian carpet industry is that carpets can be imported at from seven to eight cents per yard cheaper than the Canadian manufacturer can import the yarns with which to make a similar carpet here. No one supposes that American carpet is any better or worse than British or Canadian carpet of similar grade, though there may be, and probably are, deceptions practised in selling it. Neither is it to be supposed that American carpet can be manufactured at less cost than British carpet, for the excuse for the tariff is not that the American weaver can do more work, but that the British weaver works for very much less pay. This being the case, then, it is clear that when American carpet is sold in Canada for five cents per yard less than British carpet, it is sold below a fair profit, Canada being made a slaughter market for the American surplus. It is not fair to our manufacturers that this should be permitted, and the only way to prevent the unfair competition is by imposing a specific duty on the article. This specific duty would also rectify that anomaly of our tariff which imposes a higher duty on the raw material of our carpet industry than upon the finished product of the foreign manufacturer.

WOMAN has never had her Christmas needs so marvelously well anticipated and so completely met as in the new and fresh Christmas issue of *The Ladies' Home Journal*, which comes robed in one of the most beautiful and artistic of magazine covers. The opening chapters of William Dean Howells' new novel, "The Coast of Bohemia," will attract quick attention. It is for girls, and is perfect, so far, in its portrayal of American girl-life. Genial "Bob"

Burdette has a most amusing account of "Christmas when I was a Boy;" while "A Christmas with Dickens," by Dickens' favorite daughter, is a delightful picture of holiday life as it was celebrated in the famous novelist's home. Mrs. Burton Harrison will interest thousands of girls, in her excellent way, by pointing out the essentials of "A Young Girl's Dress in Society," while George W. Childs tells of the "Girls I Have Educated." There is an exquisitely illustrated page on "Ecclesiastical Embroidery," by Harriet Ogden Morison, and Mrs. Lyman Abbott points out the wisest way of "Conducting a Ladies' Aid Society." Hamlin Garland has a pathetic literary etching. Eugene Field contributes an exquisite poem in his "Little Sans Merci," while Dr. Talmage gives one of the best articles he has ever penned in telling "Why I Have Never Been Ill." Then comes the wealth of practical Christmas information, which cannot but prove of inestimable value to women in their Christmas buying. Not a point is forgotten—everything is touched upon, the home, the nursery, the parlor, the dining room, the festooned rooms, the gowns, the table, the servants—every phase of Christmas life is fully and admirably covered. Subscription is but one dollar per year. The Curtis Publishing Company, Philadelphia Pa.

ONE of the oldest living magazines in the world—certainly the oldest on this continent—is *Godey's*. It was started in 1830, and from its early years to the present has had considerable circulation in Canada. Dear to the memories of many a reader will be the ideal faces of the bright colored plates in old *Godey's Lady's Book*, and these colored plates are still a feature of the present *Godey's Magazine*. In the October number, the results of a happy inspiration appear in this department, in which colored full length portraits of three or four distinguished American ladies are shown in illustration of special designs in costumes. It gives some interest to a fashion plate to know that you are not looking at an abstraction but at the "counterfeit presentment" of a real woman. Among the colored portraits given for October are those of Mrs. Wm. H. Vanderbilt, Mrs. Chauncey M. Depew, Mrs. Burke Roche, and Miss Pryor, daughter of Judge Pryor, with uncolored portraits of Mrs. Harrison, Mrs. Cleveland and others.

THE Bismarck number of *The Illustrated World's Fair* is especially valuable because of the record for preservation which it offers to all who are interested in the history of the Exposition. All the ora-

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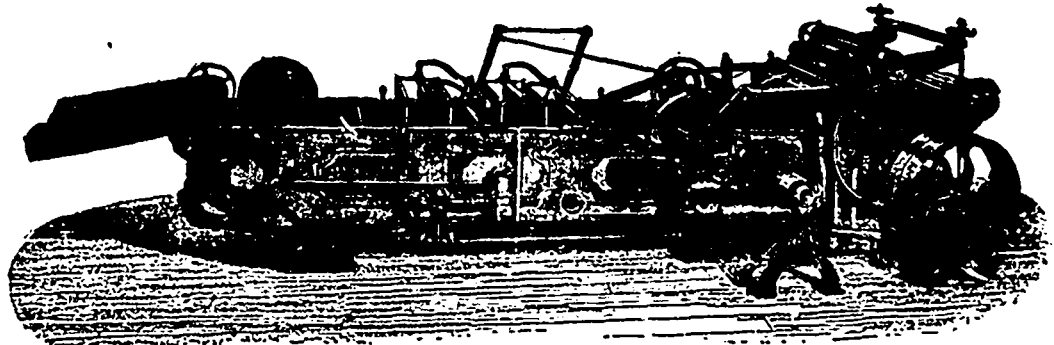
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tions and prayers, the ode and cognate matters are printed in full. The pictures faithfully and photographically show the audience in the great room, the chorus of 5,000 voices, the decorations and the parades. The civic parade and the dedication procession are both outlined carefully. Some surprising features of the horticultural display are printed with fine effect, and the gaily-decorated battleship is twice shown. Some of the architectural pictures are especially impressive. The Japanese workmen are photographed on the site of their temple. Prince Bismarck's page is of course the feature, and His Highness speaks with great interest and good feeling of the Exhibition, praising the appearance of Director General Davis, whom the Prince regards as a typical American gentleman. *The Illustrated World's Fair* is published by Jewell N. Halligan, general manager; John McGovern, editor; 25 cents a copy, \$2.50 a year, McVicer's Theatre Building, Chicago.

Outing for December is a beautifully illustrated and thoroughly readable number. The contents are as follows: "A Rogue Elephant," by F. Fitz Roy Dixon; "Goose Shooting in the South Platte Valley," by J. N. Hall, M.D.; "Athletics in Japan," by John A. MacPhail; "Canadian Winter Pastimes," by Ed. W. Sandys; "Hunting the Moose," by S. R. Clarke; "Through Darkest America" (continued), by Trumbull White; "Around the World with Wheel and Camera" (continued), by Frank G. Lenz; "Harry's Career at Yale" (continued), by John Seymour Wood; "A Sportsman in Squirrel Land," by Jennie Taylor Wandle; "A Very Strange Case," by William Hinckley; "Pacu Fishing on the Upper Paraguay," by H. H. Smith; "Acolita" (concluded), by John Heard, Jr.; "The National Guard of New Jersey" (concluded), by Lieut. W. H. C. Bowen, U.S.A., and the usual editorials, poems, records, etc.

THE high character of *The Popular Science Monthly* is well sustained in the December number. Under the title "From Magic to Chemistry and Physics," Dr. Andrew D. White shows how the world has been robbed of many of the benefits of science by the oppression of a narrow theology. Dr. A. M. Fanning, of New York, contributes a thoroughly practical article on "Deafness, and the Care of the Ears." That the Catholic Church still holds to the belief in possession by devils is shown by Prof. E. P. Evans, under the title "Modern Instances of Demoniical Possession." Certain "Recent Glacial Discoveries in England" that have been worked out by the late Carvill Lewis and Prof. G. F. Wright appear in

this number, accompanied by a folded map. The evolution of the traits of the dog—"Canine Morals and Manners," as the author calls them—is described in a very readable way by Dr. Louis Robinson. Rev. A. N. Somers describes some of the evidences that point to "Prehistoric Cannibalism in America." "Recent Applications of Paper" form the subject of an article by Emmanuel Ratoin. There is a strong and wholesome arraignment of the sham ignorance which has been deemed essential to innocence, in a paper on "The Symmetrical Development of our Young Women," by C. E. Brewster. Dr. S. T. Armstrong tells what progress has been made toward "Protective Inoculation for Cholera." In "Fallacies of Modern Economists," some current theories of the socialists, nationalists, and other economic reformers are vigorously attacked by Arthur Kitson. J. T. Donald writes interestingly on "Nickel and its Uses," and there are a portrait and biographical sketch of Prof. George Frederick Wright, the eminent geologist of the Oberlin Theological Seminary. New York: D. Appleton & Company. Fifty cents a number, \$5 a year.

THE Christmas number of *Scribner's Magazine* is made notable by the great richness and variety of its illustrations, including a novelty in magazine pictures—a colored frontispiece—reproducing in fac-simile the rich effect of a water-color painting, made for this magazine by L. Marchetti. The literary quality of the number is indicated by the distinguished list of contributors, including such names as Thomas Bailey Aldrich, Archibald Forbes, George W. Cable, Frank D. Millet, H. H. Boyesen, Octave Thanet, George A. Hibbard, Will H. Low, and Kenyon Cox. The art articles bring together wonderful reproductions, in black and white, of original paintings by Baudry, Puvis de Chavannes, Laurens, and Cabanel among Frenchmen; Hans Dahl, Arbo, and Hansen among Norwegians; Reinhart, Weir, Shirlaw, Blashfield, Beckwith, and Dodge among Americans. It is peculiarly appro-

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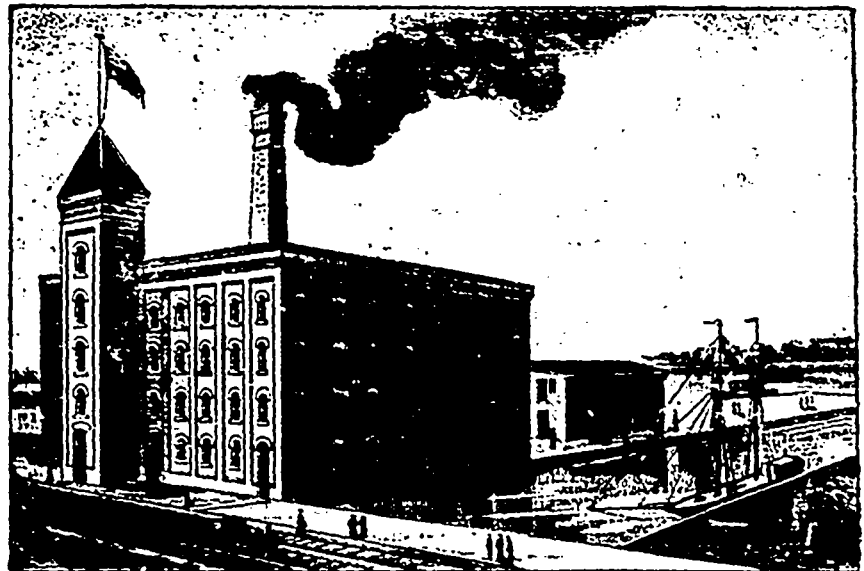
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prate that Frank D. Millet, the director in charge, should write the article on Decoration at the World's Fair. The fiction of the number is remarkably bright and happy in tone, and full of delicate sentiment. It represents a wide choice of subject and background. "For the Cross," by George I. Putnam, is a Christmas story of soldier life on the plains; George W. Cable tells the true story of a slave insurrection on a tropical island—a wonderful bit of color in words. Archibald Forbes, the famous war correspondent, writes, in the Historic Moments series, a description of the Triumphal Entry into Berlin of Emperor William and his Victorious Armies in 1871. The poetry includes the amusing story in satirical verse of "Eben Pyncho's Repentance," by Edward S. Martin, the author of "A Little Brother of the Rich," with charming illustrative borders by F. G. Attwood. Mr. Aldrich's poem is "A Shadow of the Night," and Mrs. Dorr's "In a Gallery" (with a full-page illustration). The Christmas number, as is the custom, has an effective cover of a new and original design.

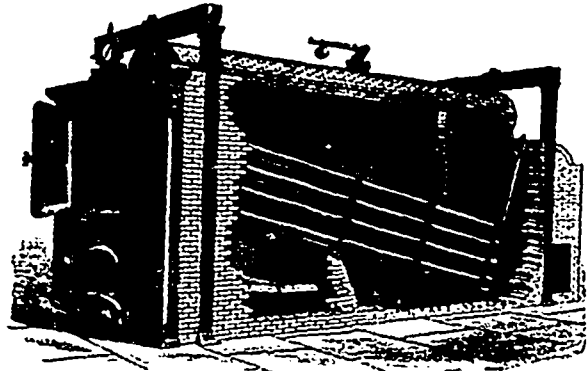
THE December *Wide Awake* is a true Christmas number. It has the full Christmas flavor, from the brilliantly colored front-piece that opens it to the fantastic flower piece that ends it. On the opening reading page a smoking plum-pudding serves as the initial to Margaret Sidney's quaint ode, "To the One, Whoever He Be," who discovered the toothsome plum-pudding. The famous English school, "The Bluecoat School," by Louise Imogen Guiney, is highly interesting and fully illustrated by Joseph Pennell; it is followed by Mr. Stoddard's Christmas story, "Mr. Van Gelt's Case," which is full of the best Christmas spirit, and recalls the popular Christmas stories that so increased the fame of Charles Dickens. Mrs. Sandham's practical paper for Christmas celebration is entitled "The Vagaries of Santa Claus;" a Christmas ballad by R. Macdonald Alden, "How Lajla Found the Christ-child," is beautifully illustrated by Merrill. "How Jonathan was Good," by Elizabeth Cumings, tells over the old, old story of a boy who did so want to be good, but— Estelle M. Hurl's description of "A Child's Christmas in France" is full of interest. The first contribution to the new series of *Wide Awake* Athletics will be of great interest to the boys. George Converse Fiske tells about "Our Iceboat," and how it collapsed; Theron Brown's "Christmas Carol" is full of poetry and beauty. The new serials commenced in this number open with spirit and interest. They are W. O. Stoddard's Revolutionary story, "Guert Ten Eyck," illus-

trated by Merrill; Molly Elliot Seawell's naval story, "The Midshipmen's Mess," illustrated by Mente, and Theodora R. Jenness' Indian story, "Piokee and her People," illustrated by Miss Kirk. A delightful Christmas play, "Wishing," by William Grant, closes this delightful number. Price 20 cents a number, \$2.40 a year. On sale at news stands. D. Lothrop Company, Publishers, Boston.

THE BABCOCK & WILCOX BOILER.

As will be seen from the accompanying illustration the Babcock & Wilcox steam boiler consists of a plain cylinder boiler, serving as a steam and water reservoir, placed above and connected at each end with a nest of inclined heating tubes, also filled with water. The rear and lower end of these tubes are connected to a mud drum at the point furthest removed from the fire. The heat is applied to one half of the cylinder and all the tube surface.

In its operation dry steam is made, and therefore no super-heating surface is necessary. Every square inch of the boiler,



inside and out, is in sight, and accessible for mechanical cleaning through a manhole in the cylinder, handholes in the mud drum, and handholes having milled faces opposite each end of every tube for the interior, and through cleaning doors in the

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walls for the interior surfaces. All joints between the several parts are made by expanding tubes into taper seats, and increased pressure tends to increased tightness.

The boiler setting forming a furnace in which all the heating surfaces are enveloped by the hot products of combustion as they rise from the grates situated under the front and highest end of the tubes, passing at right angles across them three times and onco under the whole length of the cylinder, before being discharged into the stack at a greatly reduced temperature. The greater portion of the heat is transferred to the water during the first passage of the gases across the tubes, and while combustion is being completed in the triangular chamber under the cylinder, these being properly fire box surfaces, the remaining heat is taken up during the second and then passes across the tubes, which act as economizers.

As the water inside the tubes becomes heated, a mingled stream of steam and water is discharged into the front end of the cylinder above, whence the steam gradually separates from the water, the latter flowing to the rear end of the cylinder and down again into the tubes, making a rapid and continuous circulation of all the water in the boiler, keeping all parts at a uniform temperature, and avoiding strains from unequal expansion. This rapid circulation also serves to sweep away the steam bubbles from the heating surfaces as fast as formed, supplying their places with water, thus increasing the efficiency of the surface; and it also serves to carry away any sediment contained in the water into the mud drum at the rear and lowest point in the boiler, from whence it can be blown out. The steam is taken out at the top of the steam drum at the rear end.

The manufacturers of this boiler point to the long list of users of it as a voucher for its reliability. Extending over a period of twenty-five years, the continued and repeated orders for it has demanded the establishment of shops for its construction in the United States, Canada, Great Britain, France, Germany and Austria. The wonderful record of over 100,000 horse power of these boilers in use, some of them as much as twenty years, some of them driven day and night, on which the average repairs has not exceeded five cents yearly per horse power, for the boiler proper from all causes, speaks volumes as to its durability.

Messrs. A. Holden & Co., Montreal, who are the Canadian

agents for the Babcock & Wilcox boiler, have exhibited to us a list of names of parties in Canada who have these boilers in use, probably the largest user of them being the Royal Electric Light Company of Montreal, where boilers to develop 3,350 horse power are in use. Some of the other concerns using them, and to whom reference regarding them may be had, are St. Lawrence Sugar Refining Company, Globe Woolen Mills, Montreal Woolen Mills, and Singer Manufacturing Company, Montreal, School of Practical Science, Toronto, Rosamond Woolen Company, Almonte, Ont., Moncton Sugar Refining Company, Moncton, N. B., and Nova Scotia Sugar Refining, Halifax, N. S. These boilers are now being made in Canada, at Kingston, Ont., where a battery to develop 750 horse power is being built for the Royal Electric Light Company, of Montreal.

Further information concerning this boiler may be had by addressing Messrs. A. Holden & Co., Montreal.

AUTOMATIC KNIFE

The illustration presented here with is of a pocket knife which opens automatically when the projection, or button at the end is pressed. When thus pressed the blade immediately assumes a



partly open position in which it can be grasped by the fingers to be fully opened as usual. To

close it, push the blade down into the handle as usual, when it engages with the spring of which the button is a part. It is easily opened, even with gloves on, with chilled fingers, and without having to look for the nick in the blade in which to break or bend the thumb nail.

The unique and beautiful little article is manufactured by the Automatic Knife Company, Gananoque, Ont., and is made in high grades only. Every blade is warranted handforged of the very finest Sheffield silver blade steel. It is made in several sizes and variously finished in pearl, tortoise shell, ivory, bone, ebony, cocobola, etc. It has been patented in Canada, United States, Great Britain, France, Austria and several other European States.

THE

"OPTIMATES" POWER HAMMER

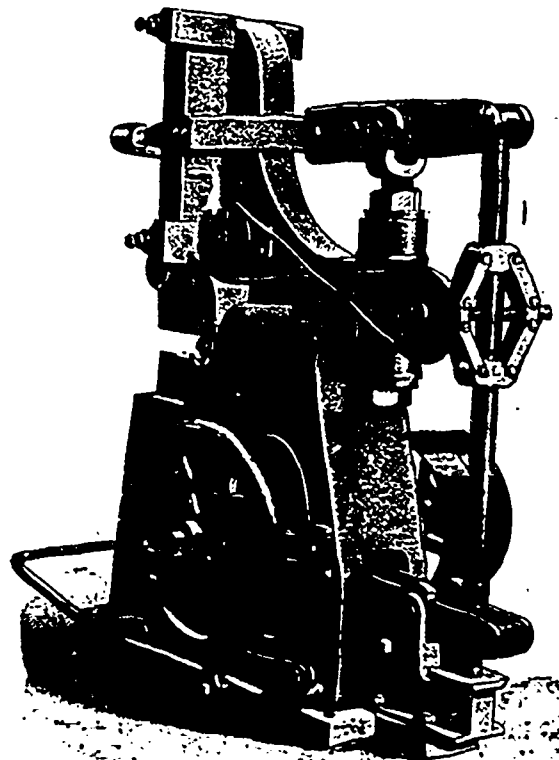
Patented in the United States, Canada, and England.

W. H. LAW,
Inventor.

MANUFACTURED BY

The Central Bridge and Engineering Co., Ltd.

PETERBOROUGH, ONTARIO, CAN.





INVENTIONS.



This department of THE CANADIAN MANUFACTURER is devoted to the interests of inventors, of patentees of inventions, and of manufacturers of patented articles. Patents are granted in Canada for fifteen years, the Government fee for which may be paid by instalments. Arrangements have been made by which the issue of all patents by the Canadian Patent Office and all renewals and extensions thereof will be promptly noticed in this department, and a brief description thereof given. Enquiries on these subjects are invited and will receive prompt attention. No charge will be made for answers by mail when return postage is sent. Information given free regarding patent laws and the obtaining of patents in Canada, United States, Great Britain and all foreign countries. Claims for inventions, as embodied in Letters Patent, also the illustrations of them, will be inserted in this journal at moderate charges. The attention of manufacturers is specially directed to the opportunities for lucrative business which may be acquired by close observation of whatever may appear in this department.

CANADIAN PATENTS.

The following patents have been issued from the Canadian Patent Office from September 24th to October 15th, 1892, inclusive. Information in regard to any of these patents may be had free on application to THE CANADIAN MANUFACTURER, or copies of American patents corresponding to these, where the American patent has been previously granted, can be procured through us for the sum of twenty-five cents.

NOTE.—The new Canadian Patent law has come into effect, whereby the life of Canadian patents is for the term of eighteen years. Patent numbered 39,264, and all subsequently numbered are granted for the longer term.

MECHANICAL.

- 40,471 Sorting and separating loose substances into various grades of fineness, J. M. Rishworth, et al, September 24th.
- 40,472 Hernia truss, C. Cluibe, September 24th.
- 40,473 Lubricant and steam packing, W. H. Strickler, September 24th.
- 40,474 Fabric for personal underwear, J. Raab, September 24th.
- 40,475 Fertilizer, F. M. Smith, September 24th.
- 40,476 Puddling, melting, heating and other furnaces, D. Parry and B. F. Kelly, September 24th.
- 40,477 Screen door, C. J. Shirreff, September 24th.
- 40,478 Window or screen door, C. J. Shirreff, September 24th.
- 40,479 Roundabouts, L. P. Brew, September 24th.
- 40,480 Mower, J. Stephain, September 24th.
- 40,481 Shoe lacing device, J. E. Bertrand and C. Duncan, September 24th.
- 40,483 Bag holder, N. R. Streeter, September 24th.
- 40,484 Book and blank case, R. Miller, September 24th.
- 40,485 Sewing machine, J. Haas and R. Luitz, September 24th.
- 40,486 Ruler, W. S. McKercher, September 24th.
- 40,487 Towing bridle, G. W. Briggs, September 24th.
- 40,489 Paddle wheel, M. Richter, September 24th.
- 40,490 Illuminating gas manufacture, R. Laird, September 24th.
- 40,491 Pendulum scale, J. B. Martin, September 24th.
- 40,492 Shelf bracket, T. McAvity & Sons, September 24th.
- 40,493 Preserving pure yeast, G. Guignard, October 1st.
- 40,494 Ventilating apparatus, W. T. Jugg, October 1st.
- 40,495 Photographic camera shutter, J. J. Clairmont, October 1st.
- 40,496 Capsule, McKesson & Cobbins, October 1st.
- 40,497 Hydrostatic weighing machine, J. Jackson and E. A. Hoad, October 1st.
- 40,498 Gas heater or radiator, A. Wolff, October 1st.
- 40,499 Stock car, W. G. Avery, October 1st.
- 40,502 Pill machine, C. A. Weller and J. Gibney, October 1st.
- 40,503 Making nails, J. B. Hastings, et al, October 1st.
- 40,504 Fare collector, B. W. Taylor, October 1st.
- 40,505 Weight lifting attachment, W. S. Ritchie and R. W. Pearce, October 1st.
- 40,506 Printer's galley, C. Home, et al, October 1st.
- 40,507 Beef tenderer, O. M. Arnold and J. M. Talkington, October 1st.
- 40,508 Pipe and nut wrench, H. Berustem, October 1st.

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PATENTS

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Patent Suits prosecuted before the Courts
Validity and Infringements of Patents investigated.

Searches made. Assignments and Agreements drawn.
Advice on Patent Laws, etc.

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G. de G. LANGUEDOC, PATENT SOLICITOR,

CIVIL ENGINEER AND ARCHITECT.

Associate Member Can. Soc. Civil Engs., Member of the Soc. of Archts. of the P.Q.

Room 7, (3rd floor), 180 St. James St., MONTREAL.

C. G. C. Simpson, 146 St. James St., Montreal,

EXPERT AND
SOLICITOR

PATENTS,

Patents obtained at lowest fees, compatible with first-class practice. (25 yrs.)

40,511 Mixing machine, J. T. L. Randle, October 1st.

40,512 Packing case or package, J. A. Jones and J. B. Magurn, October 1st.

40,513 Antiseptic composition, E. Farren, October 1st.

40,514 Safety guard for wood cutting, J. C. Thom and M. Campbell, October 1st.

40,515 Breaking and cleaning flax, A. Morison, October 1st.

40,516 Gas engine governor, W. S. Sharpueck, October 1st.

40,517 Car coupler, M. M. Decker, October 1st.

40,518 Artificial stone block, C. M. Graham, October 1st.

- 40,519 Suspender, J. L. Fredlihp, October 1st.
 40,521 Wire mat, J. E. Emerson and T. Midgley, October 1st.
 40,522 Axle Skein, I. Dansereau, October 1st.
 40,523 Device for repairing broken slat, J. Z. Merdiam, October 1st.
 40,525 Stove, W. Forbes, October 1st.
 40,526 Car for carrying heavy bodies upon railways, W. R. Kinipple, October 1st.
 40,527 Washing tank for photographic purpose, A. R. Ward, October 1st.
 40,531 Boring holes in buttons, D. B. Shantz, October 3rd.
 40,532 Boot and shoe protector, J. P. Martin, October 3rd.
 40,533 Folding base for stand, S. E. Reutter, October 3rd.
 40,534 Hermetically sealed tin cans, H. S. Cowan, October 3rd.
 40,536 Fuel, J. A. Scott, October 3rd.
 40,537 Horse shoe, D. C. Dwyer, et al, October 3rd.
 40,538 Metallic pipe coupling, F. W. Wait, October 3rd.
 40,539 Fruit basket, W. E. Field, October 3rd.
 40,540 Belting, R. Cowen, October 3rd.
 40,542 Lawn sprinkler, D. C. Wilgus, October 3rd.
 40,543 Cultivator, C. E. Bement, October 3rd.
 40,544 Musical toy, W. A. Gay, October 3rd.
 40,545 Advertising medium, E. Harmer, October 3rd.
 40,546 Tufting attachment for knitting machine, J. D. Partello and John F. Jackson, October 3rd.
 40,547 Device for destroying insects, Henry, Count of Pückler, October 3rd.
 40,548 Step ladder, G. Struthers, October 3rd.
 40,549 Degreasing leather, F. N. Turney, October 3rd.
 40,550 Pavement, J. A. Chanler, October 3rd.
 40,551 Wheel, J. Stothers, October 3rd.
 40,553 Grain binder, L. H. Grieser, October 2nd.
 40,554 Bicycle, J. Anthony and A. Everett, October 3rd.
 40,555 Cornice and eavetrough brake machine, J. M. Brown and N. G. Boggs, October 3rd.
 40,556 Brake beam for railway car, C. T. Schoen and L. W. Newton, October 3rd.
 40,557 Centrifugal pulp dryer, S. S. Stevens, October 4th.
 40,558 Box machine, R. L. Coons, October 4th.
 40,559 Bearing, F. B. Torrey, October 4th.
 40,560 Bell buoy, J. Gibson, October 4th.
 40,561 Bell buoy, J. Gibson, October 4th.
 40,562 Vehicle gear, T. R. Capwell and W. C. Fuller, October 6th.
 40,565 Dumping wagon, L. S. Browning, October 6th.
 40,567 Hot water heater, E. Gurney, October 6th.
 40,568 Type bar, R. H. St. John, October 6th.
 40,569 Extension ladder, W. J. Robertson and J. B. Genin, October 6th.
 40,570 Wagon jack, C. J. Shirreff, October 6th.
 40,571 Railroad joint, N. H. Hane, October 6th.
 40,572 Lock, F. Menike, October 6th.
 40,573 Band cutter and feeder, C. F. Graham, October 6th.
 40,574 Roof, J. J. McCarthy, October 6th.
 40,575 Grain separating, J. M. King, October 6th.
 40,576 Artificial stone, J. E. Keseling and C. Fuchs, Jr., October 6th.
 40,577 Land plowing, G. M. Clark, October 6th.
 40,578 Compound engine, J. S. Parmenter, October 6th.
 40,579 Sectional water heater, D. E. Howatt, October 6th.
 40,580 Boiler, and furnace therefor, R. Muller, October 6th.
 40,581 Boots, shoes, etc., C. A. Riedig, October 6th.
 40,582 Vittrification furnace, W. Kohler and D. Kegler, October 5th.
 40,583 Fish plate for rails, O. Munlauf, October 6th.
 40,584 Coating and means for cleaning metals, R. Heathfield, October 6th.

- 40,585 Relief valve, F. Würfler, October 6th.
 40,588 Power conduit for railways, C. T. B. Brain, October 6th.
 40,589 Safety attachment for street cars, L. E. Dubois, October 6th.
 40,590 Saw sharpening machine, B. F. Sheets, October 6th.
 40,591 Cable railway, S. D. Root and G. C. Vineyard, October 6th.
 40,592 Balls, blocks or slabs of artificial ivory, substitute in variegated colors, A. & S. De Pont, October 6th.
 40,593 Gold concentrator, W. H. Hill, October 6th.
 40,594 Securing corks in bottles, K. Kirschner, Jr., October 6th.
 40,595 Mitten, F. J. Kahn, October 6th.
 40,596 Pump, S. G. Mills, October 6th.
 40,597 Saw guide, A. A. Mowry, October 6th.

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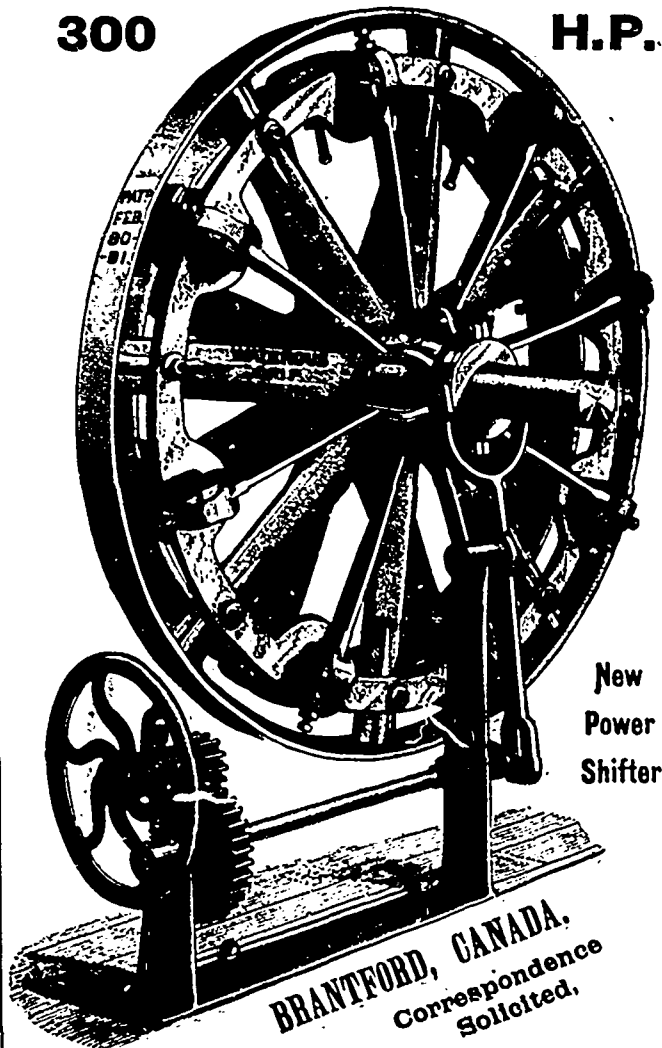
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- 40,598 Folding bed, billiard table, rack and settee, R. N. Barger, October 6th.
- 40,599 Shaping or moulding pieces of leather, W. Kro ne, October 6th.
- 40,600 Multi-tubular boiler, M. Seipp, October 6th.
- 40,601 Dispensing aerated liquids, R. A. Panchaud, October 7th.
- 40,602 Sewing machine, The Self-Threading Sewing Machine Co., October 7th.
- 40,603 Travelling carrier and hoist, W. C. Wilcox, et al, October 7th.
- 40,604 Tubular lantern, Dominion Tubular Lamp Co., October 7th.
- 40,605 Making soap, S. J. Bartlett, October 7th.
- 40,606 Open fireplace heater, G. R. Scates and E. S. Rogers, October 7th.
- 40,607 Confectioners' ovens and trays, The Adair Syndicate (Ltd.), October 7th.
- 40,608 Ventilator, W. McFarlane and J. Wright, October 7th.
- 40,609 Flask for making seamless sash weight, A. S. Hodges, October 7th.
- 40,610 Joint for spectacle frame, B. J. Price, October 7th.
- 40,611 Whip socket support, A. E. Tulloch, October 7th.
- 40,612 Cistern, C. S. Johnson, October 7th.
- 40,613 Water heater, L. L. Culver, October 8th.
- 40,615 Coin actuated vending machine, R. Moran, October 8th.
- 40,616 Gas engine, C. White and A. R. Middleton, October 8th.
- 40,617 Log turner, T. S. Wilkin, October 8th.
- 40,619 Circular knitting machine, Byfield Mfg. Co., October 10th.
- 40,620 Waste end conveyer for carding machine. B. J. Craggy, et al, October 10th.
- 40,621 Boiler furnace, E. A. Wheelor, October 10th.
- 40,624 Mechanical movement, J. McMorris, October 10th.
- 40,626 Revolving book case, J. M. Haley and C. E. Darrow, October 10th.
- 40,627 Revolving book case, J. M. Haley and C. E. Darrow, October 10th.
- 40,630 Rubber tires or metal runs or felloes of wheels for 'cycles, etc., The Pneumatic Tire and Booth's Cycle Agency, October 11th.
- 40,631 Seeding machine, Peter Hamilton Manufacturing Co., October 11th.
- 40,632 Seeding machine for cultivators, W. Coulthard and C. W. Scott, October 11th.
- 40,633 Feeding machine for carding, L. A. Peckham and C. Fletcher, October 11th.
- 40,634 Shifting seat for vehicle, J. B. Armstrong, October 11th.
- 40,635 Toilet soap, S. E. Ireland, October 11th.
- 40,636 Shirt ironing machine, C. O. White, October 11th.
- 40,637 Pianoforte action, J. H. Phelps, October 11th.
- 40,639 Hose coupling, F. W. Wright, October 12th.
- 40,640 Bottling apparatus, A. M. Donally, October 12th.
- 40,641 Atomizer, H. M. Dunlap, October 12th.
- 40,642 Water heater, E. Rund, October 12th.
- 40,643 Water meter, L. H. Nash, October 12th.
- 40,645 Safety pin, C. E. Noyes, October 12th.

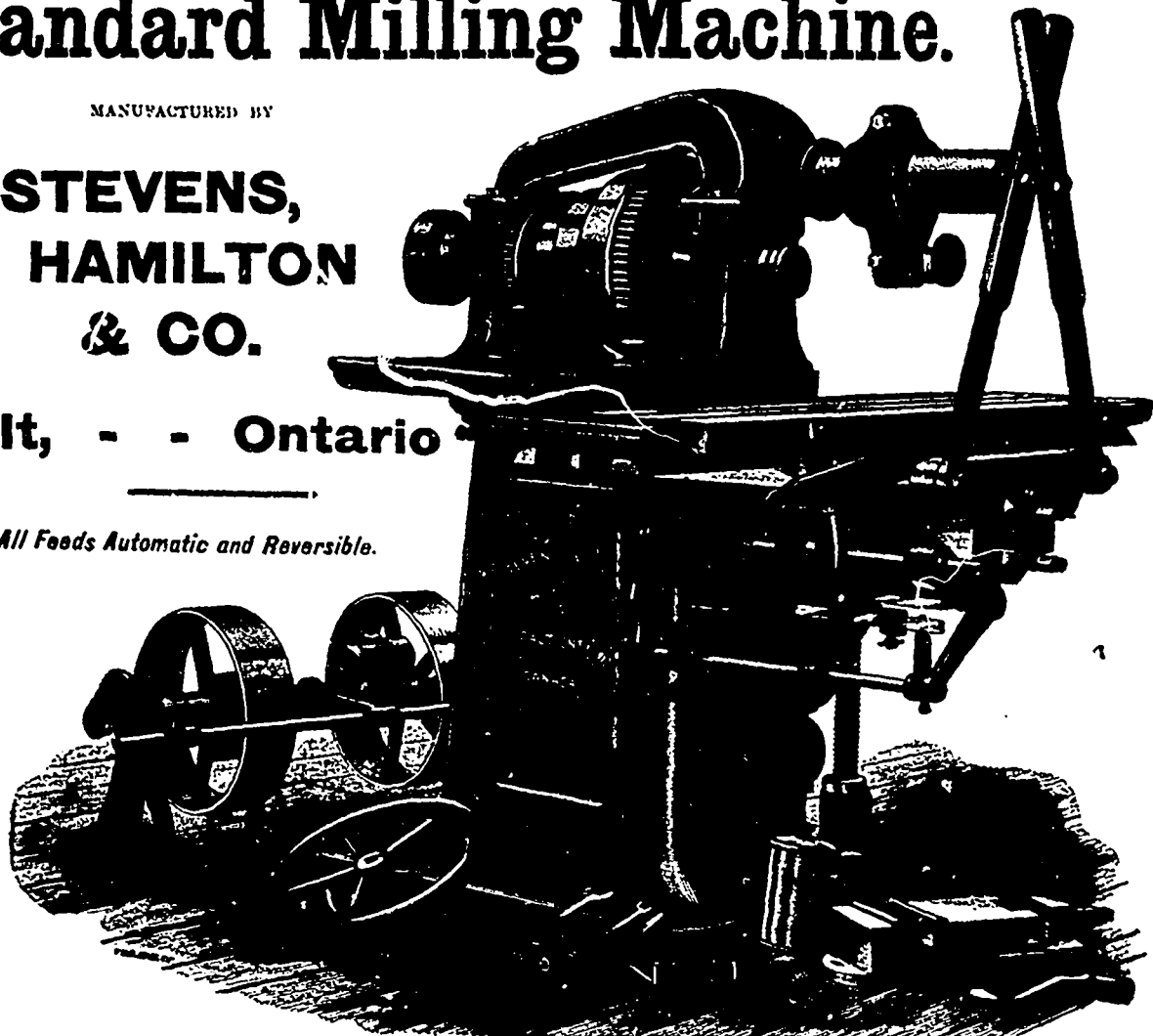
Standard Milling Machine.

MANUFACTURED BY

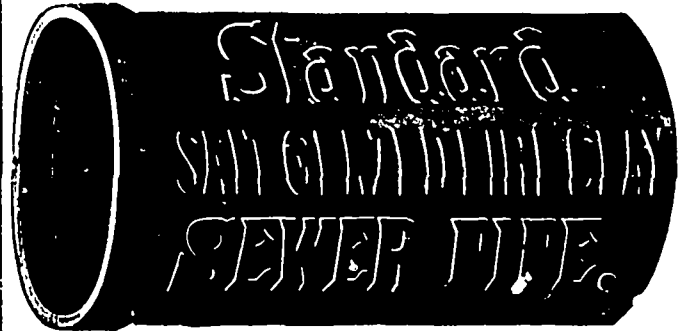
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All Feeds Automatic and Reversible.



- 40,647 Furnace for evaporating and calcining alkaline solutions, etc., H. Blackman, October 12th.
- 40,648 Sausage meat cutter, J. M. Briggs, October 12th.
- 40,649 Hydrogen burner, W. Wilson, October 12th.
- 40,650 Draw gear for railway car, A. W. Van Dorston, October 12th.
- 40,651 Feeding mechanism for carding machine, L. A. Peckham and C. Fletcher, October 12th.
- 40,652 Air brake, The Lansberg Brake Co., October 12th.
- 40,653 Steam pumping engine, The Lansberg Brake Co., October 12th.
- 40,654 Steam engine governor, W. O. Webber, October 12th.
- 40,655 Apparatus for use in obtaining copper, Val D'Costa Syndicate (Ltd.), October 14th.
- 40,656 Fog signal, W. R. Close, October 14th.
- 40,657 Oil burner, W. A. Myers, October 14th.
- 40,658 Picker for loom, L. Teweles, and T. A. Robinson, October 14th.
- 40,659 Car heater, C. S. Dean, October 14th.
- 40,660 Car coupling, W. L. DeGrace, October 14th.
- 40,661 Phone holder, J. T. Moore, October 14th.
- 40,662 Valve for water, steam and other liquids or gases, Sir Wm. Thomson, October 14th.
- 40,663 Foot power fan, W. A. Hart, October 14th.
- 40,664 Driving attachment for bicycles, E. Bradshaw, October 14th.
- 40,665 Wire plaiting machine, O. Preston, October 14th.
- 40,666 Portable evaporating apparatus, T. E. Richard, October 14th.
- 40,667 Vehicle tire, H. Rohrer, October 14th.
- 40,668 Seed planter, E. B. Knight, October 14th.
- 40,669 Horse collar, C. A. R. Ahl and O. Forbrick, October 14th.
- 30,671 Means for locking nut or bolt, J. Evmof, October 14th.
- 40,672 Street broom, J. Jones and A. Gillies, October 14th.
- 40,473 Horse collar, J. MacGregor, October 14th.
- 40,674 Sytemic alphabet of sound, F. Anderson, October 14th.
- 40,675 Beer apparatus, J. H. Kersbrock, October 14th.
- 40,676 Car coupling, R. S. Robertson, October 14th.
- 40,677 Device for heating and lighting, L. T. Wilcox, October 14th.
- 40,678 Wire lacing hook, H. B. Baker, October 14th.
- 40,679 Potato vine sprinkler, E. McEvoy and R. A. Freeman, October 14th.
- 40,680 Making rubber stamps, J. C. Barton, October 14th.
- 40,681 Metallic packing, W. H. Bodfish, October 14th.
- 40,682 Clamp for shirt board, R. Schofield, et al., October 15th.
- 40,683 Sewing machine, T. Gaquin, jr., and M. A. Nichols, October 15th.
- 40,684 Dough mixing or working machine, The Adair Syndicate, (Ltd.), October 15th.
- 40,685 Cigarette making machine, A. B. and J. Goldstein, October 15th.
- 40,686 Feed operating gear for seeding machine, Peter Hamilton Manufacturing Co., October 15th.
- 40,687 Root cutter, D. Maxwell & Sons, October 15th.
- 40,688 Actuating device for railway signal, The Fontaine Safety Signal Co., October 15th.
- 40,689 Oil for general painting, J. C. Decker, October 15th.
- 40,690 Wheel for vehicle, M. W. Lownisky, October 15th.
- 40,691 Production of motive power, A. Frank, October 15th.
- 40,692 Lighting and extinguishing street and other gas lamps, P. Everitt, October 15th.
- 40,693 Air brake, The Lansberg Brake Co., October 15th.
- 40,694 Wheel axles, K. H. Dickmann, October 15th.
- 40,695 Muff bed, E. Goldman & E. Lowenthal, October 15th.
- 40,696 Wheel Guard for vehicle, H. F. Garron and C. A. Pelt, October 15th.
- 40,697 Machine for holding reels, S. H. Boone and E. Burt, October 15th.
- 40,698 Mop wringer, W. Graham and W. F. Ashbaugh, October 15th.
- 40,699 Digger, W. Gibbs and G. J. Smith, October 15th.
- 40,700 Boiler, E. W. Jones, October 15th.
- 40,709 Car roof, J. C. Wands, October 15th.
- 40,710 Device for propelling vehicle, D. C. Bouton, October 15th.
- 40,711 Stove pipe fastener, M. W. Bloomburg, October 15th.
- 40,712 Semi-portable oven which may be used with ranges, O. Schulze, October 15th.
- 40,713 Mortising machine, L. A. Belmont and A. C. Cload, October 15th.
- 40,714 Lamp burner, E. McDowell, October 15th.
- 40,715 Sectional casing for steam generator, T. F. Morrin, October 15th.
- 40,716 Street car heater, J. Allingham, October 15th.



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Manufacturers of Salt Glazed Vitrified Sewer Pipes, Double Strength Railway Culvert Pipes, Inverts, Vents, and all kinds of Fire Clay Goods. The Standard Drain Pipe Co., of St. Johns, P.Q., Ltd. W. C. TROTTER, Pres.

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- 40,717 Folding rocking chair, J. Thornbeck, October 15th.
 40,718 Crimping or corrugating veneers, W. J. Turreff, October 15th.
 40,719 Chimney cowl, T. Falger, October 15th.
 40,720 Transmitting power, T. Krug, October 15th.
 40,721 Boiler, E. W. Jones, October 15th.
 40,722 Sash holder, S. Collins, October 15th.
 40,723 Printing oilcloth, G. F. Eisenhardt, October 15th.
 40,724 Inflated tire for velocipede, E. H. Seddon, October 15th.
 40,725 Saw-set, R. Dillon, October 15th.
 40,726 Sickle bar movement for mower and reaper, A. W. Lamp-
 here, October 15th.
 40,727 Lasting boots and shoes, C. W. Moulton, October 15th.
 40,728 Lubricating hub, F. W. Randolph, October 15th.
 40,729 Repairing pneumatic tire, R. Couxen, October 15th.
 40,730 Cage cock, J. D. Mitchell, October 15th.

ELECTRICAL.

- 40,482 Electrical safety cut out, H. S. Keating, September 24th.
 40,501 Magneto electric machine, L. C. Atwood, October 1st.
 40,509 Magnetic separator, W. D. Hoffman, October 1st.
 40,510 Means for electrically giving reciprocating motion, H. S.
 McKay, October 1st.

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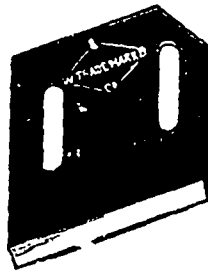
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- 40,524 Arc lamp, W. E. Irish, October 1st.
 40,528 Insulated electric conductor, J. B. Williams, October 1st.
 40,529 Insulated electric conductor, J. B. Williams, October 1st.
 40,530 Treatment of insulated electric conductor, J. B. Williams,
 October 1st.
 40,541 Making filaments for electric lighting, D. C. Voss, October
 3rd.
 40,563 Underground conduit for electrical conductor, J. F. Cum-
 mings, October 6th.
 40,564 Conduit section for underground electrical conductor, J. F.
 Cummings, October 6th.
 40,586 Electrical light, K. Kahabka, October 6th.
 40,587 Electric mains, J. Z. De Ferianti, October 6th.
 40,614 Electric motor, E. M. G. Hewett, October 8th.
 40,618 Car truck for electric motor, G. M. Brill, October 10th.
 40,622 Car truck for electric motor, G. M. Brill, October 10th.
 40,623 Motor truck for cars, G. M. Brill, October 10th.
 40,625 Arc lamp, Columbia Electric Co., October 10th.
 40,638 Melting or reducing metal by electricity, T. L. Willson,
 October 12th.
 40,644 Electric switch, C. G. Perkins, October 12th.
 40,670 Electric battery, J. Vernhet, October 14th.

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- 40,488 Pepsin, J. B. Russell, September 24th.
 40,500 Wood distilling apparatus, C. J. T. Burcey, October 1st.
 40,520 Making cheese, J. D. Frederiksen, October 1st.
 40,535 Composition for the healing of certain diseases, F. M.
 Webb, October 3rd.
 40,552 Illuminating gas, J. Wiesender, October 3rd.
 40,566 Dynamite, W. Y. Rochester and J. McArthur, October 6th.
 40,628 Extracting nickel from ores, T. MacFarlane, October 11th.
 40,629 Treatment of hops and their use in brewing, The Brewing
 Improvement Co., October 11th.
 40,646 Art of recovering refractory substances from solutions, etc.,
 H. Blackman, October 12th.
 40,701 Recovering glycerine from spent soap lye, J. S. Kirk & Co.,
 October 15th.
 40,702 Recovering glycerine from spent soap lye, J. S. Kirk & Co.,
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 effected in fuel will in one year more than pay the cost of covering,
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- 40,703 Concentrating spent soap lye to recover salt and glycerine therefrom, J. S. Kirk & Co., October 15th.
- 40,704 Purification of glycerine, J. S. Kirk & Co., October 15th.
- 40,705 Purifying the salt recovered from spent soap lye during the manufacture of crude glycerine therefrom, J. S. Kirk & Co., October 15th.
- 40,706 Apparatus for obtaining salt and crude glycerine from spent soap lye, J. S. Kirk & Co., October 15th.
- 40,707 Washing or purifying the salt recovered from spent soap lye during the manufacture of crude glycerine therefrom, J. S. Kirk & Co., October 15th.
- 40,708 Manufacture of glycerine from spent soap lyes, J. S. Kirk & Co., October 15th.

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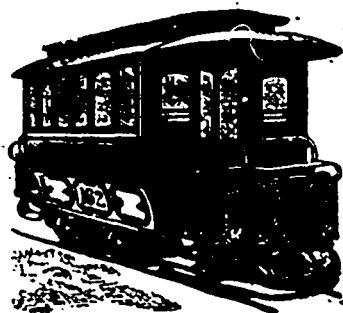
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Captains of Industry.

This department of the "Canadian Manufacturer" is considered of special value to our readers because of the information contained therein. With a view to sustaining its interesting features, friends are invited to contribute any items of information coming to their knowledge regarding any Canadian manufacturing enterprises. Be concise and explicit. State facts clearly, giving correct name and address of person or firm alluded to, and nature of business.

MR. WM. CROSBY, Morden, Man., is starting a one-set woolen mill.

THE planing mill of Messrs. Kerr & Muir at Guelph, Ont., was destroyed by fire Nov. 24. Loss about \$2,000.

MESSRS. H. E. GROSS & CO., manufacturers knit goods, Moncton, N.B., will put a steam plant in their factory.

MESSRS. J. R. SCHIEDEL & CO., Breslau, Ont., are establishing a mill for the manufacture of shoddy, flocks, batting, etc.

MESSRS. JOHN BENNER & SONS, Inglis Falls, Ont., near Owen Sound, are adding three new looms to their woolen mills.

THE Dominion Cotton Mills Co. are going to build an addition to their mills at Moncton, N.B. It will be brick, 32 x 32 ft.

MR. W. MORNINGSTAR'S large grist and flouring mill at DeCew's Falls, near St. Catharines, Ont., was destroyed by fire Nov. 24.

THE Canada Paint Company, Montreal, has established a branch factory at Victoria, B.C., where Chinese labor will be employed.

MESSRS. WARDEN KING & SONS, Montreal, will erect large new works for the manufacture of their "Daisy" hot water heater, etc.

THE Vernon Company of Ontario is being incorporated at

Toronto with a capital stock of \$300,000, to manufacture machinery, etc.

THE McClary Manufacturing Company, London, Ont., will enlarge their works by the erection of a four-storey and basement building, 62 x 100 feet.

MESSRS. DARLING BROS., Montreal, are supplying some 70 tons of new machinery to the mills of the Montreal Cotton Company at Valleyfield, Que.

MESSRS. DYER & SONS, Garden Hill, Ont., are enlarging their woolen mill plant by introducing a set of cards manufactured by the Goldie & McCulloch Co., Galt, Ont.

THE Winnipeg, Man., Grain Exchange and Board of Trade are taking steps towards the erection of a sorting elevator here having a capacity of 1,000,000 bushels.

THE St. John Bolt and Nut Company, St. John, N.B., are building a brick addition to their works, 80 x 55. Considerable new machines and machinery are being added.

THE St. Catharines Box and Basket Company is being incorporated at St. Catharines, Ont., with a capital stock of \$10,000, to manufacture baskets, crates, nail kegs, barrels, etc.

MR. J. M. RUDDOCK, of Chatham, N.B., has bought the foundry and machine shop formerly owned by Wm. Muirhead, of that town. He is putting in considerable new machinery.

MR. JOHN D. HANSON, Hull, Que., is erecting a 66 x 22 brick and stone addition to his woolen mill and will add a new loom, yarn twisting machinery, etc., giving him a capacity of 300 spindles.

THE Woolley Electrical Appliance Company at Barrie, Ont., are applying for incorporation with a capital stock of \$25,000 to manufacture the Woolley electric magnetic apparatus and other electrical appliances.

MESSRS. GALBRAITH & CO., Guelph, Ont., manufacturers of hosiery, are putting in carding and spinning machinery, made for them by the Goldie & McCulloch Co., Galt. Messrs. Galbraith will now spin their own yarn.

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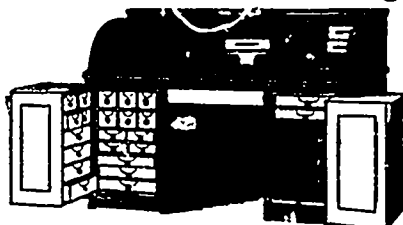
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Advances made on Consignments. Correspondence Solicited.

MR. WILLIAM MITCHELL, proprietor of the Cobourg Mat and Matting Works, Cobourg, Ont., has been introducing considerable new machinery for manufacturing specialties in jute goods. His looms are from Dundee, Scotland.

THE Peter Hamilton Manufacturing Company, Peterborough, Ont., have recently furnished a complete outfit of saw mill machinery for a mill being erected at Saanich, near Victoria, B.C., for the Toronto and British Columbia Lumber Company.

MESSRS. D. McMANAMY, A. W. OLIVER and others at Sherbrooke, Que., are organizing the Royal Corset Company, with a capital stock of \$10,000, and will engage in the business indicated by the name. The new company will occupy the premises previously occupied by the Eastern Township Corset Company.

MESSRS. WILLIAM CLENDINNING & SON, whose foundry and iron works at Montreal were recently destroyed by fire, have been voted a bonus of \$30,000 and fifteen years' exemption from taxation by the town of St. Henri, Que., and they will proceed to erect large works there for the manufacture of iron pipe, stoves, etc.

THE Yarmouth Cotton Duck & Yarn Company are adding to their outfit a new mill, which they expect to have in operation before the end of the year. The new factory with its equipment will cost from \$70,000 to \$80,000, will have a capacity of 10,000 to 12,000 pounds per week, and will give employment to 65 or 70 hands. The old mill is kept fully at work and gives employment to 130 hands.—*St. John, N.B., Sun.*

MR. A. CAMPBELL, M.P., of Chatham, Ont., is commencing the erection of his new flour mill at Toronto Junction, near this city. The building will be 50 x 65 feet, five storeys high, with a mansard roof, and there will probably be an addition of 40 x 65 feet, and three storeys high. The capacity will be 500 barrels daily. Next summer an elevator of 75,000 bushels capacity will be erected; also a large cooper shop, as it is intended to manufacture the barrels on the premises. The cost is estimated at \$60,000.

FOR some time past the Canadian Pacific Railway Company have been boring for salt at Windsor, Ont., and on November 17 a fine bed of it was struck at a depth of 1,127 feet. It is said to be the intention of the company to at once erect one of the finest salt plants in existence. The cooper shop will be over 100 feet long, and the dry house, boiling house and other buildings will be of large proportions. The salt will be manufactured by a new

process. It is the intention to start in with an output of 800 barrels a day.

THE Wrought Iron Range Company of St. Louis, Mo., have acquired the buildings, plant, etc., of the Barnum Wire and Iron Works at Toronto Junction, near this city, and will there establish a branch of their St. Louis business for the manufacture of "Home Comfort" wrought steel ranges. For some time past the question of opening up a branch factory in Canada has been under consideration, and Mr. W. W. Culver, the president of the company, has made several trips to this city to ascertain what the prospects are. The result is as stated above, and having at last acquired the site with suitable buildings and considerable machinery already thereon, the necessary alterations will be immediately put in hand, and in a very short time the new factory will open up with about 50 hands. With the exception of the manager and two or three experts who will come up from St. Louis all the help needed will be engaged on the spot, and it is also the intention to utilise Canadian raw material as far as possible in every department. Mr. W. L. Culver, the secretary-treasurer of the company, will in all probability move his family to Toronto and take the personal oversight of the new venture.

AT the recent meeting of the stockholders of the Standard Drain Pipe Company at St. Johns, Que., it was determined to increase the capital stock of the company from \$150,000 to \$500,000. Regarding this concern, the *St. Johns News* says:—It is only one degree less gratifying to the public than it must be to the stockholders to note the development of this enterprise. When the Standard Drain Pipe Company was organized here a few years ago, so unfortunate had been the experience of all who had hitherto engaged in any branch of this pottery business in St. Johns that few people had confidence in its ultimate success. But Capt. Trotter, the managing director, was one of the exceptions. He saw that there was a legitimate scope for the business and he set to work determinedly to make it a success. Backed by an intelligent board of directors he has built up the manufactory to unexpectedly large dimensions, while the concern is, comparatively speaking, still in its infantile stages. A new large kiln and an extension to the factory covering 40 x 210 feet are to be put forthwith, while next spring a much more comprehensive enlargement will be effected. At present the Standard Drain Pipe Co. give employment to over 100 artisans and laborers. There are no children about the establishment.

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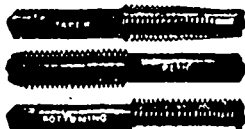
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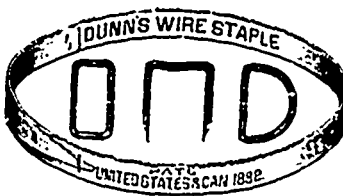
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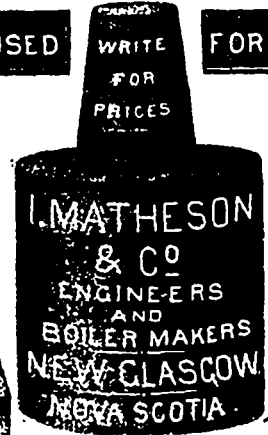
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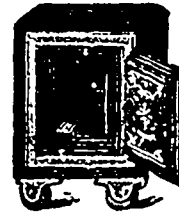
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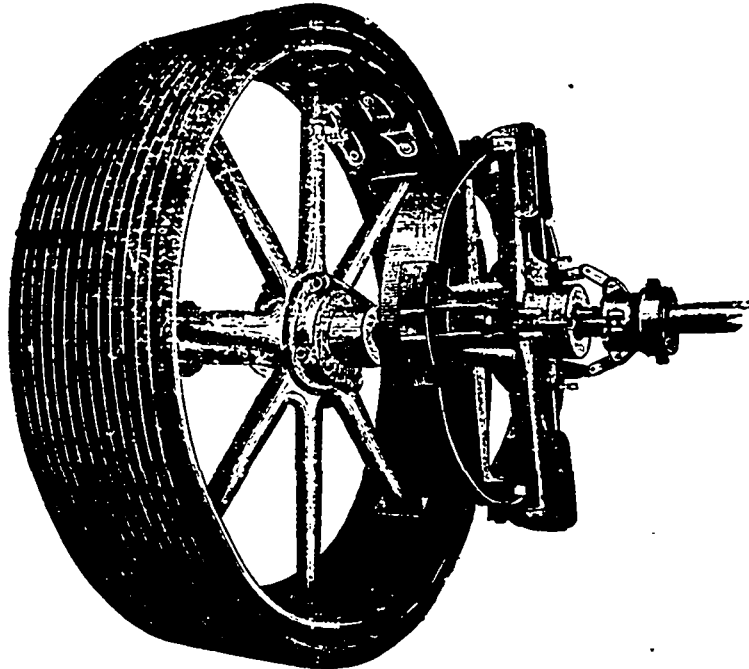
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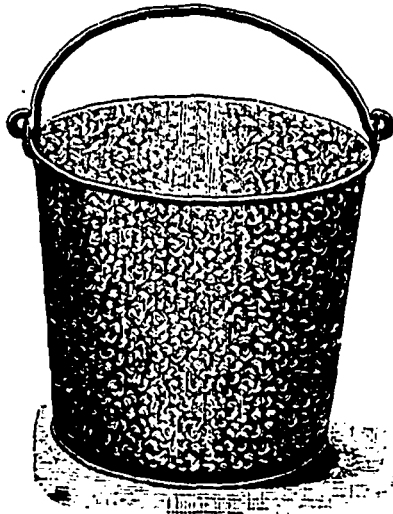
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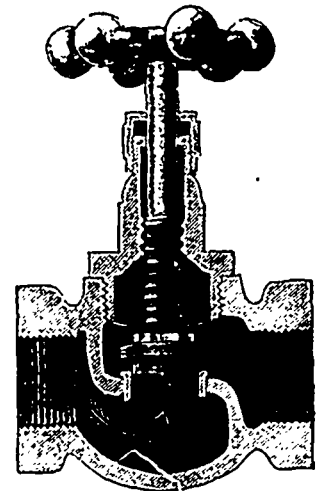
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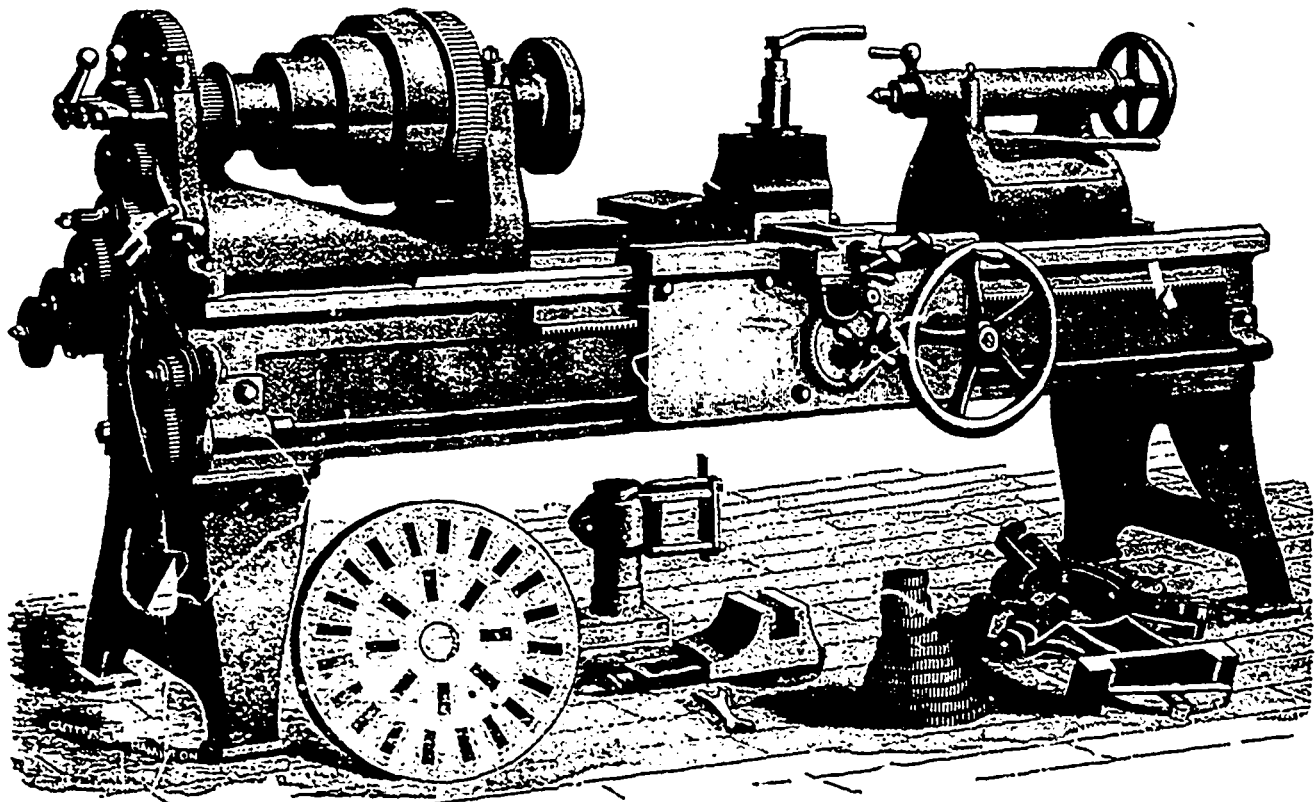
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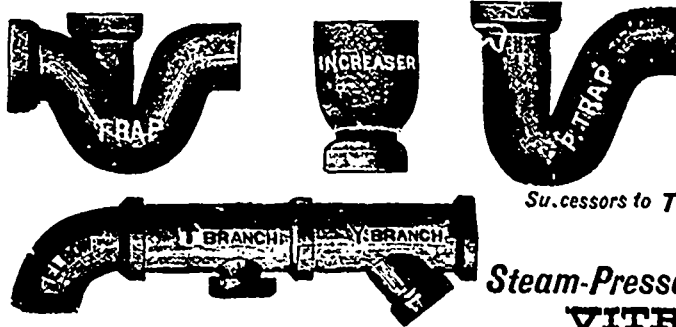
THE OBJECTS OF THIS ASSOCIATION ARE:

- To secure by all legitimate means the aid of both Public Opinion and Governmental Policy in favor of the development of home industry and the promotion of Canadian manufacturing enterprises.
- To enable those in all branches of manufacturing enterprises to act in concert as a united body whenever action in behalf of any particular industry, or of the whole body, is necessary.
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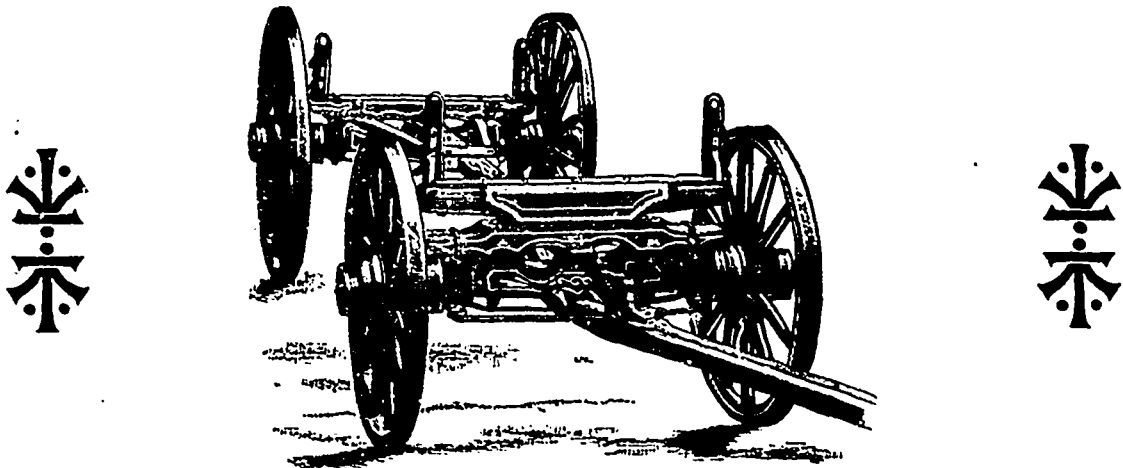
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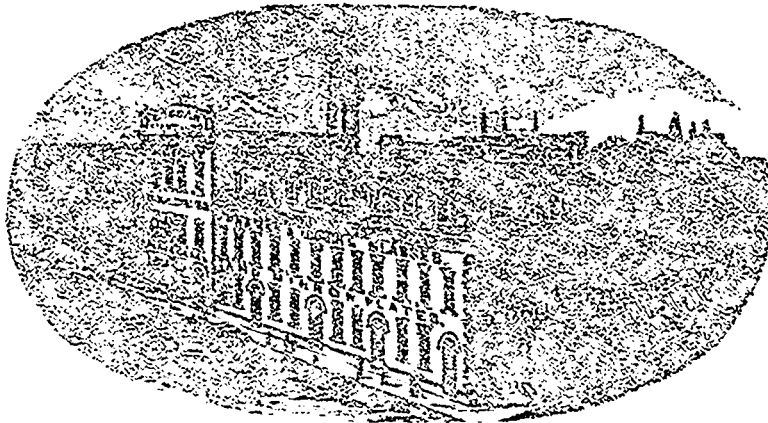
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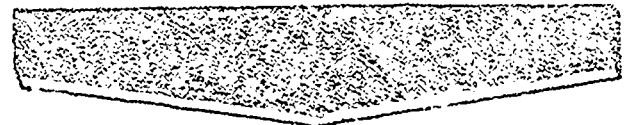
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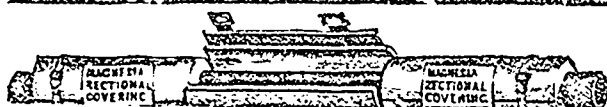
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