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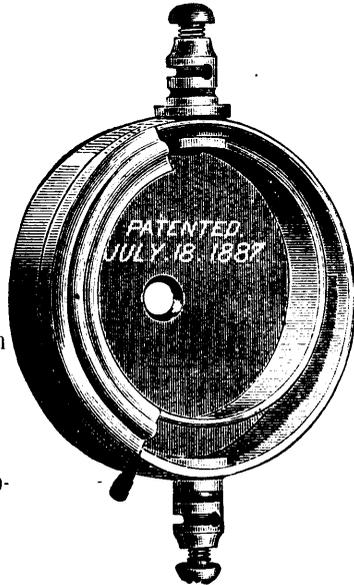
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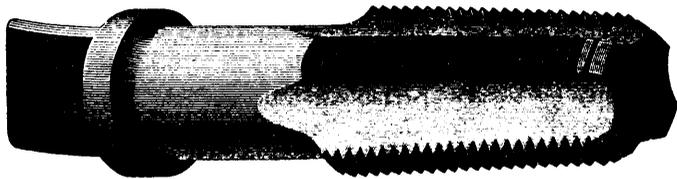
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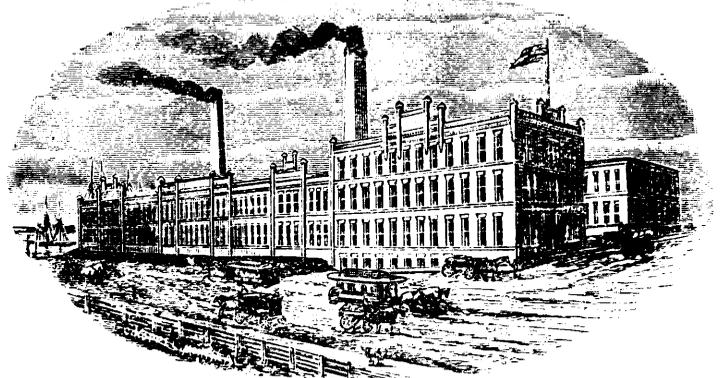
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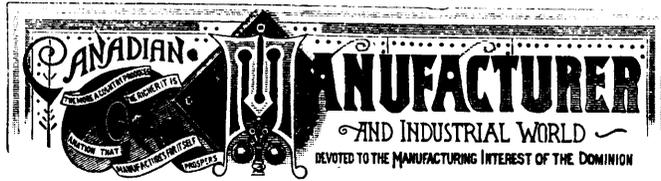
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GOOD FAITH MUST BE OBSERVED.

THE recent vote in the Dominion Parliament on the motion to censure the Government regarding the Jesuits' Estates Act of the Quebec Legislature, by which the Government was sustained by an overwhelming majority, involved the cardinal doctrines and fundamental principles of free government; and it is not likely that the Government can ever be defeated upon such an issue. There may be great differences of opinion regarding the propriety of the Quebec Legislature voting a grant to an ecclesiastical body, but the act is similar to that of a man who disposes of his property in a manner that many of his friends may consider unwise, while they readily concede the donor's right of disposition.

Under our form of government the Provinces have the right to act in certain matters as seems to them best; and any Province, acting in any way under that right, should not be disturbed in the exercise of it, either by any other Province or by the Dominion Government. This, as our American friends would say, is "States' Rights," pure and simple; and the principle should be cherished and kept alive under all changes and mutations to which the country might be subjected. Equal and exact justice should be administered to all, regardless of religious or political persuasion. Under such administration the freest commerce and the most honest friendships will exist between the Provinces and the people of them; and the respective Governments of the Provinces should be sustained by the whole people, and absolute unanimity guaranteed them in the administration of their domestic concerns. This, and this alone, is the sheet-anchor which is to hold Confederation to its moorings, and to guarantee the peaceful perpetuation of the Dominion.

The people of Quebec, by their representatives in the Legislature, passed an Act with which they are satisfied. They voted away their own money in a manner satisfactory to themselves; and in doing so they encroached upon the rights and privileges of neither of the other Provinces of the Dominion nor of any individuals thereof; and, granting unto them only and just what we claim for ourselves, the rest of the country is bound to acquiesce in the action Quebec has taken. This action involves a vital principle, from which there can be no appeal but to force and despotism.

In refusing to disallow the Jesuits' Bill, the Dominion Parliament clings close to the lines along which Confederation was formed. It is in accordance with this principle that representative governments are created and maintained, and should this principle be ignored, nothing would be left but anarchy, strife and chaos.

ADVERSE DISCRIMINATION.

A RIDICULOUS anomaly of the Canadian tariff is that feature wherein a duty of only 50 cents per barrel is imposed upon American flour, and 67½ cents upon the quantity of American wheat necessary to manufacture a barrel of flour. This is "protection" with a back-action movement—protection in favor of the American miller and against the Canadian miller. No wonder Canadian millers protest against the situation and appeal for a modification of it—it would be strange if they did not—but it is still more strange to find that a deaf ear is turned to them; and to learn that they are dismissed with the coldly comforting assurance that the Government do not propose to make any tariff changes at this session of Parliament. It is strangest of all that the Government, who pride themselves upon the glorious National Policy of Protection, upon which they acceded to power, should hesitate for even one brief day to rectify this glaring inconsistency in the tariff after it was brought to their attention.

Canadian millers ask for and are entitled to protection against the existing adverse discrimination by which it is cheaper to manufacture flour in the United States and import it into Canada, than to import the wheat from which the flour is made, and convert it into flour in Canadian mills. The millers have a right to demand that they shall not be thus discriminated against. This is a plain and simple proposition.

If the National Policy is really what it purports to be—if it is intended to protect Canadian manufacturing industries—Canadian millers are entitled to share in the protection; and all Canadian manufacturers, without regard to the particular lines of industry in which they may be engaged, should unite in demanding that justice be done to the Canadian miller. A protest from them would not be likely to go unheeded.

THE "WALKING DELEGATE."

It has been discovered that the value of the services of a "walking delegate" of a Knights of Labor Association is \$27.50 per week, and that his services consist in conspiring to blow up—and blowing up with dynamite—the breweries of such brewers as do not desire to give employment to Knights of Labor workmen. At least such seems to be the fact, judg-

ing from an occurrence in New York city very recently. It will be remembered that in February last the Stephenson brewery in that city was partially destroyed by an explosion of dynamite; and now it has been discovered that that dastardly act was done by the advice and connivance of a man named A. Fitzgerald, a walking delegate of the Ale and Porter Brewery Employés' Protective Association; John O'Connell, president of Local Assembly No. 8,390, K. of L.; and P. F. Close and Thomas Reardon, members of the executive committee of the Assembly. According to a confession made a few days ago by this man Fitzgerald, this gang of conspirators tried to invent some scheme whereby brewer Stephenson could be forced to re-employ the union workmen whom he had previously discharged. Their first plan was to send union workmen to the brewery, seeking employment; and in the event of their being employed, they were to destroy the brew to which they might have access, by putting grease in the vats. The conspirators failed in getting their men thus introduced into the brewery; and a large sum of money was voted for the purpose of carrying on the conspiracy to injure the Stephenson property; and in their fury and desperation they determined to destroy the brewery with dynamite. Fitzgerald, the walking delegate, who has testified that his salary, as such, was \$27.50 per week, in the fear of losing his position and salary, procured the explosion alluded to, and now that worthy exponent of trade unionism and Knights of Laborism, and his worthy brother conspirators, are behind the prison bars, and he, O'Connell, Reardon and Close, have been indicted for felony, and are to be tried accordingly.

We have no information, however, that any of the Grand Lecturers of the Knights of Labor, nor any of the highly virtuous labor journals, are fatiguing themselves denouncing the outrage or purging this anarchistic element from the order.

PROTECTION THE SOURCE OF WEALTH.

THE Eastern Townships of Quebec lie contiguous to the State of Vermont, and as far as soil, climate, and natural advantages are concerned, the two sections are identical. In the Quebec section the effects of the National Policy of Protection are happily illustrated in the large number of large and small manufacturing establishments, which give remunerative employment to thousands of operatives and employés, who, in turn, are consumers of the products of the agriculturists there; the prosperity of the two classes being dependent one upon the other to a large extent. In Vermont the National Policy of Protection of the United States has prevailed for more than a quarter of a century, and the people are entirely wedded to it. Indeed Vermont gave to the American people that wise and patriotic man, Justin S. Morrill, who was the father of the system which lifted that country out of the financial dilemma into which it had been plunged by the war of the rebellion, and made it the great and influential nation it now is. Efforts are constantly being made to create the impression that our National Policy has a depressing effect upon the Eastern Townships of Quebec, and upon the whole country; and American free traders say the same thing regarding Vermont, reference in both cases being made to the comparatively poor and impoverished conditions of the sections, and the forlorn plight of

the agricultural classes, as compared with the richer agricultural regions of Manitoba and Dakota.

But the condition of Vermont farmers compares most favorably not only with the farmers of Dakota, but of any of the other agricultural States of the American Union; and no doubt the Eastern Townships of Quebec compare quite as favorably with Manitoba. Recently, in his place in the United States Senate, Mr. Morrill, denying the assertion of the free-traders that a protective tariff is a tax and of no benefit to farmers, discussing the condition of the farmers of his own State, stated that Vermont is largely an agricultural State, and that in proportion to the number engaged in agriculture, actually eclipses all the other States and Territories in the total value per capita of all farm productions, and produces more horses, cows, oxen, sheep, hogs, wheat, corn, oats, barley, buckwheat, hay and potatoes, than any of the other New England States, except Maine, which is much larger in area and population. Vermont leads thirty States and Territories in the value of real and personal property averaged to each inhabitant. There are few, if any, millionaires there, but the people generally have comfortable homes, and are fairly prosperous. They fully understand that the encouragement of manufactures is an unfailing incidental protection to the pursuit of agriculture. Every new manufacturing enterprise creates consumers, and a wider and more profitable market for the farmer, and increases the value of his real estate.

Such circumstances as tend so largely to the wealth of Vermont, will also tend to the wealth of Canada. Protection has been and is the source of the wealth of Vermont, and Canada will not abandon that National Policy which is so rapidly making her wealthy.

THE GROWTH OF PROTECTION.

THE principles of a Protective Tariff are steadily gaining ground among the laboring classes of foreign countries. Nor is this gain confined to the wage earners. Manufacturers and agriculturists are fast changing their views and calling for defensive legislation. The restlessness among the workingmen of England particularly is growing daily. Of great significance is the recent action of the Chamber of Commerce of Manchester, heretofore the hot-bed of Free-Trade and Cobdenism, in unanimously recommending the imposition of duties on foreign products, in cases where these products compete with native industry, equal to the fiscal burden borne by native producers. The Fair Trade League has become a most influential organization. It is daily adding converts to its ranks. The Workman's Association for the Defence of British Industries is a most potent ally in its endeavors to lift the burdens from the down-trodden laborers of the United Kingdom.

In France the Protective policy not only has a strong hold, especially among the agriculturists, but is steadily gaining in strength. There is more likelihood of greater duties being imposed than that any will be reduced or taken off.

Turning to Germany, the low wages of whose workingmen are held up continually as an argument against the power of Protection to secure and maintain high wages, we see a most emphatic refutation of the charge just quoted. German tariffs have aimed to be protective since 1830. The Customs Verein

is really the sire to existing German unity and empire. But there was not until recently any skillful attempt to make the rate of duty proportionate to the quantity of labor involved in the product, as in the United States. In 1880 this question was agitated, and on May 14, Bismarck, in a speech before the German Reichstag, said: "Because it is my deliberate judgment that the prosperity of America is mainly due to its system of Protective laws. I urge that Germany has now reached that point where it is necessary to imitate the tariff of the United States."

Germany adopted his views and advanced its tariff. What is the result? The increase in wages has been almost continuous since the increase of its protective features. Manufactures have sprung up on every hand, and Germany has passed from an importing to an exporting nation. Of course, one effect being to greatly increase the number of employed, the per capita rate of wages does not show the same increase as in the United States, though in comparison with England it is most marked. Moreover, Germany is now reaping the benefit of a home market, and as the German workingman has economical tastes in dress and living, and as he can buy cheaper than his English brother, he is doubly benefited by the existing Protective legislation. Recent Government statistics show that the Iron and Steel Association of Germany represents 350 firms, with a capital of \$262,000,000 and employs 235,000 men. Ten years ago they were represented by 320 firms, employing but 151,000 persons, whose monthly wages have increased 52 per cent.; and this rule of increase will apply to all Germany.

Going north to Sweden, we again see Protection in the ascendancy and with the usual result. Until ten years ago Sweden prospered under a Protective Tariff. The *doctrinaires* succeeded in having their theories adopted. For a decade both agriculture and manufacturing suffered, but in a recent election the chief issue was the Tariff, and the result was an overwhelming victory for Protection. The editor of the *New York Nord Stjernen* recently said: "For the first time in a number of years Sweden seems to have awakened from the absurdity of her position, and has come to think that she should become a manufacturer for herself, and not a mere purchaser and consumer of goods from others. I believe Sweden is entering now on an era of prosperity. Protection has built the country up, and while Sweden has neither the extent nor the variety of the United States, yet the stimulus which Protection must give to the grain growing, milling and manufacturing industries cannot but be fraught with good results."

Even Free-Trade New South Wales, which has sneered at her Protectionist rival colony, Victoria, for several years past, at a recent test vote could show but one majority in her Parliament for a continuance of the present revenue policy.

In other countries the situation is similar, and the practical business men and the laboring classes are everywhere combating the theorists. The principles of a Protective Tariff and the advantages of a home market are more firmly demanded than at any previous time in the world's history. Regarding this widespread and rapidly growing sentiment the *American Economist* says that "the eyes of the world are turned to the United States, which has borne and suppressed the most gigantic war of all history, has paid off nearly all the debt incurred by that war, has given employment to its own millions

of workmen, and to a new half million each year of the unemployed of foreign nations. In spite of all, it has become wealthier and more prosperous, standing to-day at the head of all nations. Its citizens, be they wage givers or wage earners, possess more enlightenment enjoy more comforts and luxuries, eat better food, wear better clothes and withal save more money than the people of any other country. No wonder, then, we repeat, that other nations are inclined to emulate such a glorious example."

COMPARISONS ARE ODIIOUS.

OUR esteemed contemporary, the *Toronto Telegram*, speaking of the fact that recently at Samoa, of the seven war ships then there, that but one of them—a British vessel—escaped from the disastrous effects of the tornado that destroyed so many lives and so much property, says that the incident is an illustration of the superiority of English seamanship. "The supremacy of the sea of men born under the British flag is a point with which the creators of a new navy for the United States will have to reckon. No part of the Union is the nursery of seamen. The business of going down to the sea in ships does not pay well enough to attract the flower of American youth. If our Maritime Provinces were part of the Union the Great Republic would have a source from which it could draw sailors to fight its battles against every power but the British. But annexation is not to be, and without the strength which it could give, the United States can cut no figure on the sea." It is passing strange that a sensible writer could be guilty of such arrant nonsense and twaddle. Owing to circumstances regarding which we have no explicit information, when the furious tornado swept across the port of Apia one vessel only managed to escape from the insecure and treacherous harbor, while six other similar vessels were destroyed. The fortunate vessel happened to be a British ship, while three American and three German ships were wrecked. But many storms have occurred in which British ships were wrecked, while both American and German ships escaped unharmed; and it is silly to urge that in the Samoan incident nothing but the superior seamanship of the British saved their vessel, while the woful lack of seamanship caused the loss of three American and three German ships. If such superior seamanship is always the characteristic of British seamen, will the *Telegram* please explain how it is that recently in the English Channel, in fair weather and while on dress parade, as it were, two British ironclads rammed each other to the bottom; and why is it that the great destruction that within the past few years has attended the experimental evolutions of British war vessels was caused by British war vessels themselves, and not by an enemy? Whenever the United States has had occasion to use war vessels, skillful sailors have never been lacking to man them; and the "pay" has always been larger than for similar service in British ships. If the Canadian Maritime Provinces were part of the American Union it would not be speaking well of the people there to intimate that they would not fight freely and fiercely against any foe to the flag to which they owed allegiance; and it is ridiculous to intimate that the fishermen living to the west and south of Saint John are not quite as skillful as those living to the north and east of that place. The argument of the *Telegram* is very like that which South-

erners used when secession was ripening into rebellion. They thought that one high-toned Southern gentleman was the physical equal of a score or more of Yankees, but they subsequently changed their opinion regarding the matter. We suggest to the *Telegram* that nothing but disaster is ever gained by depreciating the skill, ability or valor of an adversary. What good result from such comparisons any way?

EDITORIAL NOTES.

THE boycott is extending to the agricultural population. The market gardeners supplying the Cincinnati market have formed a union and resolved not to sell a radish to any shipper who buys from non-union gardeners. This is another of those cases in which the wisdom of the experiment will be determined by the outcome.

A LARGE amount of valuable information concerning the manufacturing enterprises of Canada can be obtained by the regular perusal of this journal. It is regular and unailing in its visits twice each month, and the cost of it—\$2 a year—is inconsiderable when compared with the information to be derived from it. Subscribe for the CANADIAN MANUFACTURER.

THE Secretary of State of Illinois has issued a license of incorporation to a company with the following extraordinary name: United States Vogel Kazophone & Electrical Mico-phone Trumpet Aucastic Electromotor Power Musical Car Distance Loud Speaking Transfer Instrument Company. Chicago, capital, \$65,000,000; to manufacture instruments, rent rights and privileges, etc.

JUDGE PATTERSON, of Pennsylvania, recently rendered a decision at Lancaster, in the case of Cigar Makers' Union No. 126 of Ephrata vs. Brendel, dissolving a preliminary injunction restraining the defendant, a cigar manufacturer of the same place, from using labels of the same kind as those used by the union. Judge Patterson held that the mere adoption of a mark and public declarations that such mark will be used to label goods in the future, do not create a trade mark.

"PROF." FOSTER is responsible for the statement that "raw material comes into the country untaxed." We should not like to say that "Prof" Foster li— well, we do not care to believe that an honorable Cabinet Minister would be guilty of telling a fal—, in other words, what is the duty on pig iron and steel?

This specimen of elegant and refined editorial writing was born in the *London Advertiser*. It demonstrates two facts, one of which is that the writer exists in profound ignorance of what "raw material" really is.

THE St. John, N B., Board of Trade have sent us a copy of a paper recently read at a meeting of that Board, being an argument in favor of St John being adopted as the winter port for the trans-Atlantic steamers which may be subsidized by the Canadian Government; also a copy of a pamphlet on the navigation of the Bay of Fundy, in which it is shown that there are no serious obstacles to be encountered by steamers navigating those waters and entering the port of St. John at any season of the year.

A CORRESPONDENT, who is an extensive manufacturer of files, calls attention to the fact that many Yankee manufacturers of this line of goods come into Canada to dispose of them; and when they fail to effect satisfactory sales of them as being of first quality, the tariff bringing the cost higher than those of Canadian make, they offer them as second quality, at such prices as to very seriously interfere with the sale of Canadian made files. It is pointed out that a remedy for this sharp practice would be to make the duty specific instead of *ad valorem*.

WHAT wonderful progress has this country made in two generations. On March 4 Gen. Benjamin Harrison was formally inaugurated President of the United States; forty eight years ago, William Tecumseh Harrison, his grandfather, took the oath for the same office.—*Stores and Hardware*, St. Louis.

What wonderful knowledge is here displayed! The grandfather of President Harrison was named William Henry Harrison, as all the primary school histories teach; and Tecumseh was the name of the Indian chief who was defeated by the grandfather at the battle of Tippecanoe.

THE right of a non-union man to contract without molestation for the sale or purchase of his labor, has been recognized by the Missouri Legislature, which has passed a bill providing for the punishment of "any person or persons who shall intimidate by threat or violence of any kind whatever," any laborer with intent to prevent him from gaining or holding employment. This right has been so generally encroached upon by the unions that it has been deemed necessary to crystallize the common law as to conspiracy in this respect into a definite statute. In their zeal to help labor, the unions have been forgetting the inalienable rights of labor.

AN electrical attachment has been devised which may be applied to an ordinary clock for awakening a sleeper at any given time, the contrivance thus taking the place of the ordinary alarm clock, that needs to be specially provided for the purpose, and which needs to be wound up the night before it is to give forth its sound. This electrical clock is so constructed that it can be set to any given five minutes of each hour, the bell beginning to ring at that time, and continuing to ring until the switch is turned to cut off the electric current. There is, of course, no call for winding an alarm where this device is employed, it being only necessary on going to bed to turn the switch, thus allowing the circuit to be completed at the time the bell is to ring. In this arrangement the clock and battery are made in a compact form, the cell of the battery being inclosed in the clock case.

PRESIDENT POTTER, of the North Chicago Rolling Mill Company, states that one of the purposes which he expects to see accomplished by the consolidation of Chicago steel companies is the manufacture of tin plate. The erection of a special plant devoted to that object is seriously contemplated. The field he considers an inviting one to enter, because tin plate is not now manufactured in the United States, while the consumption there is enormous, furnishing a large business to the tin plate works of Wales and England. Every other branch of the iron and steel industry has been thoroughly established in the United States, and the productive capacity is in excess of the

present demand in almost every line. Mr. Potter believes that the high quality of Lake Superior ores would produce a steel eminently suitable for the production of sheets to be coated with tin.

SINCE 1878 the importations of foreign made woolen goods into Canada have not materially increased, in spite of the larger population and enhanced purchasing power of the country. Ten years ago the import reached \$7,975,000 from Great Britain, and \$403,687 from the United States, a total of \$8,378,687, while last year we bought from Great Britain to the amount of \$9,141,000, and from the United States \$142,370, or a total of \$9,283,370. The increase in the ten years slightly exceeds 10 per cent., and it is noteworthy that while our purchases from England increased, those from the United States fell off. The growth of the home industry is shown in the increase in the importation of raw wool from 6,230,000 lbs. to 8,399,000 during the ten years, and also in the decrease in the importation of blankets from \$201,292 in 1878 to \$64,610 in 1888, and of ready made clothing from \$887,885 to \$610,317 in the same period.

A FUNNY illustration of the working of protective tariffs is afforded by the trade between the United States and the Argentine Republic. The Argentine Republic wants kerosene, and the United States have plenty of it. The American cloth mills want wool, and the Argentine Republic has wool spoiling on its hands. But the United States Government shuts out the Argentine wool with a high duty, and the Government of the Argentine Republic claps a duty on American kerosene. The latter duty is said to be "retaliatory," and if so it seems to be an instance of the practice of "cutting off your nose to spite your face."—*Globe*.

This "funny illustration" might have been further illustrated. Canada has kerosene to sell, and Canada imposes no duty upon wool, which Canadian cloth mills want. The "retaliatory" feature does not apply as regards Canada, and still the trade between this country and the Argentine Republic is not overwhelmingly large.

THE property exempt from taxation in Montreal is valued at \$19,141,920. If that property were taxed Montreal would not need to go to the Government begging for money to fix up her harbor and ditch. As it now stands, the property is untaxed, Montreal begs money from the Government, and the biggest share of it comes out of the pockets of the people of Ontario.—*Hamilton Spectator*.

This journal has always objected to exemption from taxation of any "property" except that in use by the Government for Government purposes; of public lands open for *bona fide* settlers, and public school property. But the harbor and river improvements alluded to by the *Spectator* are for the benefit of the whole Dominion; and if Ontario supplies a large portion of what is expended in that direction, a *quid pro quo* is rendered in the increased traffic in which we are all interested. Montreal harbor and the Lake St. Peter channel are as much a part of the Canadian system of inter-provincial waterways as is the Welland Canal.

SOMETHING of a revolution occurred in New South Wales at the last election. In contrast to the colony of Victoria, the Free Traders of England and America have been accustomed

to point to New South Wales as evidence that a young country can prosper under Free Trade. But the people of that colony seem to be growing tired of the prosperity Free Trade has brought them, and to contemplate their multitudes of idle and impoverished workmen with growing dismay. For two decades past there has been a steady growth of Protectionist feeling, and at the last election so many Protectionists were chosen to the Colonial Parliament that they fall short but one of being a majority. This is in spite of the resistance of the owners of cattle ranches and their army of cowboys, who think they have no interest but in Free Trade. In ten years more every colony of the British Empire will have fallen into line with Victoria and Canada in following the example of the United States.—*Philadelphia American*.

THE *Toronto Globe*, sneering at some exhibition of what it calls "snobbery" on the part of some New Yorkers, says:

"It occurs to us just here that a humble and unobtrusive demeanor is well suited to all persons who encroach upon the public domain in any way whatsoever; in which category we include all subsidised newspapers, and all highly protected manufacturers. Some of these latter have become very high and mighty personages, but it behooves them to remember that they are wealthy only by the sufferance of the public, and that the public can unmake them as it has made them."

Canadian manufacturers are here given to understand that although they may have acquired their wealth by legitimate business enterprises, they hold that wealth only by sufferance. The difference between the *Globe* and the Chicago anarchists, some of whom were hanged, while others are serving terms in the penitentiary, is, that the anarchists, who preached such stuff as the *Globe* here preaches, also attempted to put their preaching into practice, while the more cowardly *Globe* is only flatulent with ill-smelling gas.

THE Commissioner of Crown Lands at Adelaide, South Australia, has offered a bonus of £100 for the invention of a labor saving implement capable of gathering up stones and stumps lying upon agricultural and other lands. The machine must be constructed to be drawn by horses, the draught not to exceed the capacity of three ordinary animals. It must be capable of gathering from the surface of farm land all loose stones or stumps from 1 to 56 lbs. in weight, a width of not less than four and a half feet to be cleaned at one operation. It must be strongly made at a cost not exceeding (to the farmer) £35, and must either be attachable to a tip dray, or comprise in itself a tip receptacle to hold at least 20 cwt. The implements devised will be subjected to a trial, and practical men will be appointed to act as judges. The bonus will be awarded to the most useful invention, provided it answers the purpose required, lightness of draught, combined with strength, durability, and cost to be taken into account.

Str. John, N. B., is preparing to hold a carnival the coming summer as a celebration of the consolidation of that city and its near neighbor, the town of Portland, into one municipality. Arrangements have been made for holding an Electric Exhibition in connection with this carnival, or rather in anticipation of it, which will be given on July first and continue ten days or more, the displays being confined exclusively to electric appliances. The buildings to be used for the purpose are

admirably adapted for the purpose, and space and power will be furnished free of charge to exhibitors. It is expected that there will be elaborate displays of electric appliances, not only by Canadian manufacturers, but also from the United States, Great Britain, France and Germany. Special arrangements have been made to entertain representatives of newspapers and press associations, and special invitations have been sent to the principal illustrated papers of the countries named, which will give considerable space to illustrated descriptions of the event.

A FEW days ago Mr. Frederic Nicholls, Honorary Secretary of the Canadian Manufacturers' Association, headed a delegation of visitors to Mayor Clarke, of Toronto, for the purpose of laying before him the fact that certain of the employes of the city were in the habit of discriminating unjustly against Canadian made drain tiles and sewer pipe, in the interest of American and Scotch goods importers. The delegation was composed of a number of influential members of the Manufacturers' Association, several of whom spoke very plainly and earnestly about the matter in question. These representatives were listened to very attentively by Mayor Clarke, who promised that, quality and price being equal, no adverse discrimination should be allowed. The incident, we learn, has had the desired effect. The Manufacturers' Association do not propose to remain quiet while interested influences are at work tending to thrust discredit upon Canadian manufactures that are quite as good in all respects as foreign made goods, and sold at as cheap prices.

It has been discovered that the control of the barbed-wire patents is not vested in any American firm or corporation, because the device of barbed wire was patented in France, to Louis Janin, April 19, 1865. The law of the United States, as declared by the Supreme Court, is that "a foreign patent for the same thing or a description of the thing in a foreign publication, is as effectual to void a patent as if the patentee had seen the prior invention, notice to him not being important." If this decision holds, and there is no appeal from it, the claims of certain persons for royalty under the Glidden and other barbed-wire patents are void, and all the money paid to them by barbed-wire manufacturers who had no interest in the Glidden patent is believed to be subject to recovery. The Washburn & Moen Mfg. Co., Worcester, Mass., and E. L. Ellwood, Illinois, have enjoyed a revenue amounting to millions of dollars from other barbed-wire manufacturers by reason of their possession of the Glidden patent. All those sums of money may now be recovered, if the alleged fact that the Janin patent in 1865 can be established.

A USEFUL piece of apparatus has come into use in Germany in the shape of a travelling electric light. The affair is very simple: A dynamo, with an engine to drive it, is mounted on a wagon, something like that of a steam fire engine, containing boiler, fuel box, and water tank, complete for a night's service. A dozen or so of jointed poles, a corresponding number of arc lamps and a supply of wire complete the equipment, and the whole is readily drawn by a pair of horses to the place where it may be needed. On its arrival, the poles are set up where required, and stayed

with wires fastened to stakes driven into the ground; the lamps are hung to them and properly connected, and the engine is set in motion. The lamps immediately kindle, giving a light nearly as bright as day over the whole neighbourhood as long as it is needed. Any number of lamps, from one to fifty, may be operated from a machine of suitable power; and as they may be suspended anywhere, and are not affected by rain or wind, it would seem that the apparatus might be very useful to contractors and others who have to carry on night work on an extensive scale.

WHEN coal was first introduced into London as a fuel, very serious objection was taken to its use. It appears that in the beginning of the 14th century, brewers and smiths of the city finding the high price of wood pressing hard upon their returns, resolved to make some experiments with coal, but immediately an outcry was raised against them by persons living near the breweries and forges; the king was petitioned, and a law was passed prohibiting the burning of coal within the city. Those who tried it, however found the new fuel to be so much superior to wood that they persisted in its use. But so determined was the government to suppress what was regarded as an intolerable nuisance, that a law was passed making the burning of coal in London a capital offence; and it is recorded that one man at least was executed under that law. It would appear that the ladies were most bitterly opposed to the use of coal for domestic purposes. They considered the smoke to be ruinous to their complexions, and would not attend parties at houses in which the objectionable fuel was used. Some persons went the length of refusing to eat food of any kind that had been cooked on a coal fire.

THE merchants and ship owners of St. John, N B, have capitulated to the Ship Laborers' Union, and by their own act are no longer free to manage their own business in their own way—they have gracefully consented for the union to run it for them. One stipulation of the capitulation provides that the union shall grant the merchants and ship owners the privilege of selecting their own gangs "from among the members of the union." Another stipulation has reference to the working of articulated seamen in loading and discharging cargoes, whereby not more than six such seamen shall be thus employed in any ship; and the union graciously allows the use of steam in loading and discharging vessels. In consideration of these gracious concessions on the part of the union, the merchants and ship owners solemnly "agree to employ none others but members of the Ship Laborers' Union to work on any vessels controlled by them; and not to employ or contract with any stevedore who does not employ members of the union in the loading and discharging of their vessels." And still the merchants, ship owners, shippers, brokers and business men of St. John are clamoring to have the Dominion Government name that city as the "winter port" for the subsidized trans-Atlantic steamers.

To the London *Advertiser*.—The usual acceptation of the meaning of the term "raw material" is, that whatever material enters primarily into the manufacture of any commodity is "raw." In the manufacture of pig iron, for instance, iron ore, limestone and fuel are raw materials, pig iron being the

finished product. In the manufacture of iron castings, pig iron is the raw material, machinery, stoves, hollow ware, etc., being the finished product. In the manufacture of rolled iron, in the process of puddling, pig and scrap cast iron are the raw material, rods, bars, etc., being the finished product. In the manufacture of Bessemer steel, pig iron is the raw material and steel rails, billets, etc., the finished product. In the manufacture of refined steel, refined wrought or rolled iron is the raw material, and refined steel, such as is used in the manufacture of edge tools, etc., is the finished product. In the manufacture of edge tools, etc., refined steel is the raw material, and axes, hatchets, chisels, etc., the finished product. In the manufacture of wire rods, Bessemer steel is frequently and usually the raw material, and the coils of rod the finished product; but in the manufacture of wire, wire rod is the raw material. In the manufacture of pins, needles, etc., refined wire is the raw material. See?

THE artesian wells of Dakota are probably the most remarkable for pressure, and the immense quantity of water supplied, of any ever opened. More than a hundred of such wells, from 500 to 1,600 feet deep, are to-day in successful operation, distributed throughout twenty-nine counties, from Yankton in the extreme south to Pembina in the extreme north, giving forth a constant, never-varying stream, which is in no wise affected by the increased number of wells, and showing a gage pressure in some instances as high as 160, 170, 175 and 187 pounds to the square inch. This tremendous power is utilized, in the more important towns, for water supply, fire protection, and the driving of machinery, at a wonderful saving of the original cost of plant and maintenance when compared with steam. In the city of Yankton a 40 horse power turbine wheel, operating a tow mill by day and an electric light plant by night, is driven by the force of water flowing from an artesian well, the cost of obtaining which was no greater than would have been the cost of a steam engine developing the same power, not counting the continual outlay necessary (had steam been employed) for fuel, repairs and the salaries of the engineer and fireman. What has been accomplished through the aid of natural gas and cheap fuel in building up manufactories elsewhere, may some day be rivalled on the prairies of Dakota by tapping the inexhaustible power stored in nature's reservoir beneath the surface.

THE effect of the adoption of the National Policy has been remarkable in the case of the Canadian cotton trade. Ten years ago, in spite of the depressed state of business in Canada, we imported of cotton goods from Great Britain to the value of \$4,388,595, and from the United States to the value of \$2,671,708, or a total importation of \$7,060,303. Last year the importation from Great Britain had declined to \$3,326,324, and that from the United States to \$761,623, a total of only \$4,087,947. Here we have a falling off of no less than \$3,000,000 in value of cotton goods brought into Canada—to say nothing of the immense increase in the consumptive requirement during the decade—due wholly to the operation of the protective system which has led to the establishment of cotton mills in Canada and the production within the country of almost every class of cotton goods used by the people. Of bleached and unbleached

cotton we bought abroad to the amount of \$971,570 ten years ago, and to the amount of only \$165,190 last year; while of printed goods our imports have declined from \$2,876,125 to \$1,534,118 within the decade. It is noteworthy, moreover, that while the United States sales of cotton manufactures to Canada in 1878 were 60 per cent. of those of Great Britain, last year they had fallen to less than 25 per cent. The development of the cotton industry in Canada has been remarkable and continuous, the import of raw cotton increasing from \$808,105 in 1878 to \$3,194,061 last year, or 300 per cent.

ANALYSIS of the Trade and Navigation Returns shows a great decrease for the past year in the transit trade of Canada through the United States under the bonding system, as compared with previous years. The figures are: Goods carried from United States seaports to Canada, \$15,610,519, and goods carried from Canada to United States seaports for outside countries, \$8,315,683, making a total of \$23,926,202. This is the smallest amount since 1870. In 1887 the amount was \$33,692,600, so that in a single year the decrease amounted to over nine and three quarter million dollars. This trade has been dropping down rapidly since 1883, when it amounted to over \$69,000,000. This very large drop, equal to thirty per cent., in last year is, without doubt, due to the determination of Canadian merchants to use Canadian seaports and Canadian railways in preference to those of our neighbours to the south of us. The threats of non-intercourse indulged in by the United States Congress were the principal cause of the change of route. The effect has been to transfer the disbursements of the ships requisite to carry this amount of goods to our own seaports, and to increase the carrying business of our own railways. As the Non-intercourse Act is still unrepealed, our merchants will see the necessity and wisdom of turning all the business they can into our own routes. It may be added that the five great seaports of Canada show an increase in 1888 over 1887 in tons of goods brought into and carried out of them, of over 200,000 tons.

THE construction of the Chignecto Ship Railway, across the Isthmus of Chignecto, at or near the boundary line dividing New Brunswick and Nova Scotia, work upon which has been begun, excites much interest among those whose interests lie in traffic by water between ports along the lower St. Lawrence, the Island of Anticosti, and the eastern shores of the northern part of New Brunswick, and all places bordering on the Bay of Fundy, the Atlantic coast of the United States, the West Indies, etc. This ship railway will obviate a sea voyage of about six hundred miles around and along the Atlantic coast of Nova Scotia in all passages between St. Lawrence ports and St. John, New Brunswick, Portland, Boston and New York. The line of railway is straight and almost perfectly level, and the distance between its terminals—the Bay Verte on the north, and the Chignecto Channel, on the south, which communicates with the Bay of Fundy—is only about twenty miles. At each of the termini suitable docks are being prepared for the reception of the vessels to be transported; and these vessels will be raised out of and replaced into the water by hydraulic lifts, the transportation being affected by use of powerful locomotives, the capacity of the works being to transport vessels as large as

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one thousand tons burden. The fishing fleet of the United States frequenting Canadian waters, will be enabled, by using the ship railway, to make two trips during the season instead of one, while Canadian fishermen will be able, by obtaining access to American ports, to carry on their business with a vigor and success which are impossible at present. Vessels from the north shore of Nova Scotia, and all Gulf of St. Lawrence ports, bound southward, will naturally seek this route, looking to it as one which will open up to them new markets, affording them largely extended business facilities.

If we are to annex Canada we had better start the ball rolling right now or it will be too late. At her present rate of progress Canada will soon be a country proud of herself, and disposed to think of independence instead of annexation. Since the confederation and the adoption of a protective policy, Canada has been advancing with great strides. There are "booms" there, and great chances for land and railroad speculation that are attracting English capital. The Maritime Provinces increased in population rather more than our New England States in the decade covered by the last census; Ontario increased as much as our States adjacent to that Province, and Manitoba and British Columbia rival in rapidity of development our Northwestern Territories. Montreal has grown as rapidly as any of our great cities, and Toronto faster than Chicago or St. Paul, while in Manitoba and British Columbia there are towns which have sprung into cities as rapidly as any of our "boom" places. The Canadian Pacific furnishes a shorter transcontinental line than any of our Pacific roads; a splendid subsidized line of steamers is about to connect its western end with Japan and China; Quebec is nearer Liverpool by water than New York, and England can reach China some days sooner via the Canadian route than by any of ours. British America, divided into jealous and disconnected provinces, was very different from Canada united under a federal government, compacted by a comprehensive system of railroads and water communications, and fast developing a national spirit.—Louisville, Ky., *Commercial*.

We commend the above to those of our American contemporaries who lend willing ears to the siren songs of such men as Erastus Wiman, Benjamin Butterworth, and Senator Sherman, who preach that manifest destiny leads to the early annexation of Canada to the United States. Peaceable annexation can never occur—never—and any other sort would entail a bigger and more costly job for our neighbours than they would like to undertake. Canada can't be swallowed as the Texan Republic was; and is not to be acquired as was California and the Pacific coast, by conquest. There is considerable difference between Anglo-Saxon and Mexican blood.

SPEAKING of the export of cotton goods from Canada to China, the *Exporter* says that though the business was only commenced some nine or ten months ago, it is already assuming large proportions, the total amount already exported being about twelve thousand bales. Although this innovation was started by the two largest holders of cotton stock, the first orders were divided amongst the various factories, and the new trade has been generally taken up. The goods made for the Chinese market are known as "shirtings," but instead of being eight and a quarter pounds for thirty-seven and a half yards, which is the standard weight in England for the Chinese market, they weigh about ten to twelve pounds, being three to three and a half yards to the pound. They are shipped per Canadian Pacific Railway and steamers to Shanghai at lower rates than the American manufacturer can obtain, conse-

quently the Canadian makers reap an additional advantage. Official data of cotton goods exports from the United States for the past fiscal year, in comparison with the years preceding, show that during the fiscal year 1887 more than 12,000,000 yards of uncoloured cottons were exported from the port of San Francisco. During the fiscal year 1888 not one yard of this class of exports by way of San Francisco is reported. There can be but one explanation. The large movements of uncoloured cottons to China was diverted to Canadian roads and the Vancouver route during the fiscal year. The Interstate Commerce Act was a prominent, if not the sole, cause for the transfer of this traffic from our own to the Canadian railroads. That the long and short haul clause has affected other classes of traffic similarly cannot be questioned, but there may not be another equally striking instance of the complete reversal of so large a trade movement. The Inter-State Commerce Act went into full operation less than three months before the close of the fiscal year 1887, and this transcontinental movement of cottons over American lines ceased almost immediately.

SPECIAL ADVERTISEMENTS.

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

KNITTING CREELMAN BROS. MACHINES.

Georgetown, Ont

THE *Canadian Furniture Dealers' and Undertakers' Journal*, a new advocate for public favor, published monthly at Brockville, Ont., in the interests of the trades indicated by its name, has reached this office. It is got up in handsome style, and at the subscription price—one dollar a year—it ought to circulate widely among dealers.

MESSRS. J. E. BRYANT & Co., publishers of medical literature, Toronto, have sent us, with the compliments of the distinguished author, a monograph on "Color Blindness in its relation to Railway Employees and the Public," by G. Sterling Ryerson, M.D., professor of Ophthalmology in Trinity Medical College, Toronto. The paper was read at the regular meeting of the Canadian Institute, Toronto, in February last, and conveys a large amount of valuable advice and information.

AMONGST the numerous good things in this week's issue of *Once a Week* is a splendid four-page cartoon of "Washington and his Generals." This, it is announced, will be followed in the succeeding numbers by companion pictures representing "Washington Landing his Battery," "His Domestic Life at Mount Vernon," and "Lady Washington's Reception." There is also a very good front page cartoon in this number, relating to the rapid transit problem in New York, showing the dog-in-the-manger propensities of Mr. Jay Gould.

Good Housekeeping for April 13th is full of exceedingly interesting matter, and will be, as all its predecessors have been, a most welcome visitor to all its readers. Canadian young folks will appreciate the poem, "The Old Sugar Camp," so suggestive of happy memories and maple sweets. Prof. Riley's paper on "Insect Pests" in households contains valuable information as to how to get rid of them; the suggestions regarding "good housekeeping" are always good and timely, and the amusement department is full of good things. C. W. Bryan & Co., publishers, Springfield, Mass. \$2.50 a year.

MR. J. THEO. ROBINSON, publisher, Montreal, has sent us "Silken Threads," "Mr. and Mrs. Morton," and "Mr. Naydian's Family Circle," three of a series of excellent novels being issued from his press. "Silken Threads" is a well written and very interesting detective story, the plot involving the death of a young society man under strange circumstances. "Mr. and Mrs. Morton" by the same author, is a clever satire on fashionable life, which discloses some remarkable possibilities. This book is now in its sixth edition. "Mr. Naydian's Family Circle," by the author of "Lusor Lustratus," deals largely with a mystery which the reader cannot but feel strong interest in unravelling. All these publications are of high character and unexceptional in their tone. For sale by all booksellers.

Manufacturing.

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

MR. W. C. CRAWFORD is starting a furniture factory at Tilbury Centre, Ont.

CAPTAIN ARMSTRONG will build a sawmill at Oliver's Landing, near Golden, B. C.

A BONUS of \$5,000 having been secured a flouring mill will be built at Russell, Man.

THE Ontario Milling Company, Winnipeg, Man., has been incorporated, with \$20,000.

MESSRS. S. A. MCGAW and G. V. Hastings will build a flouring mill at Port Arthur, Ont.

MESSRS. D. S. CLEMENS and J. A. Markell will build a 100-barrel flour mill at Birtle, Man.

THE Rathbun Company's lumber mill at Lime Lake, Ont., was destroyed by fire April 9th.

THE Union Shoe Company, city of Quebec, has been incorporated, with \$6,000 capital stock.

MR JOHN FREDERICKSON will build a shingle mill at Oyster Harbor, Vancouver Island, B. C.

THE Dominion Lumber Company, Toronto, has been incorporated, with \$260,000 capital stock.

THE North Pacific Lumber Company, Ottawa, has been incorporated, with \$100,000 capital stock.

THE McLaren-Ross Lumber Company, Ottawa, has been incorporated, with \$500,000 capital stock.

THE American Electrical Works, of Montreal, have been incorporated, with \$60,000 capital stock.

THE Laurentide Pulp Company, Montreal, will increase their capital stock from \$200,000 to \$300,000.

THE Port Elgin Button Company, at Port Elgin, Ontario, has been organized with \$15,000 capital stock.

THE Dominion Safety Boiler Company, Montreal, has been incorporated, with \$100,000 capital stock.

THE Pilot Mound Milling Company has been organized at Pilot Mound, Man., and will build a flouring mill.

THE Canadian Natural Gas Company has been organized at Walkerville, Ont., with \$12,500 capital stock.

MESSRS. MOYER & BROTHERS, of Listowel, Ont., will probably build a 100-barrel flour mill at Neepawa, Man.

THE Sabiston Lithographic and Publishing Company, Montreal, has been incorporated, with \$40,000 capital stock.

MR. H. WILLIAMS' planing mill at Campbellford, Ont., was destroyed by fire March 28th; loss, about \$1,500.

THE extensive tannery of Joseph Carrington, at Kingston, Ont., was destroyed by fire April 6th; loss, about \$25,000.

MESSRS. NELSON & FORSYTHE, Berlin, Ont., are erecting a 75 x 50 foot extension to their foundry and machine works.

MESSRS. COWAN & Co., Galt, Ont., have recently shipped several carloads of wood-working machinery to British Columbia.

MESSRS. CLARKE & DODD, Wolfville, N.S., employ about 20 hands in their works manufacturing their Ideal washing machine.

THE Standard Drain Pipe Company, St. John's, Que., have been authorized to increase their capital stock from \$50,000 to \$150,000.

MESSRS. CLARE BROS., Preston, Ont., manufacturers of heating apparatus, etc., have recently been making important additions to their works.

THE Toronto Cereal and Food Supply Company, of which Mr. F. C. Ireland is president, will probably start a branch of works at Buffalo, N. Y.

THE Sturgeon river grist and saw mill, belonging to the Roman Catholic mission at St. Albert, Man., was burned March 24th. Loss, \$40,000.

MESSRS. NEWLANDS & Co., of Galt, makers of glove and shoe lining, find they have to largely increase their facilities to meet the increasing demand.

THE Pictou Boot & Shoe Company, Pictou, N.S., have secured the Dominion Government contract for supplying boots to Canadian letter carriers.

THE St. Lawrence Steel and Wire Company, Gananoque, Ont., are manufacturing the Meggs' patent carpet stretcher, which they claim to be a good thing.

MESSRS. E. LEONARD & SONS, London, Ontario, have recently sent a saw mill outfit to Messrs. Roop and Bent, Springfield, N.S., where it is to be operated.

THE Victoria Lumber and Manufacturing Company, Victoria, B. C., is being organized with \$1,000,000 capital stock, for the purposes indicated by the name.

THE Alpha Rubber Company, Montreal, has been incorporated with \$30,000 capital stock, for the purpose of manufacturing Indian rubber goods and druggists' sundries.

THE Thetford Asbestos Mining Company has been incorporated with a capital stock of \$200,000, with headquarters at Thetford Mines, in the county of Megantic, Que.

FIRE in the picker room of Messrs. Malcolm & Sons' woolen mills in Brantford, Ont., on April 5th, destroyed about 20,000 pounds of wool and badly damaged the machinery.

THE Imperial Portland Cement Company, with \$60,000 capital stock, has been incorporated with headquarters at Montreal, for the purpose of manufacturing Portland cement.

MR. THOMPSON, of Qu'Appelle, Man., will establish a stove foundry and machine shops at Port Arthur, Ont., if certain inducements which he asks are granted him.

THE Oxford Woolen Manufacturing Company, Oxford, N.S., was established in 1868. Their mills give employment to about sixty hands and produce 100,000 yards of cloth a year.

THE new company who have recently acquired the Chemanus, B. C., saw mills, will erect three other large saw mills in different parts of that province during the present season.

THE Dominion of Canada Manufacturing Company, Toronto, has been incorporated, with \$100,000 capital stock. They will manufacture furniture, office, church and bank fittings, etc.

THE Shumaker Manufacturing Company, of Silver Creek, N. Y., will establish a branch at St. Thomas, Ont., if that city will grant them tax exemption for ten years and a bonus of \$7,000.

MESSRS. E. WADSWORTH & BRO., Montreal, manufacturers of church organs, have been commissioned to build a \$2,400 pipe organ for the Central Presbyterian church, Guelph, Ont.

MR. N. B. FALKNER, Belleville, Ont., is offering a number of lots suitable for sites for manufacturing purposes free to any who will erect works upon them employing not less than twenty-five hands.

MESSRS. GOLDIE & McCULLOCH, Galt, Ont., are building an eighty horse-power Wheelock steam engine and 100 horse-power boiler for the McKechnie Manufacturing Company's works at Hamilton, Ont.

THE Northern Pacific Elevator Co., at Tacoma, B. C., have started the construction of a new elevator having a capacity of one million bushels. This is in addition to the one already in course of construction.

MESSRS. HINGLEY & McPHERSON, Oxford, N.S., are proprietors of a foundry and machine shop which will give employment to about twenty-five hands. They manufacture steam engines, boilers, mill machinery, etc.

THE Chatham Manufacturing Co., Chatham, Ont., have doubled their force of men, and are now turning out twelve wagons per day. The demand for these wagons is taxing the company's productive capacity.

THE McClary Manufacturing Company, London, Ont., have recently been supplied with a sixty horse-power Leonard-Ball automatic steam engine, built for them by Messrs. E. Leonard & Sons, of that place.

MESSRS. D. HIBNER & Co., Berlin, Ont., manufacturers of furniture, etc., finding their present factory too small for their business, are erecting a 100 x 50 foot three story and basement works, and a 50 x 36 foot annex.

THE electric light system introduced by Messrs. Beatty & Sons, Welland, Ont., into their foundry, is giving entire satisfaction. The works are now running overtime, and being pushed to their full capacity to fill large orders.

THE Polson Iron Works Company, Toronto and Owen Sound, Ont., are enlarging the dry dock at the latter place, which, when completed, will accommodate any vessel 336 feet long, 50 feet wide and drawing 14 feet of water.

THE McKechnie Manufacturing Company, Hamilton, Ont., are pushing the erection of their new machine works at that place. They have been granted certain favors in the way of exemption from taxation and cheap water.

THE bid of \$10,000 made by John Goodison & Co., for the land, plant and machinery of the Sarnia Agricultural Implement Manufacturing Co., at Sarnia, Ont., has been accepted. The new proprietors will set it at work at once.

THE Canada Pipe and Foundry Company, Montreal, has been incorporated with \$100,000 capital stock for the purpose of manufacturing gas, water, soil and other pipe, all descriptions of castings, and the manufacture of machinery of all kinds.

MR. N. H. PHINNEY'S patent rubber bucket pump manufactory, at Lawrencetown, N. S., has largely increased, and the patent bucket pump is known and used largely all over the Maritime Provinces, having been found to give the most complete satisfaction.

A VALUABLE discovery of asbestos is reported from Catalone, C. B. The formation and size of veins seems to indicate that it is as good as that of the Quebec district. It is near the line of the Sydney and Louisburg Railway and quite near a shipping place.

MESSRS. MACGREGOR, GOURLAY & Co., of Galt, have dropped the idea of starting the business of wire drawing, and are now making arrangements for going into the manufacture of iron-working tools. This latter business ought to be well represented in Canada.

MESSRS. JOHN C. SPENCE & SONS, proprietors of the Canada Stained Glass Works, Montreal, have recently finished a magnificent window for St. Paul's cathedral, Fond du Lac, Wisconsin. It consists of five openings, the central one of which is 17 feet high.

There is a celebrated mineral water spring near Wilmot, N. S., and it is stated that the owner has contracted with a Boston firm to supply 400 barrels of the water per week for ten years at \$2 50 per barrel. This means \$52,000 per annum, and is better than a gold mine.

THE Royal City Planing Mills Co., Westminster, B. C., are manufacturing 105 land rollers for Sir John Lister-Kaye, for use on his farms in the Territories. The rollers are turned out of fir logs, and will be heavy enough for all purposes, without the usual weighting.

It will be remembered that Messrs. A. W. Morris & Bro., of Montreal, recently erected large cordage works at Port Hope, Ont., for the manufacture of binder twine. They find their business increasing so rapidly that they are doubling the capacity of their Port Hope works.

THE old plates of the "Great Eastern" now being broken up at Birkenhead, England, are in great demand as scrap iron, and about 2,000 tons have been bought on Montreal account. Much higher prices have been realized for it than for ordinary plates, as it is first-class iron.

THE township of Ascot, Que., has voted exemption from taxes for a number of years to the new superphosphate factory to be erected in Capelton. The establishment will be on an extensive scale, as Messrs. Nicholls & Co. propose to expend about \$100,000 on the buildings, plant, etc.

MESSRS. D. MCLACHLAN & SONS, St. John, N. B., manufacturers of steam boilers, locomotive tanks, etc., are full of work, giving employment to about thirty hands. This concern was established about thirty-five years ago, and is one of the most reliable in the business in the Maritime Provinces.

THE American Steam Compressed Fish Co., of Halifax, with a capital of \$200,000, which has all been taken up, expect to commence operations in a short time. They will employ about forty or fifty hands. The business was started by Mr. Cathcart Thomson, who secured patents for this manufacture.

AN extensive phosphate property at the Blanche, in the tenth concession of Templeton, north-east of Gatineau Point, Que., has been secured by a syndicate of English capitalists. Mr. Perkins, of Montreal, will be the manager. The capital stock will be \$500,000. A sawmill will also be erected there this spring.

THE Globe Manufacturing Company, of Northville, Mich., will probably take over the works of the Bennett Manufacturing Company, at London, Ont., and continue the same line of business—

school furniture, etc. The city has offered to grant exemption from taxation for ten years, on certain conditions.

THE Sawyer-Massey Company has been incorporated with \$100,000 capital stock, with headquarters at Toronto and Hamilton, Ont., for the purpose of manufacturing machinery, engines, boilers, machines, wagons, carriages, cars, agricultural implements, and all kinds of articles made of wood or metal or both.

A QUEBEC tanning company is prospecting for a location in British Columbia, and have decided to locate at Revelstoke. They will carry on a large business, employing some forty hands in the tannery, and consuming about 5,000 cords of bark per year. They intend to procure hides from China, and to ship the leather to England.

MESSRS. BROAD & SON, Port Colborne, Ont., have their large new trip hammer in position, and are now putting in a powerful four ton cutting press, for making hatchets, and a finishing machine. When these additions are completed the firm will be able to turn out about 500 hatchets per day. They are very busy, having large orders to fill.

MESSRS. GOLDIE & McCULLOCH, Galt, Ont., have recently shipped some very large filters to Winnipeg, Man., for the water-works of that city. They are made of boiler plate, are ten feet in diameter and seven feet high. Inside are series of pipes and valves filled with gravel, through which the water is forced. They weighed over seven tons each.

MESSRS. NEWLANDS & Co., Galt, Ontario, call attention to the "Princess" baby carriage rugs manufactured by them, and for which Messrs. W. H. Storey & Son, Acton, Ont., are Canadian agents. These rugs are described as being light, warm and elegant. They are produced in various bright shades, and are just the thing for baby carriages and perambulators.

SARNIA feels gratified over the announcement that the Doherty Company, of that city, have secured contracts for the supply of their water boxes for waterworks from Charlottetown, P. E. I., Quebec city, St. Hyacinthe and Three Rivers, Quebec, and expect to get the work for Toronto city, the Doherty box having been adopted as the standard there.—Chatham, Ont., *Planet*.

BELLEVILLE, Ont., will give a free site and exemption from taxation for ten years to all new industries which are operated for ten years, ten months in each year; and will also grant a bonus, graduated in proportion to the number of hands employed, and payable in seven equal annual instalments without interest, to every new industry employing not less than twenty hands.

JOHN CAMELFORD, Paris, Ont., is manufacturer of all wool and union carpets and Smyrna rugs. He has had over twenty years experience in the manufacturing of carpets in all grades. He started the manufacturing of Smyrna rugs about eighteen months ago with a variety of patterns of the latest designs, which secured him first prize, bronze medal and diploma at Ottawa in 1887.

A DEPUTATION of three members of the Seattle Chamber of Commerce will arrive during the week for the purpose of inspecting the works of the Oriol Sanitary Drain Pipe Co. of this city. Arrangements will likely be made with the owners of the patent, and similar works established in Seattle, for the purpose of manufacturing the pipe for sewerage purposes—Victoria, B. C., *Colonist*.

MESSRS. PINEO & CLARK, iron foundry and machine shop proprietors, Berwick, N. S., who employ from twelve to fifteen hands, have just put in a new steam engine to supply additional power required. These gentlemen, whose business embraces the manufacture of stoves, ploughs, cultivators, feed-cutters, etc., and all kinds of repairing, and mill and machine work, have commenced work on a quite extensive plow factory.

THE Hochelaga Cotton Company, of Montreal, have bought the mills and other property of the Magog Textile and Print Company, at Magog, Que., for \$370,000. The raw material on hand will be taken over at a valuation, the manufactured stock remaining to be disposed of by the Print company. The sum thus realized will enable the Magog concern to pay off all its obligations and return about twenty cents on the dollar to the stockholders.

A COMPANY composed of some of the principal merchants of Quebec has recently been formed to carry on the fishery business on the coast of Gaspé, that province, having acquired the establishments of the old Jersey firm of Le Boutillier Bros. Another company with a capital of \$300,000, has lately obtained its charter of incorporation, having for its object the prosecution of the fisheries and the manufacture of fish manure at Manicouagan, on the north shore of the St. Lawrence.

The following decisions were rendered by the Board of Customs in March:—Adams' composition for cleaning and polishing furniture, 30 per cent.; brass, sheet, stamped or figured, cut into narrow strips, 30 per cent.; harness soap, 25 per cent.; jelly tumb'ers with tin covers, 5 cents a dozen, and 30 per cent.; "Masolene" furniture polish, etc., \$1.90 per imperial gallon; patent brocaded seating, an imitation of hair cloth, 32½ per cent.; time detectors, 35 per cent.

The Yarmouth Woolen Mill Co., Yarmouth, N. S., at present employ fifty hands, work full time, out-put 12,000 yards of cloth and 1,000 pounds of yarn per month, besides a large amount of custom work. For the past six months the mill has worked exclusively on orders. This company manufacture a great variety of cloths, from a cheap union to a fine all wool tweed and ladies' dress goods, which, for durability, style and finish, are equal to any of the kind manufactured in the Dominion.

MESSRS. JOHN BERTRAM & SONS, of the Canada Tool Works, Dundas, Ont., have built for the Polson Iron Works Co., Toronto, a C size punching and shearing machine, 15 ft. long by 11 ft. high, which weighs 25 tons. The two main castings weigh 8½ tons each. The main shafts are steel, 8 inches in diameter. There are two fly wheels on the main shaft which weigh 1,500 lbs. It will punch a 3-inch hole through 1-inch plate, and shear 1½-inch plate; and it can be converted into a double punching or double shearing machine.

The Grand Trunk Railway shops at London, Ontario, a few days ago turned out two new baggage cars of an improved design. They are about six feet longer than the ordinary car, and the interior is arranged in sliding compartments so that bonded goods may be separated from the balance of the stuff in the car in a space sufficient only for their bulk. In the old style of car the bonded apartment took up half the room for perhaps two or three pieces of baggage, while the other half was over-crowded. The two new cars will run between Windsor and Suspension Bridge.

MESSRS. S. G. KERR & SONS, Canning, N.S., have an evaporating establishment which employs a number of hands in converting potatoes, carrots, turnips, etc., into a compound for soups, as well as other branches of the business. A forty horse-power boiler and a thirty horse-power engine now drive the machinery. The firm have shipped within the past few months 30,000 packages of the evaporated vegetables, and have orders on hand for 20,000 packages more. Their enterprise is attested by an order for the Royal Navy, amounting to five tons, to be delivered at Bermuda.

MESSRS. ISBESTER & REID, of Toronto, have closed a contract with the Dominion Government for building a bridge across the Grand Narrows in the Island of Cape Breton. The bridge is to be 1,800 feet long and is to be of solid stone and iron. The Narrows in some places are eighty-three feet deep. Messrs. Isbester & Reid, who are building the Cape Breton Railroad, will do the entire work, the bridge being on the line of the railway. The figures are said to be about \$550,000, but this it is expected will not cover the entire cost of the work. The competition for the work was very keen, a number of American firms being among the tenderers.

The knitted goods industries started in Lincoln, Nebraska, by Parisians who were induced to remove to that city, are not turning out so successful as could be wished. There seem to be difficulties in the way connected with the manufacture of the goods, which make the cost of getting them up much greater than was anticipated. Raw wool at fifteen cents a pound, brought to market in the condition which obtains among the "crackers" of the Prairie State is, after all, found to be no cheaper than the wool used in Ontario, while the cost of labor is very much higher in all departments. \$2.50 per dozen for finishing goods would startle the average Canadian manufacturer.

It may be of interest to know that after all, the presence of natural gas in the well bored between Paris and Brantford, on the Sanderson farm, heretofore alluded to in these pages, has been demonstrated in the most practical manner by every day use during the past winter. After the well was given up by the company who sunk it, Mr. Sanderson purchased tubing and laid pipes to his house, which is but a short distance away. One stove has been in operation all winter for heating and cooking, and there is sufficient also for lighting the house. The presence of the gas is demonstrated most conclusively, and Mr. Sanderson finds his 1,750-foot well of no little practical use and comfort.

NEXT to binders, the American implements which have had the largest sales in New Zealand are corn drills. A large number of horse hay rakes are yearly sold. The very superior cheapness and lightness of the American nearly gives them a monopoly of this instrument. For the past three seasons a number of cleaning machines have been on the market, and their low price makes them favored by farmers. They are being sold at less than half

the price of the English machine. Disk harrows also have a considerable sale. A considerable number of light, handy and cheap hillside plows are sold by Otago agents. These come from various makers in the States.—*Australasian Ironmonger.*

The original factory of the St. Croix Soap Company, at St. Stephen, N. B., was three stories, 30x50 feet; since then, in the last four years, three additions have been made, one 20 feet front, the second 25 feet front, and the third four story, 30 feet front and 75 feet deep, making in all at the present time ample room for the carrying on of the manufacture of soaps, with every advantage for turning out goods. The capacity is now 400 to 500 boxes weekly. The factory is supplied with four large soap kettles, three of them ranging from 16,000 to 18,000 lbs. capacity, and the fourth somewhat smaller. Besides these there are a number of smaller kettles for similar purposes, such as toilet soap, etc., and other plant in proportion for carrying on the process of soap making.

The Miramichi foundry has now on hand the following work:—One side wheel paddle steam tug, 71 feet keel, 16 feet beam, 4 feet 6 inches hold, fitted with a pair of geared engines, 50 h.p., and a boiler of locomotive pattern of 60 h.p. to carry 100 lbs. pressure. This boat is to be launched in May. They are also building an upright steel boiler for J. C. Miller's steamer, "Laura"; an upright steel boiler for James Robinson's steam yacht, and an upright steel boiler for Port Elgin; also a horizontal engine and boiler of 40 h.p. for Messrs. Swezey & Russell, of Napan. These, with mill and steamboat repairs, keep the foundry very busy and give employment to thirty-four hands at the present time.—Chatham, N.B., *Advance.*

A WORKING force of about 120 men, with two trains of cars, are now employed at the Sarnia tunnel. The pit has been excavated down to the eighteen-foot level, and ground on the next six-foot bench has been broken. The dimensions of the pit have been considerably enlarged from the first plan, the idea being to make the slope so easy that the material may be taken out by train instead of being hoisted by derrick. The effect of this enlargement has been to increase the amount of material to be taken out by about twenty-five per cent., so that the excavation of the eighteen-foot depth has included the removal of about 25,000 cubic yards of material. On the other side of the river good progress is being made. The working force there is about the same as that on this side, and the excavation there is down about twenty-four feet.

The organ manufacturing business of Messrs. Chute, Hall & Co., Yarmouth, N.S., indicates the growth of our home manufactures, as well as the changes a decade of years may bring forth. Ten years ago there were very few, if any, musical instruments made in the Maritime Provinces, and a large trade was carried on by dealers in organs and pianos which were made in and imported from the United States. To-day that state of things is much modified, and, although the demand has increased ten-fold, our own manufacturers furnish a much larger proportion of the supply. Chute, Hall & Co. tell us their trade is about double what it was a year ago, and prospects for this year's business are excellent. From a beginning of one organ per week, and a trade purely local, their business has increased until they are now shipping upwards of forty organs per month.—*Halifax Critic.*

OUR enterprising contemporary, the St. John, N. B., *Sun*, of April 3rd, came to us resplendent with a wealth of information regarding that ambitious city. It consisted of twenty four pages—144 columns—filled with interesting and valuable matter which embraced a very complete account of the commercial progress and position of that city, which may be considered an epitome of the business history of the place. Perhaps the most valuable and interesting feature of the paper was the sketches of the leading manufacturing industries of St. John, among which allusions were made to Wm. Parks & Son's New Brunswick Cotton Mills; Messrs. T. S. Simms & Co., manufacturers of brushes, brooms, etc.; Messrs. J. Harris & Co., car works; the New Brunswick Cordage Works of Messrs. Thomas Connor & Co.; Messrs. Fleming & Sons' iron and machine works; Messrs. Chelsey's foundry works; the Coldbrook rolling mills; Mr. James Pender's horse nail works; Messrs. S. R. Foster & Son's nail mills; Messrs. Campbell & Fowler's edge tool factory; the St. John Bolt and Nut Company; Messrs. T. McAvity & Sons' brass works, etc. The record published in the paper is one full of encouragement. It speaks of excellent achievements in the past, of enterprise, energy and a good measure of prosperity in the present, and of grand future possibilities.

It is well known that the refiners have exhausted all their stocks of crude oil on hand, and sooner or later they must commence to stock up for the fall trade; and those who hold the present stocks above ground will we hope make them pay for it when the time comes. The Fuel Oil Company are doing all they can to introduce the use of liquid fuel into Canada; and it is such a convenient fuel for mills and stationary boiler that a great consumption of this kind of fuel is anti-

pated. It is surprising that a salt block has not been established here in Petrolia before this, where fuel is so cheap, and when it has been demonstrated that a solid bed of salt, 100 feet in thickness, underlies our town, and all that is required is water to develop this industry, and enable us to successfully compete with any salt wells in Canada. We think we could make the Goderich salt men sick of the business if we once started here.—Petrolia, Ont., *Advertiser*.

MESSRS. LOUIS BREITHAUP & Co., proprietors of the Eagle Tannery, Berlin, Ont., and Penetang tannery, Penetanguishene, Ont., have sent us a very beautiful lithograph hanger illustrative of some of the different phases of their business. In it is seen the small frame leather store established by Mr. Breithaupt in Berlin in 1860, a couple of two-horse wagons, as it appears, being sufficient to contain all the materials used in its construction. Another representation shows the present extensive plant of the firm at Berlin, a memorandum stating that it was originally built in 1857-58; burned in 1866 and again in 1869, and rebuilt of brick throughout in 1869. There is also a view of the large brick stores in Berlin occupied by the firm as a warehouse and sales rooms for their products. A view of their Penetang works is shown, and the information given that they were built in 1882. The picture illustrates the works of one of the most important manufacturing establishments in Canada.

MR. P. LEWIS, of the Ordnance Department, city of Quebec, has invented a railway car passenger escape, the object of which, as the name indicates, is to enable passengers to get out or to be hauled out of derailed cars. This is effected by making the roof or a section of the roof of every passenger car movable, so that the very minute the train leaves the rails and the cars are overturned, the roof falls off automatically, and a way is left clear for the passengers to get out or be taken out. At present, when a train capsizes, the passengers are pinned in; the doors and windows of the cars become jammed, and there is literally no means of escape for the unfortunate victims, while, in ninety-nine cases out of a hundred, axes are never at hand to cut them out. By Mr. Lewis' device, a passage to liberty opens of its own accord with the accident, and there is no question that it deserves to be at once seriously examined by all interested. Among some other of the advantages claimed for it are that it is adaptable to all cars at trifling cost, that it does not reduce the strength or change the appearance of the car, that it is wind and water-tight, that it does not interfere with the deck lights, ventilators or hangings; and that so long as the train retains its upright position, no jar can displace it. Moreover, no tricks can be played with it, as in the case of the American invention, which provides for the falling out of the car side panels by bolts drawn from within or without. Nothing but the derauling of the train causes it to work.

REGARDING the remarkable gas well at Kingsville, Ont., heretofore alluded to in this journal, a gentleman who recently visited it, in describing it, says that the company, in their boring, struck a sulphur spring at the depth of 400 feet. Continuing about 1,100 feet from the surface they struck gas, and concluded to go deeper. A few feet lower down another pocket was found, and so strong was the pressure that the drill was forced up out of the shaft by it. When I saw the well they had cased it in with a four-inch iron pipe, which was laid along the earth about fifty feet from the top of the well, and turned up at the end like an ordinary gas-pipe. I was there when it was first lit, and the noise made by the rush of the gas was like a railway express, or the roar of Niagara at a distance. The gas, which has a strong smell of sulphur, shot up for about two feet out of the end of the pipe in a solid mass. Then it became flame that reached to the tops of the trees in the neighborhood. It was a most wonderful sight. The pressure is estimated at 500 pounds to the inch, or close upon 11,000,000 feet per day. Experts say it is one of the five largest wells ever discovered. The projectors are boring a second well, and a company will be organized at once to take the matter in hand. Since this well was struck, capitalists have visited it with a view to investments. A site has been secured, and a company with \$200,000 capital will build a glass factory, employing 100 hands.

JOSEPH BERGMANN, of Lansingburg, N. Y., builder of paper boats, is now engaged on the construction of paper torpedo boats, under the countenance of the Navy Department. The trial boat is nearly ready, and is a peculiar construction, measuring nearly eleven feet in length, and about the same dimensions in breadth, with a depth of only sixteen inches. Its shape at either end is that of a cigar that has been somewhat flattened in the box. Any cross section, at right angles with its longitudinal axis, is an oval, and it tapers to a sharp point at each end. It is made of twelve folds of paper, is one-seventh of an inch thick, and though it contains no braces, is so hard and strong that one by pressing against it might presume that it was solid. Its greatest beam is about four feet from the bow.

The craft is constructed in halves, so that each half is a keelless paper boat, its lines converging at two points, at stem and stern. Within the shell are three cleats, to which an electric dynamo will be fastened amidships. This dynamo will turn a light propeller at a high rate of speed. In the bow, in a space two feet long, will be stored twenty-five pounds of dynamite, enough to blow the biggest turret ship in the German navy into a cocked hat before Bismarck could say "sauer-kraut." The contact of a pointed block of brass protruding through the bow of the torpedo with the side of a vessel will discharge the dynamite. The torpedo boat will be steered by means of electric wires connecting its stern with the ship from which it is sent out. The shell, which will be water-tight, will be so ballasted that it will run along under water at the necessary depth.

MESSRS. A. HARRIS, SON & COMPANY, Brantford, Ont., have sent us their 1889 annual illustrated catalogue of Brantford machines for mowing, reaping and binding, manufactured by them. The implements alluded to are the Brantford light steel binder, over 4,000 of which were sold in the season of 1888, which number, they say, was more than one-half greater than of all other binders made in Canada. Numerous illustrations describe this machine and the working parts of it, by which its operation is made perfectly intelligible. A sheaf carrier and transport truck, made entirely of steel, malleable and wrought iron, which has proved exceedingly useful where farms are far apart, or when it is desired to transport harvesters long distances, has been improved for this season. The Brantford mower, claimed to be the only mower with front and rear cut, is a very handsome and efficient machine, free from complication, and so simple that any person can operate it. A full page illustration of a rear-cut mower describes an implement regarding which we are informed there are over 12,000 now in use. A full page illustration is also given of a self-raking reaper, which is light and simple, and combines every modern improvement. Views are given of the different factory buildings in which this great Canadian industry had its rise and made its progress, from a rather dilapidated frame building, occupied from 1857 to 1872, to a more substantial one, occupied from 1872 to 1880; then the large aggregation of buildings occupied from 1880 to 1888, and finally the immense works—one of the very largest industrial establishments in Canada—recently occupied by this concern.

THE planing mill and building material factory of Messrs. E. Gibson & Sons is situated at 83 Pleasant street, in this city, close to the water's edge. Since the death of the late proprietor, Mr. Errington Gibson, the business has been taken hold of by his two sons, Mr. Fulton Gibson and Mr. Edwin Gibson, who will continue to run it under the old style of the firm of which they were members. The building was partially burnt down in June of '87, but was speedily rebuilt. Entirely new machinery has replaced that destroyed by the fire, comprising a Woodworth planer, a re-sawing machine, the only one of its kind in the Lower Provinces, planer and matcher, circular saw, large moulding machine (one of the best in the city), morticing, tenoning, and other wood-working machines. These are run by a forty horse-power engine with a boiler of double that capacity, and give employment to from twelve to fifteen hands. The main building is 80x30 feet, exclusive of the engine house, which is a brick enclosure adjoining the factory. The materials used and worked up into the various forms required by the builder and carpenter, are pine, spruce, birch, white wood, etc., and a specialty is made of pins and brackets for electric lighting apparatus, in which this firm has a large business. All their machinery is of Canadian make and manufacture, and being found entirely satisfactory, adds another proof to that already established fact, that in point of manufactures in this line, if not in all, Canada can hold her own. The place resounds with the hum of industry, and doors, window frames, sashes, moulding and general building material, are turned out in large quantities. Business is reported very good, and as the Messrs. Gibson are both young men well trained to their particular line of trade, they will doubtless meet with the success which their exertions merit.—Halifax, N.S., *Critic*.

THE world has seen its iron age, its stone age, its golden age, and its brazen age. This is the age of paper. We are making so many things of paper that it will soon be true that without paper there is nothing made that is made. We live in paper houses, wear paper clothing, and sit on paper cushions in paper cars, rolling on paper wheels. We do a paper business over paper counters, buying paper goods, paying for them with paper money or charging them up in paper books, and deal in paper stocks on paper margins. We row races in paper boats for paper prizes. We go to paper theaters where paper actors play to paper audiences. We elect paper men with paper votes on a paper issue to represent a paper constituency in a paper Congress and make paper laws. As the

Age develops, the coming man will become more deeply enmeshed in the paper net. He will awake in the morning and creep from under the paper clothing on his paper bed, and put on his paper dressing-gown and paper slippers. He will walk over paper carpets down paper stairs, and seating himself in a paper chair, will read the paper news in the morning paper. A paper bell will call him to his breakfast, cooked in a paper oven, served on paper dishes, laid on a paper cloth on a paper table. He will wipe his lips with a paper napkin, and having put on his paper shoes, paper hat and paper coat, and taken his paper cane, he will walk on a paper pavement or ride in a paper carriage to his paper office. He will organize paper enterprises and make paper profits. He will go to Europe on paper steamships and navigate the air in paper balloons. He will smoke paper tobacco in a paper pipe, lighted with a paper match. He will write with a paper pencil, whittle paper sticks with a paper knife, go fishing with a paper fishing-rod, a paper line and a paper hook, and put his catch in a paper basket. He will go shooting with a paper gun loaded with paper cartridges, and will defend his country in paper forts with paper cannon and paper bombs. Having lived his paper life and achieved a paper fame and paper wealth, he will retire to paper leisure and die in paper peace. There will be a paper funeral, at which the mourners, dressed in paper crape, will wipe their eyes with paper handkerchiefs, and a paper preacher will preach a paper sermon in a paper pulpit from a paper text. He will lie in a paper coffin wrapped in a paper shroud, his name will be engraved on a paper plate, and a paper hearse adorned with paper plumes, will carry him to a paper-lined grave, over which will be raised a paper monument. The papers will record his paper virtues, while paper angels with paper wings will clothe him in a paper robe and wait his paper spirit from this paper world to the paper gates of a paper paradise, where all is paper, and fire-proof at that.—*The Paper World.*

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ST. JOHN'S, P.Q.

INVERT BLOCKS

FOR BOTTOMS OF BRICK SEWERS.

These Blocks are made of Fire Clay, SALT GLAZED and VITRIFIED, and form the most perfect Invert known. Amongst their special advantages, they are indestructible perfectly smooth, affording the minimum of friction to flow.

Easily and cheaply laid on ANY BOTTOM.

Made in lengths of 18 inches, or to suit buyers.

The Standard Drain Pipe Company, St. John's, P.Q.

ROBT. CARROLL, Agent for Toronto.



TENDERS.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Indian Supplies," will be received at this office up to noon of THURSDAY, 9th May, 1889, for the delivery of Indian supplies during the fiscal year ending 30th June, 1890, consisting of Flour, Bacon, Groceries, Ammunition, Twine, Oxen, Cows, Bulls, Agricultural Implements, Tools, etc., duty paid, at various points in Manitoba and the North-West Territories.

Forms of tender containing full particulars relative to the Supplies required, dates of delivery, etc., may be had by applying to the undersigned, or to the Indian Commissioner at Regina or to the Indian Office, Winnipeg.

Parties may tender for each description of goods (or for any portion of each description of goods) separately, or for all goods called for in the Schedules, and the Department reserves to itself the right to reject the whole or any part of a tender.

Each tender must be accompanied by an accepted Cheque in favor of the Superintendent-General of Indian Affairs on a Canadian Bank, for at least five per cent. of the amount of the tender, which will be forfeited if the party tendering declines to enter into a contract based on such tender when called upon to do so, or if he fails to complete the work contracted for. If the tender be not accepted, the cheque will be returned.

Each tender must, in addition to the signature of the tenderer, be signed by two sureties acceptable to the Department for the proper performance of the contract. The lowest or any tender not necessarily accepted.

This advertisement is not to be inserted by any newspaper without the authority of the Queen's Printer, and no claim for payment by any newspaper not having had such authority will be admitted.

L. VANKOUGHNET,

Deputy of Superintendent-General
of Indian Affairs.

Department of Indian Affairs,
Ottawa, April, 1889.

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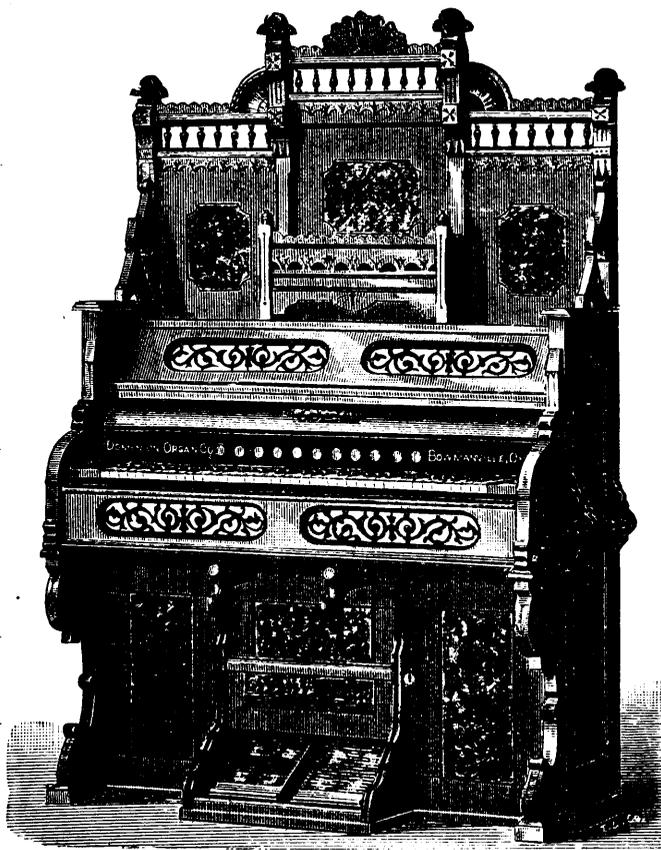
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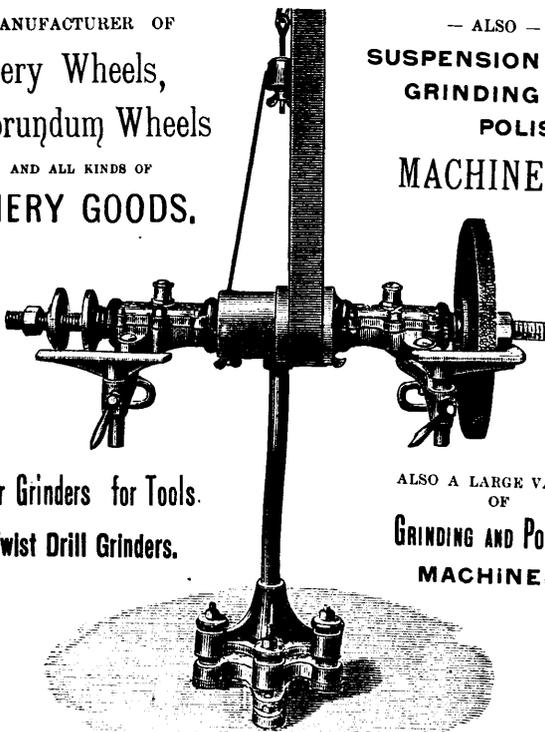
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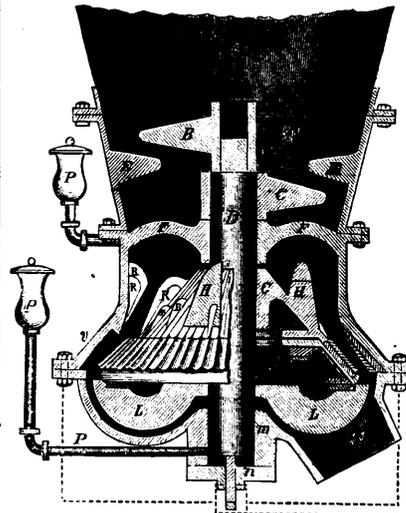
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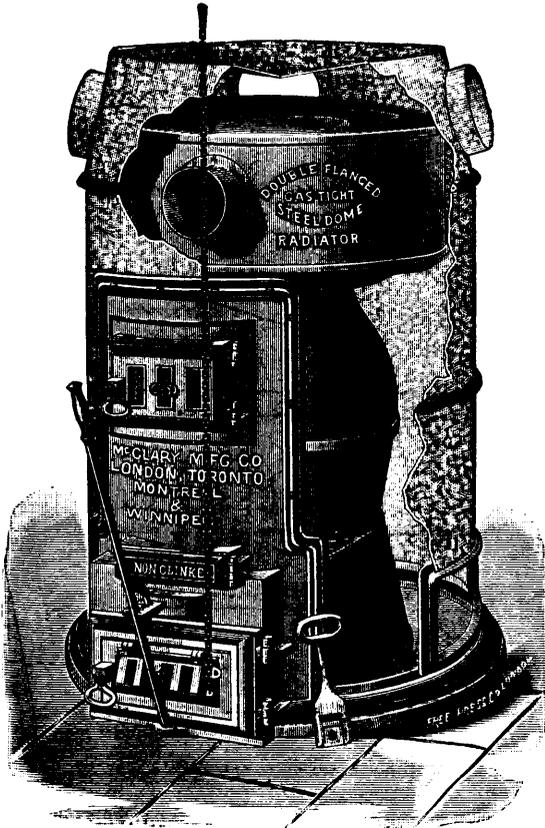
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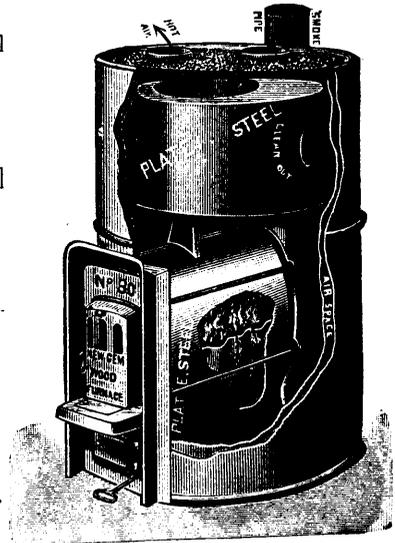
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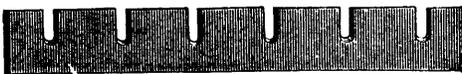
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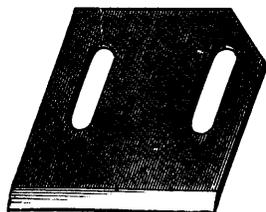
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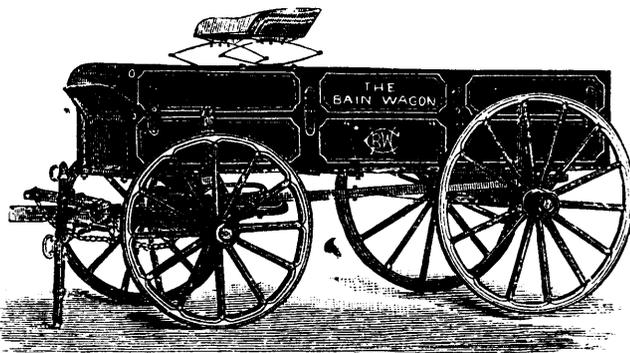
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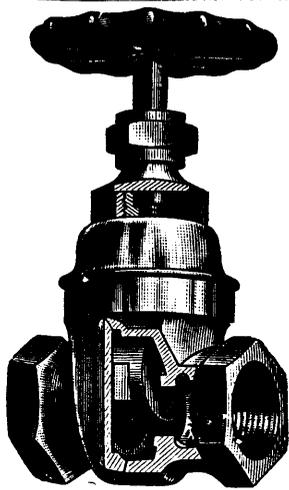
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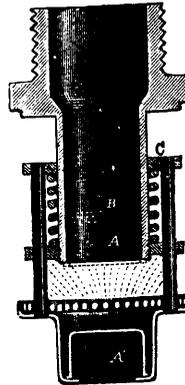
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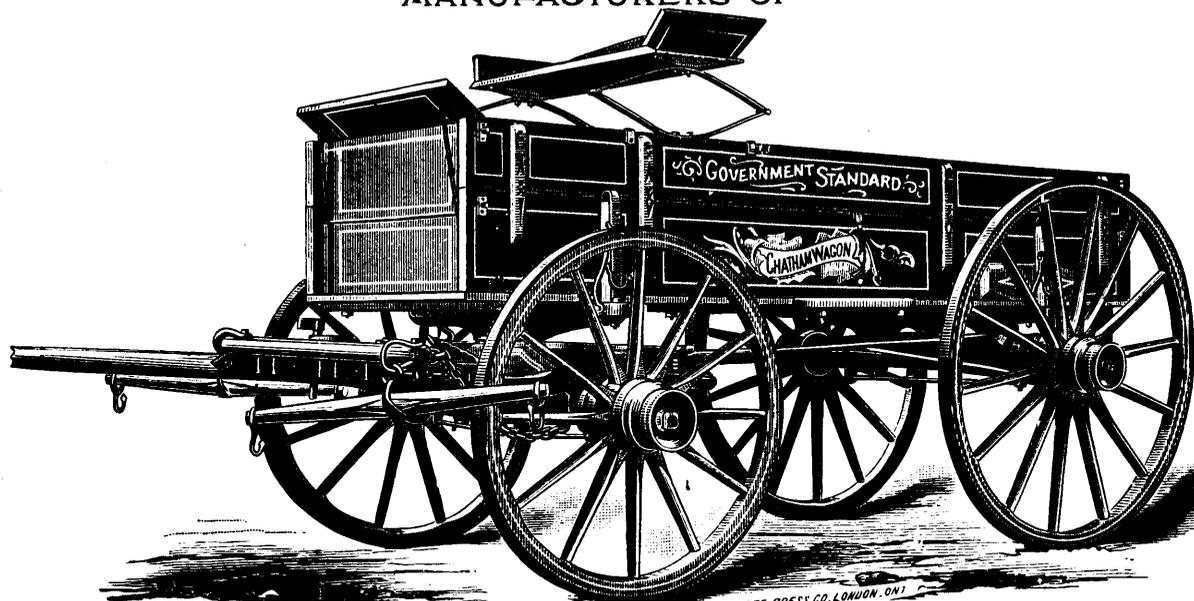
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OBJECTS.

1. To prevent by all possible means the occurrence of avoidable fires.
2. To obviate heavy losses from the fires that are unavoidable by the nature of the work done in mills and factories.
3. To reduce the cost of insurance to the lowest point consistent with the safe conduct of the business.

METHODS.

All risks will be inspected by a competent officer of the company, who will make such suggestions as to improvements required for safety against fires, as may be for the mutual interests of all concerned.

Much dependence will be placed upon the obligation of members to keep up such a system of discipline, order, and cleanliness in the premises insured as will conduce to safety.

As no agents are employed and the company deals only with the principals of the establishments insured by it, conditions and exceptions which are so apt to mislead the insured and promote controversy and litigation in the settlement of losses will thus be avoided.

The most perfect method of insurance must, in the nature of things, be one in which the self-interest of the insured and the underwriters are identical, and this has been the object aimed at by the organizers of this company.

W. H. HOWLAND, Vice-President. **JAMES GOLDIE,** President.
HUGH SCOTT, Managing Director.

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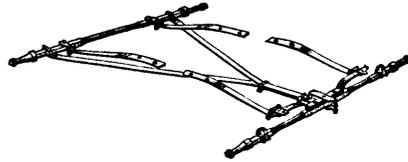
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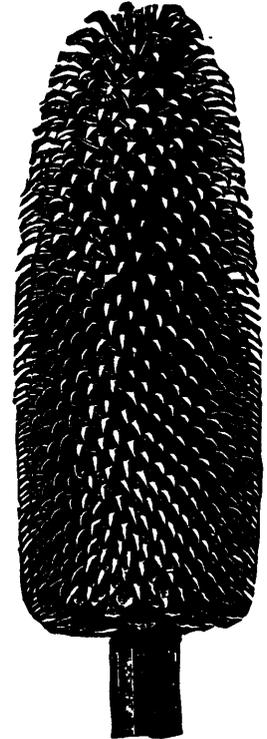
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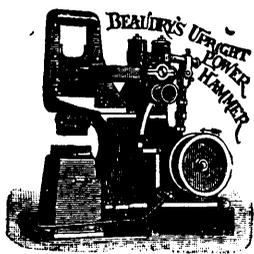
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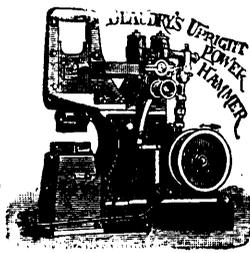
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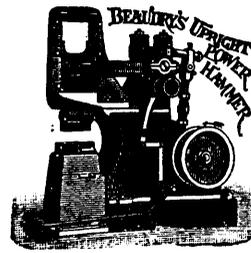
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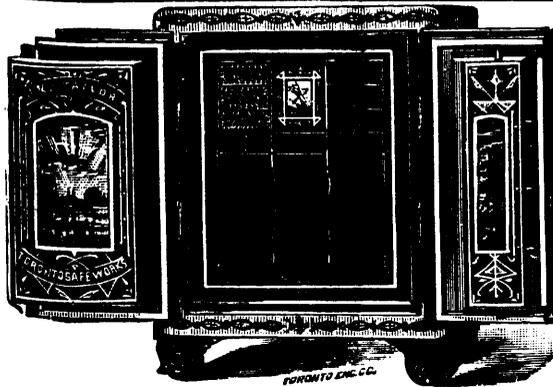


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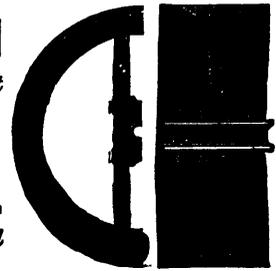
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Yours truly, S. R. STIMSON, General Manager.

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Dear Sir: Replying to your favor, will say that after using the Dodge Wood Split Pulley for a year or more we are satisfied they are a good thing, if not the best Pulley made, and shall use them hereafter in preference to any other we know of.
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We have sold these pulleys for one year, and they have been put to every kind of service, and their popularity is wonderful. We refer to the following users for proof of the above statements: Pillsbury & Hulbert Elevator Co., Minneapolis; R. M. Pratt & Co., Elevators; Northern Pacific Elevator Co.; The Pacific Elevator Co.; Minneapolis Harvester Works; Minneapolis School Furniture Co.; M. & St. L. R. R. Co.; Willford & Northway; Washburn, Crosby & Co.; St. Paul Electric Light Co.; St. Paul Roller Mill Co.; Minneapolis Brick Co.; N. W. Mfg. & Car Co., Stillwater, Minn., and very many others.
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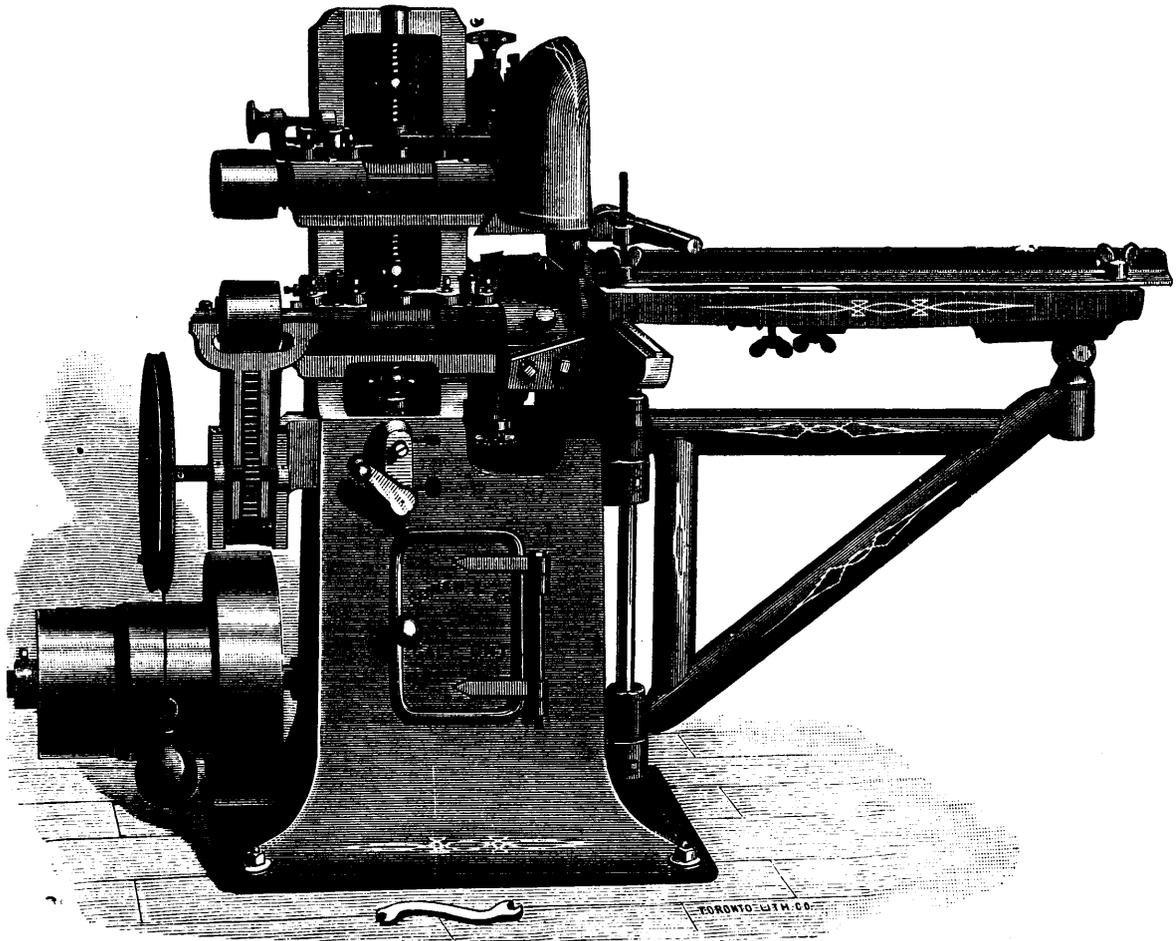
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We beg you will note this fact when comparing our List with others which are for SOLID RIM, and NOT for Pulleys in HALVES.



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

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

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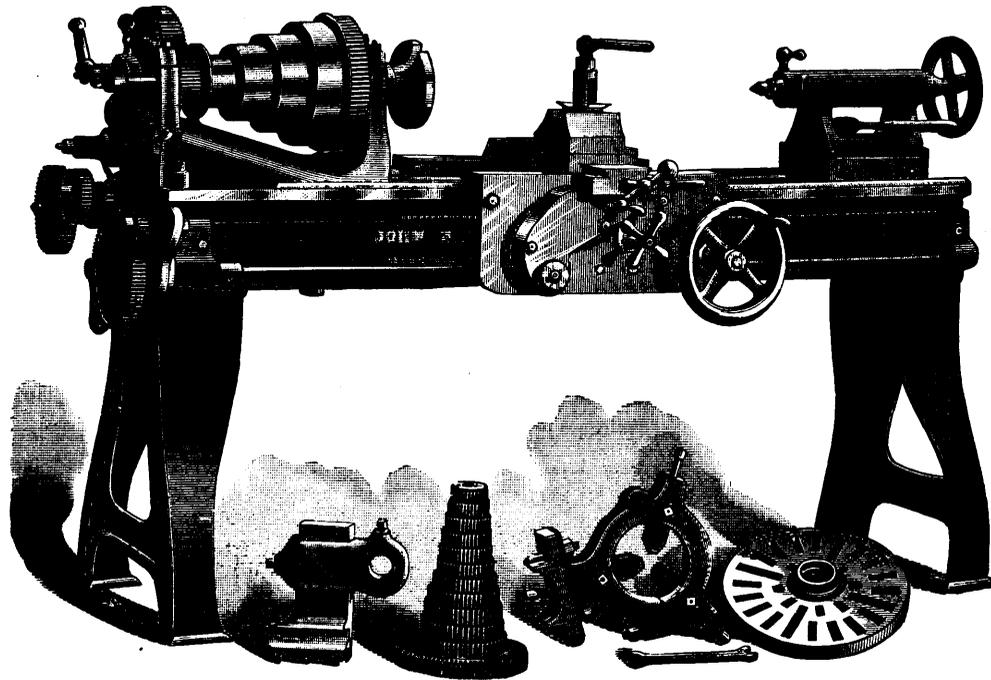
This Machine is supplied with single or double Copes, as ordered, and for furniture work it is without Copes, and with an adjustable cut-off Saw.

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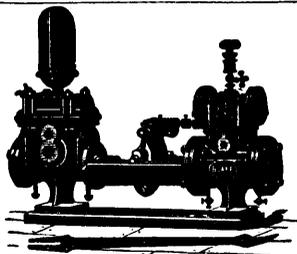
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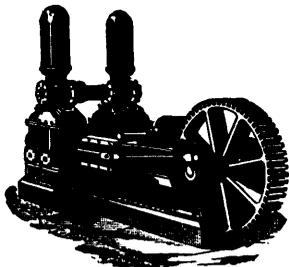
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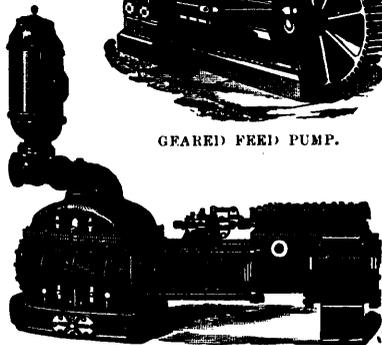
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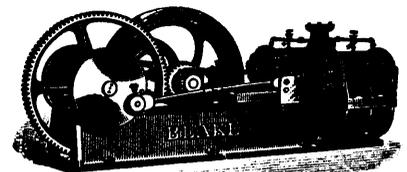
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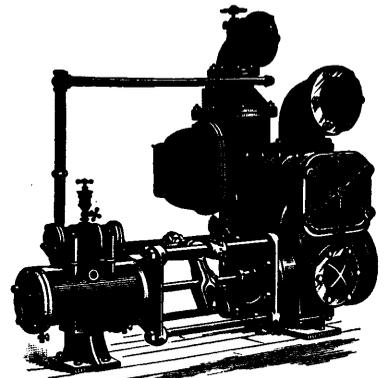
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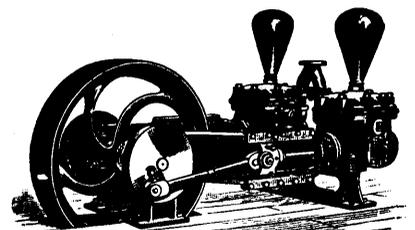
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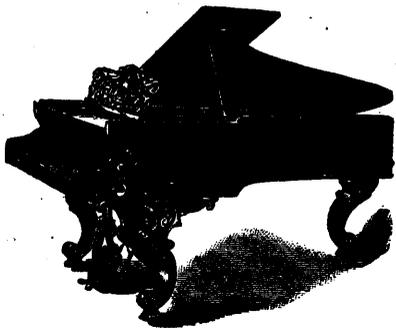


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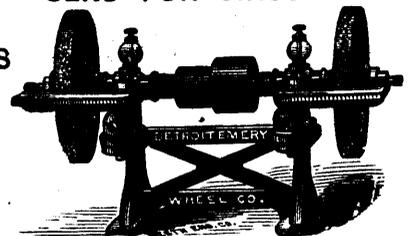
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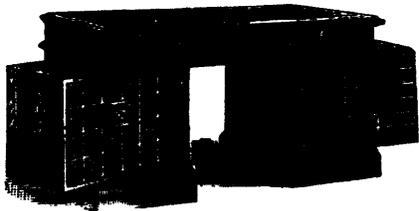
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