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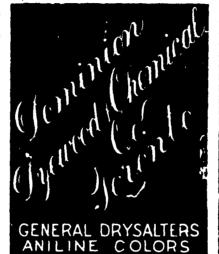
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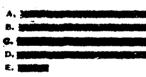
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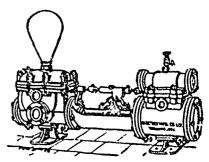
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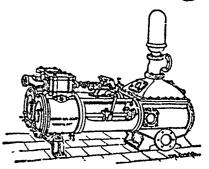
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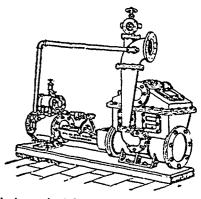


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### LAKE CANALS AND AMERICAN COMMERCE.

THE "pinch" which we are now able to put upon Canada, in order to procure fair treatment for our commerce in the Welland Canal, is a charge for her commerce passing through our St. Mary's Canal. But Canada is constructing her own canal, on her own territory at the St. Mary s, or "Soo," and, as Mr. Haggart the Minister of Canals and Rulways, an nounced, the work will now be rushed through, with men working night and day, summer and winter, so that in his judgment it may be completed by the end of the next year, in time for the trade of 1894 What Canada desires, therefore, is to gain time. She has hoped to put off action until her canal at the 'Soo" was nearly or quite completed. We have not permitted her to do this, and may force, now, a fair adjustment of the difficulty, but it is evident that after she has her own passage of the "Soo" opened to ships, and a complete system on her own soil established from the head of the lakes to the Atlantic, she will be absolutely mistress of the situation, unless we make corresponding development on our own side. - Philadelphia Manufacturer.

Our American friends are awaking to a realization of the fact that as far as their commerce on the Great Lakes is concerned, Canada must eventually hold the key of the situation, and that President Harrison's coercion proclamation, imposing

a tax upon Canadian commerce passing through their St. Mary's Canal, is not likely to change possession of it. They may squirm and kick, and indulge in much gasconade and bluster, but Canada will, before many months have elapsed, have the key securely attached to her own girdle.

The situation is very well described by Prof. Lewis M Haupt, of Philadelphia, an able American political economist, in a letter which he has recently written on the subject. He declares that President Harrison's proclamation came much too late to be of any great service to his country, excepting as it might be effective in awakening the public to a sense of the true condition which threatens to disturb American commerce on the lakes. For over twenty years, he says, the policy of the Canadian Government to secure the trade of the Northwest has been avowed and sedulously pursued, and that in a few years more it will be consummated. Then the American people will realize what it is to have a waterway capable of carrying ocean vessels through Canadian territory from Liverpool to Duluth or Port Arthur, on Lake Superior, 4,618 miles, of which only 71 miles will be through artificial channels, while to reach the same point via United States ports, would require several trans-shipments, with transit through the contracted Erie Canal of only seven feet draft and 352 miles length, at the low speed of about two miles per hour,

As a matter of fact, says Prof. Haupt, the actual average cost of transportation on the Likes is but 11 mills per ton mile, while on the Eric Canal it is double this figure, and on the railroads it is 9.19 mills, or almost nine times as much. With the Canadian waterway enlarged to a depth of 14 feet there is no possibility of the Eric Canal or the railroads of the United States retaining this foreign traffic, and yet the result is what the far-sighted policy of Canada has striven for during the past score of years. The completion of the Canadian Sault Canal, and the enlargement of the remaining links of the St. Lawrence system, which, it is expected, will occupy only two years longer, will give the Canadians absolute possession of the key to the traffic of the Great Lakes, and the railroads, as well as many other interests of the United States, will then realize what they have lost. To build this system has cost Canada over 54 millions of dollars, while to compete with it, by an extension of the proposed American "20 foot' lake sys. tem to tide water, via Lake Ontario and a canal around Niagara Falls, on American soil, and the enlargement of the Eric. Canal from Oswego to the Hudson, and thence to New York, is estimated to cost possibly three times that amount. To the American traffic this would be worth all it would cost, but it will be many years before it can be accomplished, and in the meantime it will be found that the channels of commerce have been severely disturbed -some of them permanently diverted.

Mr Haupt points out also that the strategic transportation lines lie on the Canadian side of the international border, and that it would certainly seem good policy, as well as wise statecraft, if the antagonistic interests could be merged under one management by annexation, treaty, or otherwise, and that retaliation will not remedy the difficulty. Yet it is hardly to be expected that the American people would consent to be taxed to complete and maintain a system of waterways on the Canadian side of the boundry, which would inevitably cripple their own commerce and its allied industries. He says:

The abnormal development of our railways seems to have concentrated public attention to that method of transportation as being all-important and most economical, whereas it is an undoubted fact that there is no known method as cheap asthat by water. Instead of the lake commerce being competitive with rail, it has actually developed an unormous business for the latter system which would have no existence but for the very low rates made possible by the magnificent flotilla on our lakes; boats of 3,000 to 6,000 tons on 16 feet draft, with speed of 15 and 16 knots an hour, and charges in some instances as low as & of a mill per ton-mile. The best paying railroads are those which are "competing" in this traffic. Shall this commerce go out through, and pay tribute to foreign ports? We frow not, and there is no time to be lost.

What are our American neighbors going to do about it? A 240-ton barge in the Eric Canal can no more compete with a 2,400-ton steamer in the open lakes and the Canadian canals than can a farmer's eart compare with a 30-ton freight car. But that will be about the relative position of American to Canadian lake trade seeking an European outlet when our canal system has been completed, unless the American commerce can have equal privileges with Canadian commerce in our exclusively Canadian waterways. Our Yankee neighbors it. They have tried all sorts of methods to effect their object but the right one. It has never occurred to them that anyway other than by violations of treaty and inherent rights could effect it. They do not consider any part of a treaty binding that bestows any benefit upon the other party; and they proceed to abrogate and annul and set aside such features of a treaty which they solemnly declare they will observe, as soon as they discover that these features are not entirely in their interest. Inherent rights count for nothing with them when they insist that American vessels have a right to lish within the three-mile limit on the Atlantic coast of Canada, and that Canadian vessels have no right to fish within an open sea on the Pacific side, a thousand miles from any land. They enact hostile legislation in their tariff, excluding Canadian produce from their market, entertaining the silly belief that by so doing they can force a settlement in this country favorable to annexation. And now, in the language of their Mr. Cleveland, they find themselves confronted with a situation, not a theory. Their theories regarding the coercion of Canada have all proven failures; their dreams of greed and aggrandisement are being rudely dispelled, and they are awaking to a situation where they find that at an early date their exports of grain from the Western States must of necessity be via Canada's great and only waterways. They are awaking to the fact that the American rule which declares that no Canadian vessel may carry freight between American ports, can be made to work the other way, and that Canada may with equal justice make a law that no American vessel may carry freight between Canadian ports, as for instance in transit between the Welland Canal and Montreal. Having tried hostile legislation and found it to ignominiously fail, Prof. Haupt advises that their policy lies now in the direction of harmonizing the "antagon. istic" interests of the two countries, merging them under one management, "by annexation, treaty or otherwise." Declined with thanks. The persistently hostile treatment Canada has been subjected to for long years at the hands of the United States convinces us that our happiness and prosperity does not lie in with the proviso that if Canada imposed an export duty on saw

that direction. We want no annexation; and as to a treaty, why that which is now supposed to be in force has proven a delusion and a snare. National honor, like that of individuals, should not include the practice of trickery, and from our already dearly bought experience, Canada does not desire a treaty through which American trickery would find opportunity to drive a coach and four whenever it was desired to do so. American statesmanship (1) has deprived Canada of her treaty right to use American canals on the same terms that the United States is allowed the use of Canadian canals; and before we can consent to consider any proposition for another treaty it would be well to accord us that which was guaranteed us under the existing trenty.

Canada is under no obligation to the United States in this international canal traffic business, and she will be careful, very careful, how she enters into any entangling alliance with that country.

### THE EXPORT OF SAW LOGS.

A FRW days ago the Ontario Government sold some timunderstand this very well, but what are they going to do about ber limits in this Province upon which more than \$2,000 000 was realized. Pending the sale some of the Conservative newspapers, notably the Toronto Empire and the Hamilton Spectator, rendered themselves hourse demanding that a condition of the sale should be that the logs should be manufactured into lumber in Ontario. Mr. Mowat did not accede to this demand, and now these and other papers are charging that he neglected a duty that he owed to the country in this respect.

Ever since Sir John Macdonald, under pressure from Washington and from some of the Ottawa lumbermen, renewed the export duty on saw logs, this journal has contended that a mistake had been made and advocated a renewal of the duty. We have shown from authentic sources that the timber supply in Michigan, Wisconsin and Minnesota was practically exhausted, and that those sections of the United States which had previously been supplied with lumber cut from timber grown in these States, were being supplied with lumber manufactured from Canadian logs. This fact has not been denied and the fact that hundreds of millions of feet of Canadian logs are being rafted acress Lake Huron to American mills is corroboration of it. It was because Canada was receiving no quid pro quo in the transaction we advised that an export duty be laid on logs.

Under the United States tariff of March 3, 1883, (item 219) such lumber as is manufactured of these Canadian logs was liable to a duty of \$2 per thousand feet board measure, and logs were on the free list. But under the McKinley tariff of Oct. 1, 1890, (item 218), white pine lumber is assessed at only \$1 per thousand feet, there being a proviso to the effect that "in case any foreign country (Canada) shall impose an export duty upon pine, spruce, elm or other logs \* \* \* exported to the United States, then the export duty upon the sawed lumber \* \* \* when imported from such country, shall remain the same fixed by the law in force prior to the passage of the Act of March 3, 1883." In other words, the McKinly turiff reduced the duty on Canadian lumber from \$2 per thousand feet to \$1,

logs, the duty on Canadian lumber should be restored to \$2 per thousand feet.

The Canadian saw mill industry is not the only one that has suffered by the unwise removal of the export duty on logs. A very good idea of how these saw mill men have suffered was given by Dr. Spohn in a speech made in the House of Commons, showing that in his district alone hundreds of mills had been shut down and thousands of workmen thrown into idleness, while the logs which should have been worked up into lumber in these mills by these Canadian workmen were being hauled and rafted past these mills and carried to the United States, giving employment to American manufacturing enterprises and to American labour. All these facts, as related by Dr. Spohn, have been shown at length in these pages. Other Canadian manufacturing industries very seriously affected by the removal of the export duty, were the manufacturers of saw mill machinery, saws, leather and rubber belting, etc. It can be easily comprehended that the manufacture into lumber of the vast quantities of logs being carried from Canada to the United States calls for the use of very large values of saw mill machinery and supplies; and that if this work were done in Canada the production of these things would be in Canadian manufacturing establishments, giving employment to Canadian capital and Canadian workmen. We have the works for manufacturing these supplies, and the skilled workmen for operating them, but the unwise policy of the Dominion Government have given them a stunning blow from which they will not recover until the wrong that has been done them has been righted, and an export duty laid upon logs.

But why should the Ontario Government usurp the functions of the Federal authorities in this matter? Heretofore the Conservative party have been exceedingly tenacious of any invasion of federal right by provincial governments, and there does not appear to be any necessity for anything of the sort now. Mr. Mowat, in our opinion, has no more authority to require that Ontario logs shall be manufactured into lumber in Ontario than to require that the lumber shall be manufactured into furniture before being exported. To do so would be an interference with the flow of trade, entirely beyond the purposes for which the provincial government was created. It is equally clear that the Dominion Government have the right to hus interfere, and that if the interference should be imposed it should be from Ottawa.

By all means let the Dominion Government impose the export duty on logs. The Ottawa lumbermen will probably argue that if this is done the American duty will be increased to \$2 per thousand feet, and that this additional sum will have to be paid out of their pockets. We do not think that such would be the case. A great deal of the Canadian lumber that goes to Boston and New York is exported from these ports, the American merchants acting as middlemen, in receiving from Canada and shipping to the West Indies and South America, in bond. If the lumber is not all shipped in bond, but a portion of it is consumed in the United States, the domestic supply of that country being now so reduced, the consumers would certainly have to pay the increased duty, while the Canadian export duty would greatly benefit many Canadian manufacturing industries.

If, as we have shown, the American consumers would have to tors but better for the whole country.

pay the increased American duty, the Dominion Government should not hesitate to not only impose the export duty, but it should be made at least \$3 per thousand feet. The American duty cannot be any higher than \$2; and if our export duty were placed at \$3, the result would be that about all the logs cut in Canada for the American market, would be manufactured into lumber in Canada. This would be a bitter pill to American millmen, but it would force them to migrate to Canada and carry on their operations here, and that is just what should be done.

Impose the export duty, and make it \$3 per thousand feet.

### COAL OIL AND THE DUTY.

During the fiscal year 1891 the imports of refined oil into Canada, chiefly from the United States, aggregated in round numbers 5,000,000 Imperial gallons valued at \$500,000, upon which \$365,000 duty was paid. This oil was contained in 120,000 barrels valued at \$182,000, upon which \$48,000 duty was paid. The duty on oil is 71 cents per Imperial gallon, the equivalent of about 6 cents per Standard gallon; the duty on barrels being 40 cents each. The law requires that all inported oil shall come in in barrels; and it cannot be imported These imported barrels were probably worth no more in Canada than the duty paid upon them-40 cents each-but their first cost, \$182,000, should be charged to the oil contained in them, thus making the first cost of the oil \$682,000. Then the duty should be also added to the cost, the result being that the 5,000,000 gallons of oil imported cost the importer more than \$1,000,000, or more than 2 · cents per gallon, the first cost in the United States being only 10 cents per gallon. Of course this is independent of freight charges, etc. It is supposed that the duty upon barrels was laid in the interest of the coopers.

Considering the length of time the Canadian coal oil industry has been under the protection of the tariff, it should by this time have reached a development which would give it the entire possession of the home market; and seeing from the above facts that in spite of a tariff which amounts to more than a hundred per cent. of the first cost, it may be well to enquire—first, if the duty is high enough, and second, if it is too high.

According to the ethics of protection, the National Policy was intended to apply to manufacturing industries where there was a probability that within a reasonable time these industries would become developed to an extent where the demands of the home market would be supplied by them, and at reasonably low prices. If experience showed that the prevailing duty was not sufficient to effect this, but that it might be accomplished under a higher duty, then the higher duty should be imposed. But if it is found that the duty is sufficiently high, and that the development from any cause is not probable or possible, then the duty is clearly not for protection. but for revenue only. If this is the case—if it is a fact that a high duty will not develop the industries, and that it is not desirable to obtain revenue in that particular manner, then it is clear that the duty should be modified or removed to meet the emergency. It might be unfortunate for the invest-

We are not prepared to state the quantity of Canadian coal oil consumed in Canada, but we know that for some reason or other it does not meet the requirements of the people to the extent that American oil does. If it did, no American oil would be imported if the petroleum wells of Lambton county had capacity to supply the demand. But in the face of a duty of over one hundred per cent. on the cost, we import 5,000,000 gallons of American oil per year. If it were not for the prohibition of the use of tank cars in importing this oil, the cost would be very considerably lessened; and surely this prohibition is unfair to the consumers, seeing that the domestic manufacturers use them very extensively. Can it be that this more than a hundred per cent. duty is intended to protect only those who pump the crude petroleum from the earth? Or is it to protect the refining industry? or both? If the first, then it might be well for the Government to pay a bounty on the production and admit crude American oil free, maintaining a duty on the refined product. If this were done, American oil refined in Canada would meet the domestic demand for that quality, and Canadian labor would find occupation in refineries which do not now exist. It is said that for lubricating purposes Canadian oil is superior to American. If this is so it would maintain its supremacy notwithstanding the competition of lubricants made of American oil. If American petroleum was admitted duty free and refined in Canada, the consumption of Canadian oil might cease, but the consumer would obtain what is thought to be a better oil for at least ten cents per gallon less than what is now paid.

Another and a very important feature involved in this matter, is the reduction of the cost of liquid fuel. We have knowledge of the existence of manufacturing establishments in Canada where such fuel is used, not only for making steam but for generating heat in manufacturing processes. there are not many of them, for the simple reason that because of this more than a hundred per cent. duty the fuel is too expensive. Why should Canadian manufacturing enterprises be handicapped by this prohibitive duty on fuel? In the United States there are thousands of industrial works where oil fuel is used with most gratifying results. Gratifying not only because oil fuel is cheaper than any other, but also because such large economy in expenses is obtained in handling it as against coal and wood fuel. We have knowledge that machinery is now in existence in Canada for the manufacture of devices for using oil fuel, but for obvious reasons it is not worked to any large extent; while if oil fuel was free many such establishments would be kept in active and profitable operation.

It does not seem to be any lack of enterprise on the part of Canadian refiners that their coal oil is not as highly prized for domestic consumption as that made in the United States. According to the Petrolea Advertiser one refining concern there own one of the most complete oil manufactories in the world. What with the lubricating oil, paratline wax and gas oil that they turn out, nothing is wasted, everything is used up, and their plant is in continual use from one year's end to the other. This shows the enterprise and energy calculated to ensure unbounded success; but as good oil as this concern can produce, and as cheaply as they can make it, it does not fill the bill, for consumers will have American oil, paying over

a hundred per cent. duty on it, giving it the preference over any oil which has ever yet been manufactured in Canada.

### MENDACITY.

It is a pleasure to discuss economic questions with honorable contestants—those who are actuated by a sincere desire to discover what is for the best interests of the country, and who are magnanimous enough to concede that their opponent may be quite as honest as themselves. Where such discussion is had in fairness and moderation—where it is free from personalities and abuse, good should result. But the Montreal Herald is not that sort of a controversial antagonist, for it seems to think that mean low flings, hard, cruel and unjust epithets, and unstinted abuse are the correct things to advance against arguments which it finds itself unable to answer in any other manner.

In a recent issue of this journal allusion was made to the fact that with a more than two-thirds majority in the House of Commons, the leaders of the dominant party felt themselves secure in ignoring the reasonable requests of the manufacturers for some modifications of the tariff, and that this large majority would not be so large after the next election if the Government continued to disregard them. There was no intimation that the manufacturers desired any increase in the tariff, but it had been distinctly and repeatedly stated that the desire was to have some incongruities and irregularities of the tariff removed. No more-no less. In noticing this matter, the Herald attempts to make it appear that "the monstrosity of a Canadian McKinley bill " was desired; and then to alludes to the manufacturers as clamorers for concessions, as venal and corrupt men, as despoilers of the people, as perpetrators of legalized robbery, as raisers of false issues, as appealers to prejudice and passion, etc. It says:

In effect, the manufacturers say to the Government: "You hold power because we will that you shall. We put up the money that purchased the bribable voters last election. We cracked the lash over our employees; and constrained them, under fear of suffering to their families, to vote for your candidates. In short, we own you, body, bones and soul. Therefore, hand over to us the combination to the public safe. We would like to make a haul of a few more millions." And the Conservative leaders will yield; because the servant is not greater than his master.

Such are the arguments (?) advanced by this refined exponent of free tradeism against the manufacturers of Canada. Really, to judge from the language of the Heratd, one might imagine them to be the off-scouring of creation—a band of thieves and robbers whom it would be a benefit to society to kill and destroy and remove from existence as if they were a pack of famishing wolves. It is a reproach to the civilization of the age that such sentiments should be uttered.

Under the legis of protection these manufacturers have in vested millions of dollars in Canada, and are giving employment to thousands of people. With the exception of a few to whom we will presently allude, who can point to and name any of these manufacturers who have accumulated large wealth through the operation of protection? Can the Herald do it? Can it point to and name any systematic oppression of employees on the part of these manufacturers? Is it to be consider-

eda crime for men to invest their capital in manufacturing enorprises, and attempt to make Canada industrially independent of other countries? Are they to be denounced as thieves and robbers because they, by their intelligence, care and technical knowledge, earn a fair remuneration for their labor?

The Herald, quoting what this journal said regarding the appeals of the manufacturers to the Government to correct some irregularities of the tariff, thinks that we are not too modest to show our hand -that with every issue we clamor for more concessions to the manufacturers. There is no occasion for concealment in any honest cause. There is nothing to conceal in this. The "concessions" we have asked of the Government were not to make any changes in the tariff which would affect the revenue either by increasing or decreasing it. All that has been asked was that where incongruities existed, they might be modified. For years the manufacturers of linseed oil besought the Government to remove the duty on flax seed, but it was only recently that the prayer was heard and answered. Large capital invested in mills and machinery for making linseed oil had been idle for years, and laborers who would have found employment in this industry were forced to seek their bread elsewhere. Meanwhile one of the by-products -oil cake-was admitted duty free. The manufacturer if he operated his works was forced to pay duty on his raw material, while a finished product-oil cake-came in free. Why should the interests of the manufacturer be kept in this condition by an incongruity of the tariff which should have been removed as soon as the attention of the Government was directed to it ? Why should the industry remain in a condition of collapse for years when it should have been prospering? And if it was right to correct this incongruity at the eleventh hour, why was it not corrected in the first hour? Of course we clamored for the concession which was finally given. So, too, with degras and stearine, two most important articles used in the manufacture of certain kinds of leather made for export. Neither of them have ever been made in Canada, nor is it probable that they will be for many long years to come, and yet they were burdened with a heavy duty that ought never to have been levied. The additional cost in the manufacture of leather incurred by the duty on these articles amounted to a handsome profit in the business. This leather had to be sold in Europe in competition with American leather, and yet the American tanners had no such handicapping to contend against. No degras is made in that country, but the McKinley tariff has it in the free list; and stearine, which is made largely in that country, was of course also free to the American tanners. The attention of the Government was directed to this incongruity time and again, and it was only after long, tiresome and persistent work that with a graciousness that was valued at its worth these articles were placed on the free list. The tanning industry is one of the most important in Canada; and while the revenue sacrificed by the removal of the duties on these articles amounted to only a few thousand dollars a year, the concession of it constituted the difference between profit and no prolit to the tanners in their export trade. Why not have had this concession in the first place? It is true these are not the only concessions the Government have made to manufacturers, but there are many others of similar character which have not been made, although most urgently requested. These

are not in the direction of higher duties and greater protection. Protection is not supposed to be like the apples of Sodom—fair and beautiful to behold, but which were ashes and bitterness on the lips. If we are to have protection, let it be carried out and administered with a true and honest spirit; and because manufacturers do not long for the Dead Sea fruit, we ask some changes in this direction.

This journal has never sought to disguise the fact that in some instances the tariff has been and is being used as an engine of oppression: that monopolies have developed under it and because of it which wring an unjust tribute from the people. It has put strong arguments in the mouths of the Opposition in Parliament when showing that the sugar tariff was not arranged in the interest of the people, but that the refiners were reaping unjust accumulations through the operation of it. Does the Herald think in doing this we were clamoring for more concessions to the sugar refiners? With a great flourish of trumpets, Mr. Foster and the Government benches proclaimed free sugar for the poor man's breakfast table, in placing refining sugar on the free list, when he and they knew and know that no breakfast table in Canada can possibly at present enjoy the luxury of free sugar. So, too, do we object to the provisions of the tariff which makes it possible for a combine to control the manufacture of binding twine, allowing the syndicate comprising it to heap up riches at the expense of the farmers of the country. If the Herald thinks that this is "camoring for concessions to the manufacturers" it is welcome to its opinion. On principle we are opposed to manufacturing industries being carried on within prison walls where the products are to be sold in the open market in competition with the products of free labor; but in this binder twine business, we clasp hands with the labor organizations and approve of the move being carried on looking to the manufacture of the article by prison labor. It is not according to the ethics of protection that the tariff should be used as an engine of oppression of the people, or as a means for combines and syndicates to extort unjust profits from consumers. And we ask the Dominion Government to administer the tariff along this line. But we object to the mendacity of the Herald and other free trade papers in misrepresenting manufacturers and the views they entertain regarding the tariff and the administration of it.

### IS THE LABORER WORTHY OF HIS HIRE?

Reports from Great Britain show that in addition to the severe industrial depression prevailing there, great uneasiness is felt because of the discouraging results of the harvest. We are told that the farmers there have managed to struggle through a succession of bad seasons borno up by the hope of a more favorable time to come. Many of them have been living on their capital, which has now shrunken so much as to have almost entirely disappeared. It is claimed that the real explanation of the non-remunerative nature of agriculture there, is that much too large a proportion of the profits goes for the rent of the land—that the landlord who lives in luxury, and who does not work, gets the cream, while the tenant farmer, who performs the labor and experiences the anxiety, gets but a small proportion of skin: and milk for what he does. In

many instances the rent the British farmer pays for the use of Customs. It consisted of three copies of the Police Gazette, his farm for one year would purchase a larger and better farm in Canada. Under the ideas of free trade prevailing theres there does not seem to be any hope for better conditions for this class. Protection would raise the price of what the farmer produces, but those who never feel the pinching of hunger protest that the price of bread must not be advanced by that means.

The condition of the other classes of laborers in Britain is equally deplorable. Under the operation of protection in other countries, British morehandise is being crowded out, and manufacturers are lowering expenses and cost of production wit' a view to paying these foreign duties, as they have to do, until their operatives find themselves at starvation's door. Fuel must be cheapened, and so the coal miners are famishing. The price of the poor man's loaf must not be increased, and so the farmers are starving. The cost of transportation must be kept at a minimum, and so the laborers on the railroads, and the seamen on the shipping, find it impossible to keep soul and body together. These are the classes whom it is most convenient to squeeze, and the squeezing process is carried on most vigorously and mercilessly. If ever the laboring classes of a country were brought to drain the dregs of misery, it is those of Great Britain at this time, and all through the evil effects of free trade. The landlords do not starve, for they live by the sweat of the farmer's brow. The manufacturers do not suffer, for their operatives bear the brunt of the depression The ship owners live as luxuriously as ever, even if seamen and longshore men cry for bread.

The United States is blamed for much of this distress. Cheap American wheat and cattle glut the British market and depress the corresponding industries there to a point where British farmers famish. A duty on these articles would relieve the farmer, but free trade will not countenance it. The McKinley tariff shuts British manufactures out of the American market and British workmen walk the streets in idleness. The free traders rave and fume and anothematise Mckinleyism, and the American workman smiles as he follows his occupation, knowing that he is working full time at good wages. It does not seem to occur to the free traders that the McKinley tariff was made for the benefit of Americans, not Britishers.

The woes of Britain have reached a climax where changes are imperatively demanded. The laborer is worthy of his hire, Profit sharing in industrial occupations, and an abridgment of some of the ridiculous privileges of the privileged classes would be for the benefit of the country.

### EDITORIAL NOTES.

A world of wealth lies in that one word-advertising.

An effective advertisement in the Canadian Manufac-TURER is a fair estate.

An advertisement in the Canadian Manufacturer may save a deal of idleness.

eizure was recently made in that town by an officer of the See?

which had been discarded by a passenger in a railway car. Now if the Customs officers really desire to make some seizures which will help to break up a smuggling gang which is doing great injury to a Canadian manufacturing industry, let them go to a little town in Quebec, where only an imaginary line separate, it from a similar little town in Vermont, and where a large traffic is carried on in smuggling whips from the United States into Canada

THE idea that a nation must export more than it imports in order that it may be prosperous is one of the absurdities that have dire long and strong service in maintaining a vicious fiscal system.—Toronto Globe.

If we had capacity to consume at home all we can produce, and if we could produce at home all we can consume, we would be better off than if we did an immense foreign trade. It is absurd to imagine that a large foreign trade, particularly in imports, indicates prosperity. We impoverish ourselves when we import goods that could be made to advantage at home. We are not as prosperous as we should be if we send abroad any products that ought to be consumed at home.

A. St. THOMAS firm received a consignment of boots and shoes from Germany the other day. Being under the impression that the goods had been shipped from Hamburg, where the cholera is raging, they refused to accept them.—Monetary Times.

Large quantities of leather, suitable for the manufacture of boots and shoes, are made in Canada and sold to Germany. With the pauper labor of that country it is made into merchantable goods and sent back to Canada, thus depriving Canadian boot and shoe factories of employment to just that extent, and that notwithstanding the tariff. The trouble is, the Canadian duty on such goods is not high enough.

BRITAIN'S purchases of us increase sixteen per cent, in nine months; her sales to us increase only one per cent. Which country should take the first step towards fostering her trade with the other?—Montreal Star.

Britain bought an increased quantity of merchandise from us because she required them and could supply her wants better from us than from any other source. If her sales to us in the same time were but inappreciably increased it was because we could purchase the merchandise cheaper elsewhere, or produced it ourselves. Why should we buy anything from Britain that we can produce at home? Why should we sell her anything that can be consumed at home?

A DUTY on foreign goods reduces the purchasing power of wages, but cannot increase wages. - Toronto Globe.

A duty on foreign goods retards their importation, but not the consumption. The consumption of foreign goods being retarded, the consumption of domestic goods is increased. Goods are the product of labor. The increased demand for domestic goods means an increased domand for domestic labor. The law of supply and demand prevails. The demand for labor being increased, the price for labor is correspondingly increased; so that a duty on foreign goods increases the wages According to the Coaticook, Que., Observer, an important of labor and consequently the purchasing power of wages.

Ir a tariff did not increase the cost of articles it would afford no protection or encouragment .- Toronto Globe.

The tariff retards and obstructs the importation of foreign goods, but it does not retard or obstruct the consumption of similar goods. The tariffencourages the manufacture of such goods at home. Possessing the home market, the competition between manufacturers forces the cost of production down to the lowest possible figure, and the home made goods are sold eventually at as low prices as the foreign goods would have sold at if there had been no protection. But under protection home capital and labor do the work and derive the benefit which would otherwise have given employment to foreign capital and foreign labor.

Ir the tariff restrictions that surround the men who manufacture logs into lumber were removed, the business would thrive in spite of the machinations of Yankee saw mill owners, There would then be no agitation for an export duty on logs or a restriction in favor of domestic manufacture at the sale of timber limits .- Toronto Globe.

The best interests of Canada would be promoted by placing an export duty of say \$3 upon pine logs. That would mean an American duty of \$2 also-and should the American consumers of lumber find that their lumber cost them four or five dollars per thousand feet more than it now does they would howl for terms which Canada would dictate. Impose the

THE idea that imports injure and exports confer benefits is still the base of protectionists' arguments. The base was always unsound, and although it has crumbled away they have not yet discovered the fact.—Toronto Globe

In fourteen hundred and ninety-two. When Columbus crossed the ocean blue, He said unto his jolly crew, "Let's discover a thing or two."

So when he landed on the sacred soil of America, in looking around for something to discover, he discovered a crazy dancing dervish, who was singing this very same song, now for the ten thousandth time rejuvenated and reproduced by the free traders:

The thing they found, so the records say, Was this back row ballet coryphee Which, with her song has been on view Since fourteen hundred and ninety-two.

THERE is an idea abroad that a tariff imposed by one nation makes it necessary for other nations to adopt a similar policy. It has no foundation outside of the imitating or aping propensity of man. The nation following such a course cuts off its nose to spite the face of some one else. - Toronto Globe.

The Globe's editor attends the same kindergarden political school in company with the Empire's young man. Britain adopted free trade a half century ago there were other nations that then adhered to that fiscal foolishness. But since then, and at this time, every important nation on earth except Great Britain practises protection, and none of them consider that in so doing they cut off their noses. The "aping propensity" is on the part of the Globe's kindergarden editor to imitate the expressions of Cobden, whose theories have been long since exploded.

THE Globe says :- " A direct tax makes the people watchful." You bet it does, or rather it would if the system pre-

everybody else, would watch for the coming of the tax collector, and dodge him if he could. The farmer couldn't dodge to any advantage, or rather his farm couldn't, and so the tax collector would have a sure thing on him; and if the tax wasn't forthcoming on demand, off would go enough horses, cattle, sheep or pigs to answer the call, and the chickens would have to roost high to escape the confiscation. The mechanic who owns his own home couldn't dodge to advantage, for the tax-gatherer could certainly find the cottage, and away it would go under the hammer if the taxes were not promptly forthcoming; or his tools of trade, or his wife's sewing machine would be carried away before his eyes to pay the tax. Oh yes, a direct tax would make the people watchful, but much redness of eyes would be apparent.

A Garr journal tells us that "the Canadian with capital to invest in ship-building will establish his industry in Great Britain." One of the most onerous burdens Canada has to bear is that the British flag is free in all her ports. The laws are prohibitive of ship building in Canada. It is true some materials are admitted duty free, but many others must pay duty, while ships built in the United States or elsewhere, but registered in Great Britain or any British possession, are admitted to every privilege. The fine steamer Columbian, belonging to the Richelieu and Ontario Navigation Company, probably the finest passenger steamer plying in Canadian waters, was built in the United States, received British registry in Newfoundland, and enjoys every marine privilege in Canada without the payment of any duty whatever. This is not right; and until this anomaly is corrected Canada can never hope or expect to possess such a ship-building industry as exists in the United

INCREASING the cost of goods does not increase the wages of those who manufacture them. It decreases the quantity consumed, thereby decreasing the demand for labor and lowering wages. - Toronto Globe

That depends. If the cost of goods manufactured in a free trade country for export to a protection country is increased on delivery by the operation of protection, of course the wages of those who manufacture them is not increased. But if such goods are manufactured in the protection country, and the operation of protection shuts out or retards the importation from the free trade country, the demand for the home-made goods is increased, and the demand being increased the wages of those who manufacture the goods is also increased. The quantity of goods consumed is not decreased, but the origin is changed. This has reference to the country practising protection. The Globe's wise remark that protection "decreases the quantity consumed, thereby decreasing the demand for labor, and lowering wages," applies to the free trade country.

It is contended by those who favor an export duty on saw logs that the Yankees "must" have our pine, either sawn or in the log, and will overcome the barrier by an increase in cost. But trade is very sensitive. When the McKinley tariff of twenty cents a bushel was put on our barley, instantaneous theorists thought that the malt houses in New York State "must" have it The malt houses are closed. - Toronto Globe.

Saw logs is one thing, barley another. The supply of logs in vailed. Imagine how the farmer, the mechanic, and about the American lake region is practically exhausted, and Canada is the only available source of supply. The United States can produce barley as well as Canada, and is doing it, although Canadian barley is the better. The malt houses in New York are closed because they cannot obtain Canadian barley, but that country seems to get along without it notwithstanding. But it cannot get along without lumber; and if an export duty were imposed on logs, Canadian logs would be cut into lumber in Canada, giving employment to Canadians, and the American consumers would have to pay both the Canadian export duty and the American import duty on what they would be obliged to use of it.

It gives us much pleasure to announce that at the recent meeting of the Macdonald Memorial Committee, at which several models were submitted for inspection, that offered by Mr. Hamilton McCarthy, of Toronto, was accepted, and the Tor onto bronze monument to Sir John A. Macdonald will be constructed after that plan, and under the supervision of Mr. Mc Carthy. The accepted model is an admirable likeness of Sir John, and represents him in an attitude familiar to those who have seen him when addressing an assemblage. Mr. McCarthy is a young Canadian of decided talent and ability, of whom the country should feel proud. He has already produced some excellent works, notably the bronze statue of Colonel Williams, at Port Hope, and his studio contains models of many of the prominent men of Canada. In selecting Mr. McCarthy's model of Sir John, and placing the execution of it in his hands, the committee have displayed what is believed to be most excellent taste, and have given an encouragement to Canadian talent which will be of great benefit to the country.

Ship-nulliping is one of the industries that cannot survive a protective tariff. It must compete with the whom world, as the cost of transporting a ship is nothing; and the price of raw material in a protected country is a fatal obstacle. A remnant of American ship-building is kept alive by a law absolutely prohibiting the carrying of goods from one United States port to another in a foreign vessel, but the American or Canadian with capital to invest in real ship building will establish his industry in Great Britain.—Toronto Globe.

A "remnant" of American ship-building indeed. The inland marine of the United States is larger than that of any other country on the face of the earth—perhaps larger than that of all others combined. Look at the commerce of Ogdensburg, Oswego, Buffalo, Cleveland, Detroit, Chicago, Duluth—look at the American commerce that passes Detroit—infinitely larger and more valuable than all that passes through the Suez canal. And the Globe calls that a remnant. In truth it is kept alive by a law prohibiting the carrying of merchandise in foreign vessels between domestic ports; and if Canada had such a commercial may she would be a buildred fold richer.

Public opinion has no effect in deciding the issue of a strike except so far as it may stimulate either of the contesting parties to greater effort or endurance. The sympathy of the whole world was with the Homestead strikers, yet Mr. Carnegie has triumphed.—Toronto Globe.

and more prosperous than she is.

The Homestead strikers—blessed lambs that they were were guilty of riot, murder, arson and treason, and yet the kindergarden editor of the Globe would have its readers believe that the sympathy of the whole world was with them. The proprietors of the Homestead works were denied the privilege of managing their own business. They were denied the privilege of protecting their own property. They were denied the privilege of employing men who desired to labor in their works. All these things were guaranteed to them under the law, and they were clearly within their rights in what they did and what they attempted to do; and yet the socialistic Globe holds them up to scorn and execration. No, dear Globe, the sympathy of the whole world was not with the strikers. The misguided men did not have the sympathy of lovers of law and order and of good government. Such sympathy as they had was that of the unthinking and of such socialists and iconoclasts as the Giobe.

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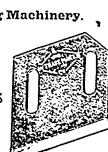
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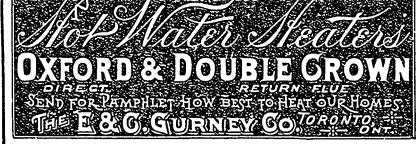
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THE Toronto workingmon have decided not to protest against | Trust and the Sugar Trust. But it is folly for the Empire or the making of binding twine by prison labor. They thus forego one of their settled principles for the benefit of the farming community. This is a straw showing the direction of the wind. City men are beginning to realize that they must give the farmers a better chance, if they are to prosper themselves. -Montreal Star.

The action taken by the Toronto workmen is not antagonistic to the ethics of the Nation ! Tolicy, neither is that policy to be denounced because the manufacture of binding twine has fallen into the hands of a combine who have established a grinding monopoly. An error in the administration of protection which ought to be remedied by proper legislation is this—the Government when it discovers that the N.P. is being used for oppression should have the power, and the inclination to use it, to lower or even remove the duty. If it were possible to do this such a thing as a binder twine monopoly or a sugar monopoly imposing unjust prices upon consumers could not exist. But to destroy the N.P. because some combines impose exorbitant prices would be wrong and disastrous to the country. It would be like burning a valuable barn to destroy the vermin infesting it.

WE used to be told that the high price of anthracite coal was due to the duty. If we can be subjected to an American combine under free trade in coal and prices raised, why why should we not meet the same consequences under any one of the 100 huge trusts which now exist in the Republic, should the respective products dealt with be admitted free? An answer is requested.—The Empire.

any one else to contend that because a "trust" controls the petroleum produce of the United States it makes the price of coal oil and other products abnormally high. We have no Standard Oil Trust in Canada, but it would be a blessing to the country if we had if it gave our manufacturers liquid fuel at anything like as cheap prices as American manufacturers pay. So, too, with sugar. Every now and then the "upire gets off a lot of twaddle about free sugar on the poor man's breakfast table, when it knows that never since the N. P. came into existence has that event ever occurred. No breakfast table in Canada is served with free sugar, for the Canadian sugar ring, or trust, is protected to the tune of eighty cents per hundred pounds, and only refined sugar is used, while the cost of refining is not more than thirty cents per hundred, Every pound of sugar consumed in Canada pays a half cent more than it ought to into the pockets of the refiners. The anthracite matter is not affected in any way by the tariff, either in Canada or the United States. This journal is thoroughly in favor of tariff protection when properly administered, but not when it becomes oppressive.

Printers' Ink is a journal for advertisers, published in New York. Unfortunately for it it seems to be on the wrong side of politics, that is from the Republican standpoint, a consequence of which is it is not in accord with the good Mr. Wannamaker, the Postmaster-General, and therefore it is not admitted to transportation through the United States mails as Of the 100 huge trusts which now exist in the United second class matter, as most other publications are in that States, as alluded to by the Empire, the hugest is probably country. This is rough on Printers' Ink from a financial view. the Standard Oil Trust, followed closely by the Authracite and it certainly reflects very unfavorably upon the Post Office

### anufacturers' ssociation anadian .

W. K. McNAUGHT, President

J. J. CASSIDEY, Socretary

GEORGE BOOTH, Treasurer

Office, ROOM 66 CANADA LIFE BUILDING, KING ST. WEST.

TORONTO.

### THE OBJECTS OF THIS ASSOCIATION ARE:

TELEPHONE 1274.

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 maited body whenever action in behalf of any particular industry, or of the whole body, is necessary.

To maintain Canada for Canadians.

Any person directly interested in any Canadian manufacturing industry is eligible for membership.

Manufacturers desiring to ho'd meetings for the promotion of their business are invited to avail themselves of the Board Room of the Association for the purpose, which is offered to them free of charge.

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Department of a great country, that should be above anything so contemptibly mean as what Mr. Wannamaker, its chief appears to be in the transaction. The proprietors of our esteemed contemporary are clever business men, with a keen perception of the road to be travelled in pursuit of the almighty dollar. Their publication is decidely bright and "catching," and enjoys a large circulation. But unlike other similar publications, the larger the circulation the more money Mr. Wannamaker squeezes out of it as postage at the rate of one cent for every two ounces or fractional part thereof, instead of at the rate of two cents a pound if it were admitted to the mails as second class matter. We are sorry for Printers' Ink, and the only feasible suggestion we can propose at this time, whereby Mr. Wannamaker may be defeated in his nefarious warfare, is for the proprietors to change their office of publication from New York to Toronto-from the oppres sion of the United States to the freedom of Canada. If Printers Ink were published in Canada it would be admitted to the Canadian and United States mails free, just the same as the CANADIAN MANUFACTURER is. Our contemporary announces that it has publication offices in both New York and London. This latter may or may not be a myth—we do not know—but if it had a bona fide publication office in Canada the others might be dispensed with to great pecuniary advantage. The CANADIAN MANUFACTURER cordially extends an offer to Printers' Ink to use its printing outfit in a laudable endeavor to circumvent the hostility of the good Mr. Wannamaker.

Out old friend, the Canadian Almanac, now in its forty-sixth year, increases in vigor each year of its life. The issue for 1893 will be published earlier than usual, and has been enlarged by the addition of an Ontario Law List, a more complete Clergy List, and a variety of other valuable information. An interesting article on "Wills and Executors" has been prepared for it, also one on "Life Insurance." The city taken up is Montreal, of which a readable sketch is given, together with a map of the central portion.

Good Housekeeping for November gives the opening chapter of an absorbing serial story by H. Annette Poole, with the title of "A Noble Girlhood," It is a story with a purpose, and that purpose runs directly along the lines of the home life, as persistently and practically set forth in the pages of Good Housekeeping from month to month; but it is none the less a beautifully written, atrong and impressive narrative, which every reader will follow with increasing interest. There is besides in the current number a marked Thanksgiving flavor, as is to be expected, and the usual aggregation of valuation papers in relation to the home life and the various interests of which it is the centre—in every way a most welcome visitor and valuable companion for all to whom the name of "home" has a meaning. Clark W. Bryan Company, publishers, Springfield, Mass.

MR. C. A. MILLENER, Descronto, Ont, has sent us "Useful Tables for Business Men," a most excellent book, which he has recently published, and which consists chiefly in tables, which cover very completely all the subjects that are likely to be required in counting houses and offices. It includes formulas, explanations and examples of the use of tables contained therein, all very clear and intelligible. There are rules for computing simple and compound interest, annuity and sinking fund tables, bond values, tables for finding weight of round, that and bar iron, lumber measure, rules for converting sterling into decimal currency, value of foreign currency in dollars, tables of all sorts of measures, and a mass of other information of great value to accountants and business men. In size and shape it is exceedingly convenient, and the materials of which the book is made are first-class. By mail, postage paid, in cloth binding, \$1: leather, \$1.25.

THE November Wide Awake opens with a profusely illustrated article on "Some British Castles," written by Oscar Fay Adams, and appropriately frontispieced by a splendid full-page picture by Garrett, of "Marmion's Defiance to Earl Douglas at Tantallon

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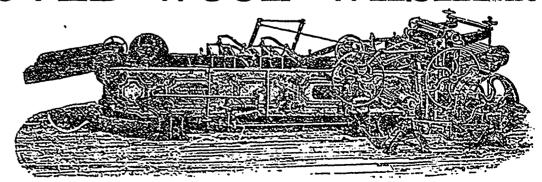
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Castle." Alexander Black has a descriptive paper on "The Babies of the Zoo" at Central Park, illustrated by Irene Williamson. Edith Robinson gives a story of the pluck and bravery of a Harvard boy at a city fire, and calls it "Raglan's Substitute;" Mary Seldon McCobb has a Thanksgiving story, "Why She Was Thankful," and "Mabel's Election Day" is an appropriate November story by Ellon Strong Bartlett. Florence Howe Hall tells of "The Moriarity Duckling Fair;" How Dorothy Paid Her Way," by Caroline E. Hersoy, is a bright story of a bright girl. The serials, "The Coral Ship," by Kirk Munroe, and "That's Mary Ann," by Kate Upson Clark, end with this number, for a new volume of the Kate Upson Clark, end with this number, for a new volume of the ever-popular Wide Awake begins with the December number. Price, 20 cents a number, \$2.40 a year. D. Lothrop Company,

publishers, Boston.

Dream November's chilling blasts, while scattering the frost seared foliage at will, have no power to mar the beauty of the evergreen leaves of cheery Outing. The current number is bright, healthful in tone, and most seasonable in subject matter, and, for beauty of illustration and pleasant charms of text, is one of the beauty of flustration and pleasant charms of text, is one of the best numbers of the popular magazine that ever left the press. The contents are as follows:—"Yumi, the Japanese Longbow," by Robert G. Denig; "Through Darkest America" (continued), by Trumbull White; "Battles of the Football Season of '91," by Walter Camp; "Bicycle Riding in Germany," by Fanny B. Workman; "A Day with the Quail," by Ed. W. Sandys; "A Thanksgiving Day's Bear Hunt," by H. S. Habersham, "Acolita," by John Heard, ir: "The Portrait by Hunt," by Felith Robinson. Thanksgiving Day's Bear Hunt," by H. S. Habersham, "Acolita, by John Heard, jr.; "The Portrait by Hunt," by Edith Robinson; "A Moot Point in Track Athletics," by John Corbin; "Harry's Career at Yalo" (continued), by John Seymour Wood; "National Guard of New Jersey" (second paper), by Lieut. W. H. C. Bowen, U.S.A.; "Round the World with Wheel and Camera" (continued), by Frank G. Lenz; "Sturgeon Fishing in Russia," by Robert F. Weld," and the usual editorials assessment at a Walsh," and the usual editorials, poems, records, etc.

So elever a society woman as Mrs. Burton Harrison does well when she employs her pen to define social laws, and point out mistakes for girls to avoid, and girls should read the first of her series of articles on "The Well-bred Girl in Society" in the November Ladies' Home Journal. Not less authoritative and charming is the first glimpse, which we get in this number, of the home-life of The B. CREENING WIRE GO., Ltd. Dickens in the opening article of the series of papers entitled, "My Father as I Recall Him," by the great novelist's favorite daughter, Mamie. Dr. Talmage lends the piquancy of personal element to an interesting paper, telling of the "People Who Write to Me." The

famous opera singers. Marie Roze and Clara Poole, have each an article on the voice, intended for girls who love to sing, and advising them how to keep their voices in good condition. Mary E. Wilkins tells the story of "A Thanksgiving Thief," while Julia Magruder and Josiah Allen's Wife also have an excellent story each. Mrs. Mallen describes the newest autumn gowns, and also those for home and evening affairs; what Christmas presents women should give to men are described by Mr. Bok, and Palmer Cox tells the origin of his famous "Brownies." Robert J. Burdette, Maria Parloa, Margaret Bottome, Miss Scovil, Mrs. Lyman Abbott, and all the Journal editors seem better than ever, and altogether this Thanksgiving issue, with its new and beautiful cover, will bring The Ladies' Home Journal closer than ever to the hearts and needs of womankind. The Curtis Publishing Company, of Philadelphia, publish this magazine for 10 cents per number, and \$1 per year.

THE Dedicatory Edition of The "itustrated World's Fair is furnished with a beautiful cover, which carries accurate portraits of all the chiefs of departments and the great officers. There are a hundred pages in this issue, and the leading article is written by Carter Harrison. The articles illustrated by the portraits of the authors number fifteen, including Joachim, while the water scenes

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and panoramic views leave nothing to be desired in the way of illustrations. All the main buildings and numerous State buildings are photographed as they now appear. About twenty pages are filled with the short and sprightly articles that have given the magazine a high place in periodical literature. Sampson, Low, Marston & Co., have as uned the publication of the magazine for magazine a high place in periodical literature. Sampson, Low. Marston & Co., have as used the publication of the magazine for Great Britain, and her colonies, and this connection also assures a wider distribution in Europe Prince Bismarck has written an article for The Illustrated World's Fan about the Exposition, and articles by Henry Watterson, Sara Bernhardt and Alphonse Daudot are in prospect. The present issue of this ionrnal demonstrates. that Chicago can produce the highest form of periodical. The the Methodist Book Publishing House, Rev. Dr. Withrow being price is \$1 a copy, and the issue forms a proper souvenir of the the editor. Few persons unacquainted with newspaper work have dedication. Part second contains reprints of the articles and por- any correct idea of what is to be found on an editor's table. Extraits of Patti, Col. Ingersoll, President Hayes, Max O'Rell, Lyman J. Gago, Director-General Davis, Chief Handy, David Swing, Col. Norton, Dr. Meloy, and a doz-n other famous people. Jewell N. Halligan, McVicker's Thestre, Chicago. The regular (25 cent) issue contains thirty-two large pages of original articles and pictures. Every page of this journal is illustrated.

Taking up the November Popular Science Monthly, one is struck by the many phases of actual human life, in distinction from the ideal life of fiction and poetry, which this magazine reveals. Sara Jeannette Duncan opens the number with a study of the mixed races of India. Dr. Wesley Mills treats of "The Natural or Scientific Method in Education," basing his essay upon what has been discovered as to the way in which the brain receives and records impressions. There is an article by Dr. T. Lauder Brunton on "Posture and its Indications," to which still more novelty is given by its odd illustrations. What things are being studied in the field of mental illustrations. What things are being studied in the field of mental science are pointed out by Prof. Joseph Jastrow in a paper on "The Problems of Comparative Psychology." The question whether it will ever be possible to put together by chemical process a creature having life is discussed by M. Armand Sabatier, under the title "The Synthesis of Living Beings." Some "economical trees" that have sent roots into decayed parts of their own trunks, are described by Frederick Le Roy Sargent, with illustrations. The calculations made by Jacques braudi, the latest arithmetical prodigy, are described by M. Alfred Binet. Some remarkable "Reasoning people."

bers that he was once one of "the young people," and memory scalls up scenes and faces in a panoramic view which entrances him; and though he may be far away from those scenes, and though the loved faces can appear to him no more here, his heart yearns all the more earnestly that in the sweet by-and-bye there will be a happy reunion never to be broken up. Coming back to the realities of life, he takes inspiration from the word "Onward," and plunges into the battle of life renewed and refreshed threagh thaving devoted a half-hour to this little messenger to "young are described by M. Alfred Binet. Some remarkable "Reasoning" people."

Animals" are put on record by Allen Pringle. An account of "The First German Paper-maker," with pictures of his mill is given by Edouard Grosso; and J. B. Mann answers the question, "Are Business Profits Too Large ?" by showing that capital and skill do not

changes and newly-published books predominate, and, fortunately, the tired editor finds mental recreation and rest in looking over thom. Politics—of all shades; religion—of all denominations; magazines containing "reviews" and elaborate articles covering every imaginable topic under the sun; trade papers—devoted to all the leading industries—no two alike—no entire agreement in all things between any of them. It is a kaleidoscope of life—every them. new, over changing, always interesting. But which of all this mass of literary scintillations can be quite so interesting, quite so literary table for many years, and whose business it is to examine and discuss some of the matters which concern the state and welfare of the country, lays aside and forgets all these things with this "paper for young people" before his eyes. As he looks it over he is carried away back through long years of his life, and he remony bers that he was once one of "the young people," and memory

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## ※ INVENTIONS. ※

This department of The Canadian Manufacturen 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 free 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 incentions, as embodied in Letters P atent, 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 1st to 13th, 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.

40,181 Chemical fire engine, The Muskegon Chemical Fire Engine Co., September 1st.

40,182 Vehicle, W. E. Stevens, September 1st.

40,183 Vise, D. C. J. Sabourin, September 1st.

40,184 Harvester binder, A. G. Reaman, September 1st.

40,185 Combination rule, square and compass, M. G. Flick, September 1st.

40,186 Stop cock, C. F. Logan, September 1st.

40,187 Fluid meter, F. W. Holt, September 1st.

40,188 Transfer ticket, A. White, September 1st.

40,189 Rail joint, F. H. Heath, September 1st.

40,191 Threshing machine, W. Alpert, Soptember 1st.

40,192 Air heating apparatus, J. A. Kirkpatrick, September 1st.

40,193 Cash indicator and register, The National Cash Register Co., September 1st.

40,195 Churn, O. Linebarger and G. Onderkirk, September 1st.

40,196 Hydrocarbon oil burner, B. H. Elwood, September 1st.

40,197 Mop wringer, C. A. White and O. U. Wardwell, September 1st.

40,198 Camera, The Blair Camera Co., September 1st.

40,199 Railway time signal, The Fontaine Safety Signal Co., September 1st.

40,200 Railway time signal, The Fontaine Safety Signal Co., September 1st.

40,201 Apparatus for ordering tobacco, S. P. Mayo and G. A. Pople, September 1st.

40,202 Machine for making clay conduits, J. J. Powers and R. Van Buron, September 3rd.

40,203 Spring motor, S. Peterson, September 3rd.

40,204 Valve gear, The Bruno Nordberg Co., September 3rd.

40,207 Car step, F. W. Jones, September 3rd.

40,208 Salt container and sprinkler, F. N. Dixon, September 3rd.

40,209 Car coupling, A. Loughced, Septomer 3rd.

40,210 Shoe sewing machine, A. Eppler, September 3rd.

40.211 Check controlled lock, J. R. Buckingham, September 3rd.

40,212 Steam engine, D. D. Hardy, et al, September 3rd.

40,213 Axle, J. F. Miller and Dr. C. A. Stiles, September 3rd.

40,214 Manufacture of rails, girders and rolled bars of various sections and similar objects, T. Bicheroux, September 3rd.

40,215 Storm or other lanterms, lamps, stoves, and the like, J. T. and J. Paul, September 3rd.

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40,216 Magnetic hammer and nail puller, A. Blake, September 3rd.

40,217 Magazine gun, F. M. Garland, September 3rd.

40,218 Rack for wagon beds, M. C. Craig. September 3rd.

40,219 Mutes for musical instruments, D. Genese, September 5th.

40,220 Ventilating heater, R. Marsh, September 5th.

40,221 Steam joint for rotary pipe or hollow shafting, J. B. Morgan and H. Adams, September 5th.

40,222 Calculator, W. J. Clayton, Soptember 5th.

40,223 Cartridge loader, F. R. Baldwin, September 5th.

40,224 Pipe joint, W. Sykes, September 5th.

- 40,225 Tires for bicycles, etc., W. Swain and W. Philipson, September 5th,
- 40,226 Envelope seal, H. Denis, September 5th.
- 40,227 Wrench, B. B. Lowe, September 5th.
- 40,228 Pneumatic door check and closer, J. S. Shrawder, September 5th.
- 40,229 Sewing machine, V. Torusa, September 5th.
- 40,230 Manufacture of butter, N. Rolland, September 5th.
- 40,231 Machine for printing paper bags, R. E. Stewart, September 5th.
- 40,232 Warp operating mechanism for cross weaving, W. Talbot, September 5th,
- 40,233 Puzzle, J. Clouston, September 5th.
- 40,234 Decoy, F. A. and G. Thorn, September 5th.
- 40,235 Steam pump, A. F. Hall, September 5th.
- 40,236 Manufacture of nails and apparatus therefor, Per Adolf Nilsson, September 5th.
- 40,237 Wallet, G. K. Morton, September 5th.
- 40,238 Organ, R. H. Jones, September 5th.
- 40,239 Water heater, The Consolidated Car Heating Co., September 5th.
- 40,240 Temperature regulator, The Consolidated Car Heating Co , September 6th.
- 40,241 Extension table, J. A. Ethier, September 6th.
- 40,243 Disk harrow, The Johnston Harvester Co., September 6th.
- 40,244 Surveyors' instrument, J. R. Hanlon, September 6th.
- 40,247 Socket pipe for drainage, H. Knowles, September 6th.
- 40,248 Bundle carrier for harvesters, B. F. Stewart, September 6th
- 40,249 Vaginal syringe, L. E. Hendrickson, September 6th.
- 40,250 Tenoning machine, A. Giddens, September 6th.
- 40,251 Clamp for moulders' flasks, W. W. Archibald, September 6th.
- 40,252 Carpenters' plane, R. Robinson, September 6th.
- 40.253 Tapping and pipe threading machine, H. C. Bradford, September 6th.
- 40,254 Parcel holders, D. W. Long and C. Dinnick, September 6th.
- 40,255 Key-board for musical instrument, F. J. Stinson, September 6th.
- 40,256 Loose pulley bearing, C. T. Brandon and R. S. McPhail, September 6th.
- 40,257 Charging car heating apparatus with a heating medium, The Consolidated Car Heating Co., September 6th.
- 40,258 Paper hanging machine, A. H. Lohlker, September 7th.
- 40,259 Hoisting and conveying apparatus, T. S. Miller, September 7th.
- 40,260 Street sweeper, J. Jones and A. Gillies, September 7th.
- 49,262 Cutting metals, W. Smith, September 7th.
- 40,263 Safety lamp, J. Thorne, September 7th.
- 40,264 Dispensing liquids, W. M. Fowler, September 7th.
- 40,265 Fishing apparatus, J. Dunham, September 7th.
- 40,266 Combined drill, hoe and cultivator toeth, J. Muir, September 7th.
- 40,267 Bar for watch and like chains, C. Bolt, September 7th.
- 40,268 Machine for making spikes and nails, H. Greer, September 7th.
- 40,269 Harness attachment, A. E. Choquette, September 8th.
- 40,271 Rail-joint, A. Klein, September 8th.
- 40,272 Boots and shoes, G. Willey and P. A. Stone, September 8th.
- 40,273 Lifting jack, A. Warren, September 8th.
- 40,274 Lifting jack, A. Warren, September 8th.
- 40,275 Ammunition belt, F. M. Garland, et al, September 8th.
- 40,276 Machine gun, F. M. Garland, et al, September 8th.
- 40,277 Cover for the ends of hub bands, W. Chaplin, September 8th.
- 40,278 Fire extinguisher, G. H. Downing, September 8th.
- 40,279 Attachment for ranges, J. F. Myors, September 8th.

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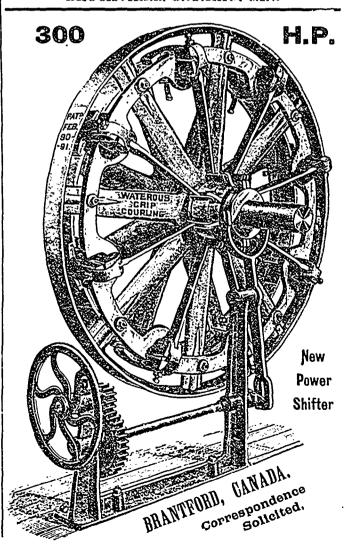
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- 40,280 Lathe carriage, P. G. Simpson, September 8th.
- 40,281 Printing press, Duplex Printing Press Co., September 8th.
- 40,282 Dust and mud cap for point bands for vehicle hubs, W Chaplin, September 8th.
- 40,284 Can, Fairbank Canning Co., September 8th.
- 40,286 Rivetting machine, J. L. Thomson, September 8th.
- 40,287 Rivet slotting machine, J. L. Thomson, September 8th.
- 40,288 Apparatus for dispensing liquids, W. M. Fowler, September 8th.
- 40,290 Railway construction machine, J. W. Close and J. C. Graves, September 9th.
- 40,291 Chain stitches for uniting parts of boots and shoes, A. Eppler ir., September 9th.
- 40,292 Sewing webs to upper and inner soles of boots and shoes, A. Eppler, jr., September 9th.
- 40,293 Pipe coupling, E. F. Roberts, September 9th.
- 40,294 Mechanical stoker for steam boilers, J. Proctor, September 9th.
- 40,295 Support for bicycles, J. W. Snyder, September 9th.
- 40,296 Lawn mower, A. Harris, September 9th.
- 40,297 Steam boiler furnace, Hawley Furnace Co., September 10th.
- 40,298 Means for bending electrotype plate. Curved Electrotype Plate Co., September 10th.
- 40,299 Fertilizer distributor, American Harrow Co., September 10th.
- 40,300 Letter and bill file, W. Gottwalls and It. Allan, September 10th.
- 40,301 Mechanical motor, G. Cochins, September 10th.
- 40,302 Pea sheller, E. C. Moulton, September 10th.
- 40,303 Air brake, W. E. Mahor, September 10th.
- 40,304 Railway track, P. H. Dudley, Soptember 10th.
- 40,307 Feed water heater, C. Jacobs, September 10th.
- 40,308 Mason's tools, J. G. Faulds, September 10th.
- 40,309 Typewriting machine, G. W. N. Yost, September 10th.
- 40,310 Package making and filling machine, H. E. Smyser, September 10th.
- 40,311 Steam generator, F. E. Fitch, September 10th.
- 40,312 Meat cutter, A. Shepard, September 10th.
- 40,313 Gang saw mill, T. S. Wilkin, September 12th.
- 40,314 Coin operated automatons, A. M. Pierce, September 12th.
- 40,315 Hot water heating system, F. A and E. N Gates, September 12th.
- 40,316 Door closing appliance and check for same, R. Adams, September 12th.
- 40,317 Legging, L. W. Groat and W. J. Van Vleck, September 12th.
- 40,320 Trimming attachment to machines for sewing looped fabrics,
  A. L. Traver, September 12th.
- 40,321 Slab sawing machine, A. T. Linderman, September 13th.
- 40,323 Pipe coupling, W. Carey. September 13th.
- 40,324 Street indicators for street cars, G. Spoelstra, et al, September 13th.
- 40,326 Compound steam engine, R. M. Beck, September 13th.
- 40,190 Printing tolegraph, W. W. Taylor and E. M. Leavens, September 1st.
- 40,194 Graphophone, The American Graphophone Co., September 1st.
- 40,205 Method of electric metal working, M. W. Dewey, September 3rd.
- 40,206 Method of magnetically reducing friction, M. W. Dewey, September 3rd.
- 40,242 Regulator for dynamo electric machine, E. M. Bentley, September 6th.
- 40,245 Electric soldering iron, C. E. Carpenter, September 6th.
- 40,246 Lightning arrester, J. W. Easton, September 6th.
- 40,261 Electric signal for cable and other cars, J. J. Wolf, September 7th.

- 40,270 Electric railway, C. Richter, September 8th.
- 40,283 Transmission of currents through conduits for the propulsion electrically of railway cars, G. L. Parker, September 8th.
- 40,285 Electric regulator, The Consolidated Car Heating Co., September 8th.
- 40,289 Electric arc lamp, W. D. Graves and F. J. Stafford, September 9th.
- 40,305 Pastective covering for electric cables, J. H. Cheever, September 10th.
- 40,306 Magneto electric machines for use in blasting operations, A.
- S. Fitch, September 10th. 40,318 Secondary battery, M. Waddell, et al. September 12th.
- 40,319 Secondary battery, J. B. Entz and W. A. Phillips, September 12th.
- 40,325 Fluids for primary batteries, T. Coad, September 13th. SCIENTIFIC PROCESSES.
- 40,322 Extracting zein, T. B. Osborne, September 13th.

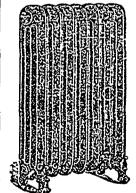


## The Standard Drain Pipe Co., St. Johns, P.Q.

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. Trottar, Pres.

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means of the drum up to the anchorage.

under favorable circumstances to move a boom containing 60,000

In crossing portages from one body of water to another, it is not

The boat has power

to keep the shoeing from

contact with the

ground. At-

tached to the bow of the boat,

near the bot-toin, is a heavy

chain to which

is attached a pulley block,

and another similar block is

attached to a

convenient tree.

The cable is

then rove through these, one end being

attached to the bow chain and

the other on the

drum. By the

winding of the

drum the boat

is drawn along

over the land at

the rate of a

mile or more a day. This Can-

adian alligator

### A CANADIAN ALLIGATOR.

THE accompanying illustration is of a steam warping tug invented by Messrs. West & Peachey, Simcoe, Ont., and patented in Canada and the United States. It is described as being a steam boat and necessary to make a level road for the boat to move over. All that stoam winch combined. The engine can be thrown in gear to drive is required is to place logs and green skids across under the runners

the paddle-wheels, or to drive the cable drum, which has capacity to hold a mile of wire cable. The hull is scow shape, built very strong. On the bottom of the boat are two runners shod with iron, and part of the bottom, and the bow is protected by iron boiler plate. The boiler is pivoted in ita longitudin a l centre, and has a screw at the forward ond by which it may bekept level when the boat is

ALLIGATOR STEAM WARPING TUG.

ѷ

going up or down hill in crossing a portage. In warping, the bow | go through swamps and woods, and up small streams. After warpof the boat may be run up to the boom of logs and the end of the ing down a boom of logs it will return with the empty boom, doing cable made fast to it. The boat is then run backwards until the the work cheaply with great saving in time and labor. It may also cable is payed out, when anchorage is made to a tree on the bank be made to take supplies to lumber camps, to tow scows, and to or otherwise, when the cable is wound in, the raft moving but the boat remaining still. Or an end of the cable may be anchored and the boat backed up to the boom, paying out the cable and having connected with the boom, both boat and boom may be hauled by West & Peachey.

can be made to climb hills and

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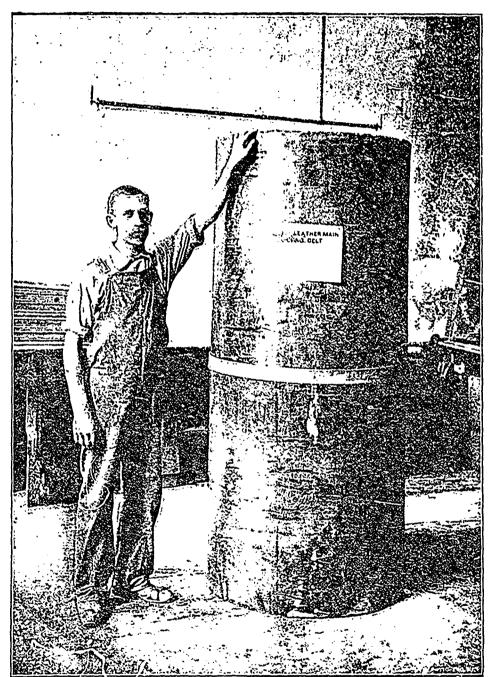
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November 4, 1892.

## Captains of Industry.

This department of the "Canadian Manufacturer" is considered of special value to our readers branse of the information contained there 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. S. W. Surri, of Lakelet, Ont., will build a saw mill at Clit

MR JOSEPH WEILLER is establishing a car iago factory at Walkerton, Ont.

Mn. Lewis Yaeck is starting works at Walkerton, Ont., for the manufacture of pressed bricks, etc.

by fire, Nov. 1st; loss about \$3,000.

Messus. John Benner & Son, woolen manufacturers, Owen Sound, Ont., will introduce two or three more looms.

MR. ARCHIBALD CAMPBELL, of Chatham, Ont., will build a flour mill and elevator at Toronto Junction, to cost \$60,000.

Messas, Bowen & Gordon's carriage works at Petrolea, Out., were destroyed by fire, October 27th; loss about \$2,500.

THE steam boiler in Mr. II. McQuarrie's saw and shingle mill at Baysville, Ont., exploded and wrecked the mill on Nov. 1st.

THE saw and planing mill of Messrs. Woodcock & Ramsden, at Mount Albert, Ont., was destroyed by fire October 17th; loss about

THE Canadian Pacific Railway Company will build a grain elevator at St. John, N. B., with 300,000 bushels capacity, to cost

THE Dominion Rolled Plate Company is being incorporated at

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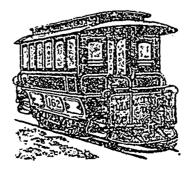
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Montreal with a capital stock of \$75,000 to manufacture rolled plate,

MR. JACOB MESSINGER, woolen manufacturer, Hanover, Ont., is making some alterations and repairs in his mill, and introducing

THE Vernon Company of Ontario is being incorporated at Toronto with a capital stock of \$300,000 to manufacture machinery, mechanical devices, etc.

THE Montreal Match Company, with factory and head office at Louisovillo, Quo, has been incorporated with a capital stock of \$10,000 to manufacture matches.

THE Montreal Silk Mills Company is being incorporated at Montreal with a capital stock of \$75,000 to manufacture underwear and all kinds of silk and woolen goods.

MR. J. FESWICK, Preston, Ont., will hereafter drive his electric light plant with water power instead of steam. Mossrs. Barber & Bates, Meaford, Ont., are making the necessary turbine and other machinery.

THE Household Machine Manufacturing Company is being incorporated at Hamilton, Ont., with a capital stock of \$500,000 to manufacture machines and implements for household, farm and domestic use, etc.

THE Thompson-Morris Hand Power Propeller Company is being meorporated at Hamilton, Ont., with a capital stock of \$10,000, to manufacture beats to be actuated by the Thompson-Morris hand power propeller.

THE James Robertson Company is being incorporated at Montreal with a capital stock of \$750,000 to manufacture saws, barb wire, lead pipe, lead shot, lead traps, white lead, putty, paints, saw mill supplies, etc.

THE Canada Paint Company, Montreal, are establishing a branch paint factory at Vancouver, B.C. The machinery, manufactured in England, is now en route, and it is expected to have the works in operation in December.

THE Lyman Brothers & Company, Toronto, has been incorporated at Toronto with a capital stock of \$150,000 to take er the busier the busi- given. ness of the firm of Messrs. Lyman Bros. & Co., manufacturers of drugs, medicines, chemicals, etc.

THE Brush Electric Light Company are assuming the plant of the Trenton, Ont., Electric Light Company, and will hereafter drive it with water power instead of steam. Messrs. Barber and Bates, Meaford, Ont., are supplying turbines, etc.

MR. JOHN LEMON has a in engaged in the manufacture of pottery at Owen Sound, Ont. is new factory is 105x70 feet, and contains two stoves. He will employ about 15 hands, and will manufacture full lines of white earthenware.

THE Hackney Hammer Company of Cleveland, Ohio, inform us that they have made arrangements with Messrs. Stevens, Hamilton & Co., of Galt, Ont., to manufacture their celebrated Hackney hammer with which to supply their Canadian trade. This is another victory for the N.P.

THE Yarmouth, N. S., Electric Street Railway has been put in successful operation. The dynamics and other electric appliances were supplied from the Peterborough, Ont., works of the Canadian General Electric Company, and the cars by Messrs. Patterson & Corbin, St. Catharines, Ont.

THE Blythe Woolen Mills at Peterborough, Ont., have been put in operation under the management of Mr. James Kendry. A full force is being put on, and the works will be kept in operation day and night, making flannels. The mills are to be considerably enlarged next spring, and new machinery added.

THE Standard Drain Pipe Company of St. Johns, Que., have called a general meeting for Nov. 18 inst., to authorize an increase of the capital stock of the company from \$150,000 to \$500,000. We learn that the business of this company is in a most satisfactory condition, and is increasing so rapidly as to require a large increase of capital to properly conduct it.

THE Owen Sound Portland Cement Company, of Owen Sound, Ont., with works at Shallow Lake, near that town, have sent us a circular having reference to the Sampson brand of cement manufactured by them. A table is given furnished by the School of Practical Science, Toronto, giving the tensile strength of the article; and reference is made to a large number of consumers who have used it, a number of testimonials regarding its value being also

THE Dodge Wood Split Pulley Co., Toronto, advise us that they have gone extensively into the rope driving branch of their business

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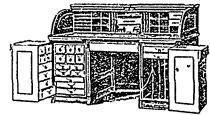
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and are making a specialty of supplying large mills and manufacturing establishments with rope transmission machinery -- using special iron grooved pulleys in connection with their patent system of slack take-up device. Many of the large saw mills, pulp mills, cotton mills, etc., are now adopting this system of drive with very gratifying results; and the Dodge Company prodict rapid strides in this direction in the near future. They have made extensive shipments of their popular wood split belt pulleys this year to all the principal centres of Europe, and anticipate the early necessity of further increasing their capacity to meet the demands of their export trade. They publish in our pages a list of their Canadian agencies, and caution the public against unitations.

Messes, John Bertham & Sons, Dundas, Ont., shipped last week from their works a large set of paper pulp dryers to the Maritime Sulphite Fibre Company, of Chatham, II. B. The machine consisted of a heavy frame carrying six lower and six upper dryers continuously geared. The dryers, which are thirty-six inches diameter and eighty-six inches long, were turned and ground to a gauge in their bearings, and, being cast on end in dry sand moulds from a fine quality iron, presented a fine appearance. The whole appearance was tested running with a steam pressure of The whole apparatus was tested running with a steam pressure of fifty pounds per square inch. Hitherto machinery of this class has been imported into Canada, but Messrs. Bertram are prepared to manufacture all that may be required. This week this firm shipped to the Hamilton Bridge Company, Hamilton, two large multiple drilling machines to be used in boring rivet holes in the boilers now under construction for the large new steamer being built there; also two radial drilling and countersinking machines for ship plates. The latter drilling machines have a radius of fifteen feet, enabling the operator to reach any point in this area.

business most wonderfully, advancing step by step until now they occupy a safe first place among the great hardware houses of the continent, and to-day no house in Canada holds a more prominent and reliable position. In addition to their facilities for manufacturing, which are very large, they are also wholesale importers of hardware and similar goods, and their connections with large concerns abroad place them in position to derive all the benefit possible from such arrangements.

They are now manufacturing on a large scale plate glass mirrors, church windows, bevelled and sand cut work in plate glass of all designs and shapes. The various manufacturing and wholesale

departments of the concern are as follows:

1. Shelf hardware, locks, hinges and carpenters' tools.

2. Paints, oils, varnishes, turpentine, etc. Guns, cutlery and plated ware.

4. Roofing materials-pitch, tar, building paper and tarred paper.
5. Nails, barb wire and coil chain.

Binder twine, cordage, lath yarn, etc.

Cross cut saws, axes, handles, etc.

8. Refined oil, benzine, water white and lubricating oil, packing and cotton waste.

9. Sheet glass, plate glass, fancy windows and a rors.
10. Agricultural tools, road scrapers, wheelbar, 3.

These departments occupy twenty-one flats, with a total area of 70,220 square feet of floor room not including oil vaults, engine rooms and powder magazines. Goods are shipped direct from warehouses to cars, thus avoiding breakage in handling and expense in hauling.

As an encouragement for the establishment of so large a concern

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Perhaps the largest and one of the most important hardward manufacturing concerns in Canada is the Hobbs Manufacturing Company of London, Ont. Their main factory building faces 300 feet along the track of the Grand Trunk Railway, giving them most excellent facilities for receiving supplies and shipping goods.

This company during the past five years have developed their

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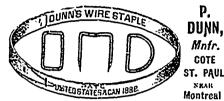
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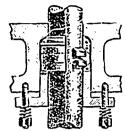
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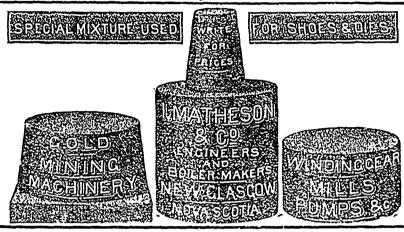
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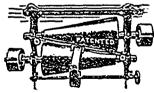
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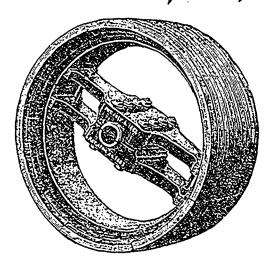
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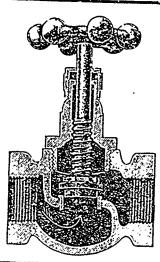
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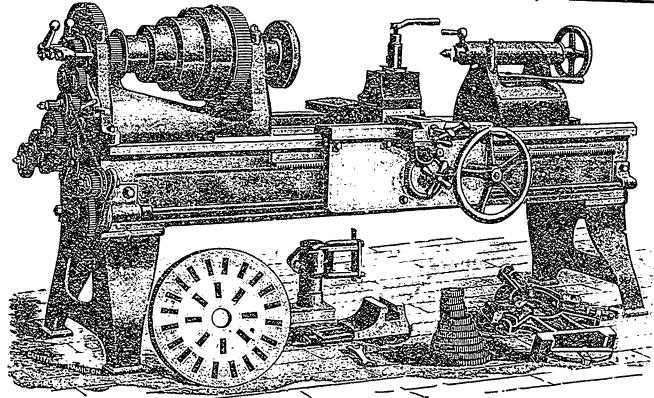
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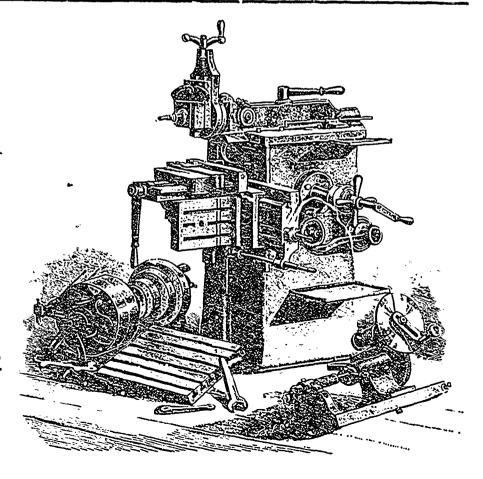
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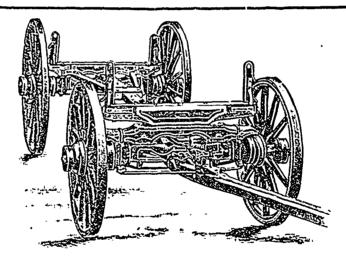
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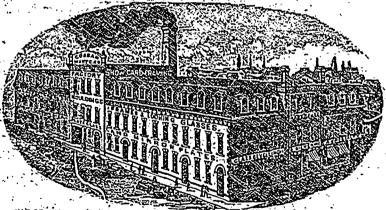
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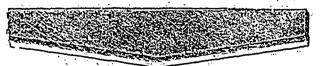
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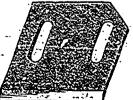
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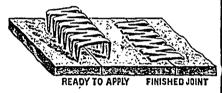
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