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Vol. 14.

TORONTO, MAY 18, 1888.

No. 10.

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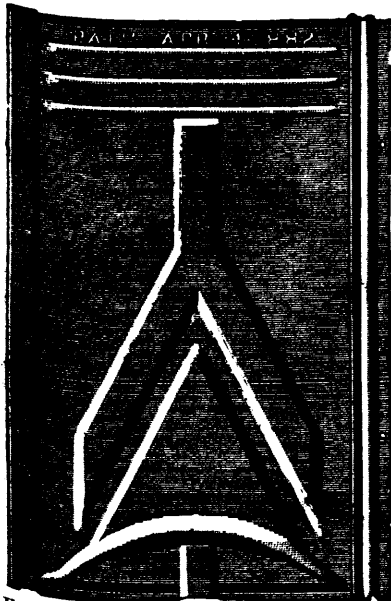
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COMBINATION *VERSUS* MONOPOLY.

THE Senate General Law Committee of the State of New York, which was recently instructed to make investigations relative to "trusts," in their report say:—"The end, if not the purpose, of every combination is to destroy competition and leave the people subject to the rule of a monopoly."

For the purpose of showing the fallacy of this assertion, Mr. S. C. T. Dodd, of New York, has written a pamphlet entitled "Combinations: Their Uses and Abuses," a copy of which has been sent to us by the publishers, Messrs. George F. Nesbitt & Co., New York, and from which we reproduce some of Mr. Dodd's strong arguments.

There is no necessary relation between "combination" and "monopoly." The wonderful successes of modern business depend upon combination. It is as much a necessity of trade and commerce as steam and machinery. By combination capital is obtained, enterprizes of magnitude conducted, and great results accomplished. By combination small capitalists can successfully compete with large capital. Every partnership is a combination. Every corporation is a combination. Destroy the right to combine and business on a large scale at once becomes impossible. Unity of action would be destroyed. Our railroads would be eaten with rust. Our ships would rot in their harbors. Our warehouses would decay. Mankind would become segregated as savages, each acting for himself alone, and endeavoring to destroy others. Surely people do not stop to think what they mean when they utter their wild cries against combinations.

Possibly some combinations are monopolists, but monopoly does not necessarily arise from combination. A monopoly can be held by a single person as well as by a combination of many persons.

A monopoly is a grant by the Government for the sole purpose of buying, working, making or using anything. * * * Let it not be forgotten that the struggle against monopoly ever has been, and ever will be, a struggle against interference in business by Government.

It is by no means true that every monopoly is an unmitigated evil. Many exist which are among our greatest blessings. Every grant of a patent right is a monopoly. Every grant of an exclusive right is a monopoly. Railroads, and gas and water companies, in so far as they possess exclusive privileges, are monopolies. Yet none but socialists or anarchists would deprive the people of them, or of the blessings they have conferred.

Combinations of capital and of persons, whether as partnerships, associations, or corporations, without any grant of exclusive privileges, are in no sense of the word monopolies. Without combinations, partnerships, joint stock associations, or corporations, the business of the world would stagnate. They are as indispensable to manufactures and commerce as the air is to our existence. It may be a surprising statement, but it is true that all the evils of the old monopolistic system that have survived to this day exist in consequence of the restrictions which have been placed by law upon the freedom of combination.

The greatest step forward which has been made in jurisprudence in the last half-century has been in the partial removing of restrictions upon combination; and the greatest blessings that legislation can confer upon commerce and manufactures is to leave the right to combination entirely unrestricted, while it directs careful attention to the prevention of such evils as combinations may be found to give rise to or foster. Combination is a power for good. It may also be a power for evil. The power must not be destroyed, it must be regulated.

Less than half a century ago the natural right of the British people to combine for trading in any manner except as partners was denied, and the issuing of a transferable stock without special legal authority, was an illegal offence. For this reason the few corporations which were created by Parliament held exclusive franchises, and were, therefore, monopolies. The right to combine was denied to the people in order that a few upon whom this privilege was conferred should hold a monopoly. In the United States these laws and customs upon this subject were brought from England, and until within a very few years in most of the States of the Union freedom of combination was denied, and the right was granted by special legislative acts to those who were able to purchase special privileges. Those were the days of monopolies. In those States that have freed themselves from this error, and allowed all persons freely to combine for manufacturing, mining or mercantile purposes, an era of prosperity came in marked contrast to the condition of those States whose laws forbade such combination. * * * Not until 1856 did England free itself from the shackles it had placed upon its own industries, and permit free combination of persons and capital. Since that date any seven or more persons may combine in any lawful

business by simply filing and registering a statement of their intent. Within the last ten or fifteen years it has become evident to legislators that the best mode by which the monopolistic features of corporations or other combinations might be eradicated was to make the right of combination perfectly free to all; and to-day there is scarcely a State in the Union in which any three or three thousand persons may not combine their capital, be it small or great, in any lawful business enterprise. In New York manufacturing corporations may be thus formed without limit of capital, and the corporations thus formed can combine at pleasure. Corporations are no longer created by special, but by general laws. Franchises are no longer exclusive and indestructible privileges. They are general, and may be recalled at will by the power which granted them. As a consequence corporations are now simply business partnerships with transferable shares, and the law recognizes them as such.

This change wrought in the laws was forced by the necessities of business. When business is small and local, it is carried on in a small way by individuals. When business ceases to be localized in a village or city—when it is no longer confined by state lines—when the producer or manufacturer has the world for his market, the business must increase with the growth of the demand. Capital must be supplied in increasing quantities, every appliance which will cheapen cost of manufacture and transportation must be utilized, and combinations on a large and larger scale become absolutely essential.

IMPORTANT TESTIMONY RE GASOLINE STOVES.

THE Philadelphia *American Exchange Review*, for April publishes a tabulated statement concerning the destruction of property by fires in the State of Massachusetts in the year 1887. The *Review* is a prominent and reliable journal devoted to the interests of insurance companies, and is accepted as authority on insurance matters. The statement alludes to 108 different descriptions of property where 2,238 fires had occurred, the actual damage done to buildings and their contents aggregating \$4,220,326. This includes 959 fires in dwelling-houses, involving \$544,315 damage to buildings and contents—an average loss of only about \$567.50 to each fire.

From the *Review* article we have formed a tabulated statement showing the number of known causes of all these dwelling-house fires, and the number of fires occurring from these respective causes, also the number occurring from unknown causes:—

1. Defective chimney.....	180
2. Kerosene lamps.....	107
3. Firecrackers.....	70
4. Exposure.....	67
5. Children playing with matches.....	56
6. Careless use of matches.....	50
7. Incendiary.....	47
8. Smoking (in bed 12).....	40
9. Sparks from chimneys.....	31
10. Overheated stoves and furnaces.....	29
11. Curtains and goods near gas jets.....	28
12. Soot in chimney.....	17
13. Lightning.....	15
14. Woodwork near stovepipe.....	13
15. Clothes near stove.....	8
16. Spontaneous combustion (old rags 4).....	8
17. Ashes in wooden vessels.....	7
18. Sparks from locomotive.....	6
19. Sparks from stove.....	6
20. Thawing water-pipe.....	4

21. Lighting fire with kerosene.....	3
22. Rags in stovepipe hole.....	3
23. Timber built into chimney.....	3
24. Cigar stubs in wooden spittoons.....	2
25. Electric wires.....	2
26. Fat boiling over.....	2
27. Ignition of volatile oils.....	2
28. Mice and matches.....	2
29. Tar boiling over.....	2
30. Explosion of gas.....	1

Known causes.....	811
Unknown causes.....	148
Total.....	959

Analysis of this table shows that defective chimneys were most prolific in causing 180 fires; kerosene lamps coming next, with 107 fires; children playing with matches, and the careless use of matches following close with 106 fires, and sparks from chimneys and stoves, overheated stoves and furnaces, soot in chimneys, woodwork near stovepipe, ashes in wooden vessels, and lighting fires with kerosene causing 106 other fires, all of which latter are attributable with more or less directness to the use of the ordinary coal or wood stove. It also shows that there was no case whatever of any fire occurring in any dwelling-house in the State of Massachusetts during the year 1887 caused by gasoline, or attributable to gasoline, either directly or indirectly.

Gasoline stoves are in general use in Massachusetts, and thrifty housekeepers refuse to do without them; and during the summer months when the heat arising from the use of coal and wood stoves would be oppressive and uncomfortable—say for about six months of the year—only gasoline stoves are used. Fires do not occur from defective chimneys when the ordinary stoves are not in use, for chimneys are not required in the use of gasoline stoves, and fires cannot possibly occur from sparks from chimneys and stoves, overheated stoves, soot, hot ashes, etc., where only gasoline stoves are used. If, then, no fires whatever occur from the use of gasoline stoves—in use half the year—and if 180 fires occur from defective chimneys, and 106 fires from other causes in connection with the use of coal and wood stoves, used only half the year, it is but a fair deduction to say that the use of gasoline stoves reduces fire casualties, as here alluded to, one half. In other words if gasoline stoves were not used half the year, and coal and wood stoves were used all the year instead of half the year, as now, instead of 286 fires occurring, incident to the use of coal and wood stoves as now, the number would be doubled. If it were not for the use of gasoline stoves, instead of the 286 fires occurring from the causes specified, there would probably be 572 such fires.

Why, then, are fire insurance companies so averse to the use of gasoline stoves?

THE LABOR COMMISSION.

THE results of the visit of the Royal Labor Commission to St. John, N.B., as manifested in the activity of the members of the various trades there, are discussed in *Progress* of that city, and from which we learn that five of the commissioners, who were appointed from the trades and labor organizations, during their journeys over the Dominion have done all in their power to advance "unionism." The names of these "organ-

izers" are given. We are told that Mr. John Armstrong, and all who stand with him on the commission, hold or have held high rank in their respective unions; and that all of them are Knights of Labor as well. Naturally enough they looked at St. John from the unionist's standpoint, and while they were in that city Mr. Armstrong aroused sufficient interest among the printers "to carry out his ideas," and Mr. Heakes labored with the carpenters so successfully that he organized a branch of the brotherhood of carpenters and joiners. These efforts of the Royal Labor Commission, or of these five members of it, resulted in the organization in St. John of "unions" of printers, carpenters, ship laborers and cartmen; and a movement is in progress to organize three more unions—of painters, moulders and millmen—which seven unions, together with the Knights of Labor, it is proposed to combine into a Federation of Labor. Commissioner Kerwin advised that it would be well to supplement the trades unions with mixed assemblies of the Knights of Labor, thus bringing into organization all men and women employed in isolated trades, and of others not necessarily engaged in manual labor, who sympathize with the movement.

The question presents itself: What was this Royal Labor Commission appointed for anyway? Judging from this report that comes up on the east wind from the sainted city beside the sounding sea, it might be supposed that the Dominion Government were desirous of bringing all the men and women in Canada employed in manual trades, and all who sympathize with them, into trades unions, federations of labor, Knights of Labor and similar organizations; and that these worthy commissioners were being paid ten dollars a day for their services in that direction, besides their travelling expenses.

There is no possible objection to any or all of these gentlemen of the commission being Knights of Labor, or of belonging to any labor organization if their inclinations lead them thitherward, nor is there any objection whatever to be urged against them, as individuals, going wherever they please and bringing about such organizations, but the tax-payers of Canada have good cause for complaint against these men, who, while receiving pay from the Government, employ their time in the manner indicated. It will be news to the tax-payers too, to learn that at least "five of these commissioners were appointed from trades and labor organizations." Is it a fact that any such organizations were authorized or requested to make nominations for members of the commission? We hope not.

SHOULD PROFIT BY EXPERIENCE.

THE fire insurance companies doing business in Montreal have been brought to face a situation that is intensely interesting. For a long time and until very recently the fire department of that city was in a disorganized and demoralized condition, and the streets were notoriously bad, rapid transit over many of them in the more valuable business portions, being almost impassable for heavy carriages. Under these circumstances the losses by fires were very large, and as a consequence premiums for insurance amounted to almost prohibitory rates. But a better condition now prevails; the fire department has been re-organized and improved, and the streets are in better condition, but the insurance rates are not proportionately lowered, and insurers are restive. In fact the insurance fra-

ternity in Canada, as exemplified at the recent meeting in Toronto of the Canadian Fire Underwriters' Association, are imbued with a quality of conservatism that constantly impels them to impose restrictions and to increase premium charges, but never to reduce them. It may have been all right to increase charges to Montreal insurers while the streets of that city were impassable and the fire department incompetent, but when those conditions disappeared there was shown no willingness on the part of the insurance people to lower their charges. They held the power to exact them, and they used that power; for their organization as an association prevented individual companies from doing what the association decided should not be done. Illustrating this, the proprietor of the St. Lawrence Hall, one of the largest hotels in the city, and valued at \$500,000, states that in 1879 the insurance companies charged him 60 cents on the hundred dollars on the building, and 75 on the furniture in it, while now they are demanding \$1.22½ on the building and \$1.42 on the furniture.

The insurance companies cannot complain that they are making no money in their business. Papers recently read in the House of Commons at Ottawa, showed that the net cash premiums received during 1886 by the fire insurance companies doing business in Canada amounted to \$4,932,335, and the losses to \$3,301,338; while during 1887 the premiums amounted to \$5,200,075, and the losses to \$3,367,798. Thus in 1886 the profits on their insurance business was \$1,630,947, while in 1887 they were \$1,832,276. During nineteen years—from 1869 to 1887 inclusive—the total net cash premiums received by the companies amounted to \$68,932,293, against \$50,629,103 losses—an excess of \$18,306,190. During 1887 the net amount of risks carried amounted to \$635,101,557.

Montreal business men have appealed in vain to the insurance companies to reduce their charges, but fire insurance conservatism, like revolutions, never goes backward, and now it seems that applications from these business men to American companies not having offices in Canada, to the extent of probably \$3,000,000, have been made, and a furore is the result. The Dominion law imposes penalties upon foreign companies doing business in Canada who have not acquired local habitation according to law, but the hare must be caught before it is cooked, and it seems to be impossible to exact these penalties when the insuring company has its habitation in a foreign land, and the transactions are carried on through the mails. And thus it is that the goose that laid such golden eggs in the nest of the conservative Canadian companies is now beginning to deposit them in a Yankee basket.

A spirit not at all akin to the conservatism pervading Canadian insurance companies prevails among companies doing business in the United States, and that spirit impels them to conform their management to the enlightened requirements of the day. An aggregation of untoward circumstances permanently established, implies increased premium rates, and the abatement or disappearance of those circumstances means a lessening of the cost of insurance. This, in turn, is an inducement to insurers to make use of all precautions and safeguards possible, thereby leading to the lowering of rates; and the lowering of rates leads, of course, to larger lines of insurance. They make money by their system, and—Canadian companies should profit by their example.

MANUAL TRAINING.

THE recent action of the Toronto School Board in promising a delegation from the Trades and Labor Council that they would take no steps looking to the inauguration of a system of manual training of the boys attending certain of the public schools without first notifying the Council, remains unexplained. The Council seems to have become masters of the situation, and it is fair to conclude that, the Council being opposed, there will be no system of manual training introduced. The boys may acquire what knowledge of the three R.'s they can, but if the Toronto Trades and Labor Council can prevent it, when they leave school and begin the earnest battle of life, they will not be possessed of any knowledge whatever of how to handle any sort of tools, or be prepared to be or become anything more than common day laborers. The Council will not permit these boys to receive any manual training while at school, and it will not permit them to become apprentices to any of the trades when they leave school, the reason assigned being that the trades are overcrowded now, and that such education in them would but make a bad matter worse.

But it is to be noticed that there are quite large numbers of foreign born mechanics arriving in Canada, and that as fast as they come they are absorbed into their respective labor organizations here, and that while native born Canadians, the sons, many of them, of the members of this obstructive Council are in enforced idleness because of their ignorance of any trade, and naturally drifting into vice through idleness, these foreigners are taken in hand and supported in idleness sooner than allowed to work when the unions say not to work. If these trades and labor councils are to be permitted to have their way in dictating to school boards, and in preventing school boys from receiving manual training, it cannot but be that the mistaken members of the councils will soon be brought to see some of their sons brought to disgrace through their enforced idleness, and wear striped clothes behind prison bars. The Society for the Prevention of Cruelty should now interfere.

SPECIAL ADVERTISEMENTS.

TO RENT.—Two large flats on Pearl St., Toronto (in rear of *Mail* building), well lighted, steam heated, and with available steam power up to 10 H. P. Apply at 10 Pearl Street.

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EDITORIAL NOTES.

GROUND has been broken for the new Toronto Rolling Mills works.

CRAIG STREET, Montreal, is to be paved with block stone a distance of 9,800 feet, requiring 62,000 square yards of paving. The actual number of blocks of stone that will be required will be nearly 2,000,000.

ONE of the latest phases of pooling is that of the New York Board of Underwriters who have adopted a plan by which the Board takes charge of all applications for full lines of insurance and apports them among the Board Companies.

ACCORDING to the report of the Labor Commissioner of New York, recently issued, 50,000 workmen engaged in strikes during 1887, in that State. They gained \$944,000 in advanced wages, but lost over \$2,000,000 while out of employment. The net result was a loss of over a million dollars.

The *Guelph Herald* tells of a woman who mixed gasoline with the water in her clothes boiler to help remove the dirt. The water boiled over, and it was weeks before the woman recovered from her burns. According to expert insurance testimony this was clearly a case of gasoline stove explosion, and proves the charge that such stoves are dangerous things.

A NOVEL "commencement" was recently held at the New York Manual Training School. 120 bricklayers, 184 plumbers, 15 stone-cutters, 38 painters and 28 carpenters were given diplomas, certifying to their skill in their respective trades. This school has been in existence over seven years, and all the more useful manual trades are taught. It is something of this sort that the Toronto School Board wanted to inaugurate here, but the Toronto Trades and Labor Council wouldn't permit it.

MONTREAL is about building a main sewer about three and a quarter miles in length, in which work traveling derrick excavators will be used; and the contractor has gone, or is going, to Yankeeland to obtain the necessary plant. There are several concerns in Canada who could furnish all the machinery necessary in building this sewer, of quite as efficient character and as cheap as any that can be had in the United States, and it is ridiculous that Canadian manufacturers should not be allowed to supply the demand.

"THE KHAN" of the *Toronto Telegram*, seems to be down on the jawsmiths of the labor organizations. Hear him: "Don't stand with your hands in your pockets, and look like a knot on a log; Tighten your 'galluses,' spit on your hands, and hump yourself out of the bog. Oh never allow the spring breezes, Through your whiskers to mournfully rustle; Remember that Fortune that dowdy old jade, Smiles only on people who hustle. Chop cordwood, dig drains, or split rails, But don't stand around like a dumb thing; The spring is here, the summer is near, So go to work and do something."

At the annual meeting of the Texas State Board of Underwriters, recently held at Houston, Texas, says *St. Louis Stoves*

and Hardware, the restrictions heretofore placed on the insurance of dwellings in which gasoline stoves were used, was rescinded, and hereafter no extra charge will be made by insurance companies in that State on account of their use. This action of the State Board confirms what that paper had previously said, that it was but a question of time when Texas insurance companies would follow the precedent set them by other States, and withdraw all objections to gasoline stoves.

THERE is a mild row of a religio-political character going on in Hamilton over the question whether the Free Masons should be invited to lay the corner stone of the new city hall. The *pro tem* editor of the *Spectator* thinks he grasps the situation very tightly when he says concerning the matter:—"When it comes right down to a basis of practical common sense, why should there be mummery over one stone more than another in any building." The young man has evidently never travelled towards the east in search of light, or he would not have made use of such a silly expression.

The experience of organized labor in the United States as regards strikes, and the losses resulting from them, is not a happy one. Since the beginning of last year there were over 1,000 strikes, in which 350,000 men were involved; and the number of days of labor lost amounted to over 10,000,000. At \$2 a day for wages unearned the loss aggregated over \$20,000,000. No doubt some benefit accrued from some of the strikes, but the only substantial benefit accruing to the public from them consists in the disintegration of those organizations which accomplish no good purpose.

DURING the past ten years it is claimed that Chicago lumbermen have paid about \$3,000,000 in fire insurance premiums, during which time the actual fire losses amounted to less than one-sixth of that amount. Lumber, lumber yards, planing mills, box factories, etc., are more hazardous than gasoline stoves; and yet Chicago lumbermen are talking of organizing mutual insurance companies. Canada needs insurance companies who will advertise that they take so-called gasoline risks—i.e. where gasoline stoves are used—on just such terms as similar risks are taken in Chicago and elsewhere in the United States.

AN ARGUMENT of a Canadian fire underwriter against the use of gasoline stoves in Canada is that Canadian domestic "help" have not sufficient intellect to learn how to properly manipulate the article. Gasoline stoves are in common use throughout the United States, and recently in Texas, that last stronghold of insurance opposition, the fire insurance companies there have removed all restrictions against their use. About all the domestic "help" in Texas consists of Americans of African descent and color, and the insurance companies think that these have common sense enough to know how to manage gasoline stoves. Is it not rather rough on Canadian girls to say that they haven't as much sense as Texas "niggers"?

OUR esteemed contemporary, the *Shareholder* takes up the battle of the fire insurance companies against the use of gasoline stoves. It repeats the bugaboo story about one pint of vapor-

ized gasoline impregnating 200 cubic feet of air and making it explosive. It also speaks of an obsolete law against the use of naphtha. Its method for "obviating all the risks arising from the use of gasoline" is the enforcement of the old law. Laws are yet in existence forbidding a man to kiss his wife on Sunday, and against witchcraft, but they are not enforced now. There are thousands of gasoline stoves in use in Massachusetts, but not one fire occurred in any dwelling-house in that State last year from their use—not one.

At a recent meeting of the Board of Directors of the Toronto Industrial Exhibition Association it was resolved to add two members of the Toronto Press Club to representation in the Association. In contending against the motion it was argued that the association should be guarded as to extending the scope as to admission, the principle which had previously prevailed being to admit only members of such organizations as had special fitness for representation. Colonel Gray, speaking in favor of the motion, was of the opinion that the members of the press are a most valuable auxiliary to the success of exhibitions. Colonel Gray is correct. The Toronto Press Club represents an element in this community which the Exhibition Association does well to recognize.

THE latest fad among the labor unions is to appeal to the public to demand the exhibition of the "blue label" upon all cigar boxes from which smokers buy their cigars, special stress being laid on the assertion that "certain cigar manufacturers in Montreal make a habit of beating and otherwise cruelly ill-treating girls and boys of tender years." The impression is sought to be made that non-union manufacturers thus abuse their labor, and that the universal adoption of the blue label will remedy the evil. The evidence before the Labor Commission in Montreal disclosed the fact that probably the best managed cigar factory in that city—where the employees were treated with the most consideration, and were paid the very highest wages—was one in which no Knights of Labor or members of cigarmakers' union were allowed to enter.

At a recent meeting of the Committee of Chairmen of the Montreal City Council, discussing the fight that the fire insurance companies are said to be making to force a change in the personnel of the Fire Department there because of its inefficiency, Alderman Stevenson said that the best reply to that charge was the fact that out of 356 recent fires only eight had got beyond the buildings in which they originated. He was interested, he said, in a certain building, and had enquired what rebate would be made in the premium charges if the thermostat system was applied to it; but he was informed by the company to whom he applied that no rebate would be allowed. Montreal underwriters were to blame for insurance premiums going out of the country, but insurance can be effected in the United States at about one-third of the rates charged in Montreal.

RECENTLY the legislature of New York passed a bill repealing what is known as the Saturday Half-holiday law, and now the governor has vetoed the bill. The law does not compel all workers to rest from their occupations on Saturday afternoons

but it compels the closing of banks and similar institutions, which certainly produces inconvenience and frequently hardship. It does not give working people generally a half-holiday, but it compels banks and public offices to close, the shortened hours affecting only those whose hours of labor are notoriously the shortest. This law is of similar character to that sumptuary legislation in Ontario which permits a few tradespeople to compel the closing of all stores and places of business in lines similar to their own before sundown on all afternoons except on Saturdays. It is surprising how some politicians suckle at the labor teat.

This time it seems to be fastened onto the Knights of Labor with considerable security. Last week when the steamer *Bramwell* arrived at her dock in Montreal from Europe, about seventy men were put to work discharging cargo. They had not been long at work when at a given signal all of them except seven or eight stopped work. They explained that they were Knights of Labor, and demanded that before they would return to their work the seven or eight other men, who were not Knights of Labor, should be discharged. The stevedore in charge stated that the non-union men were good and competent, but that the striking Knights of Labor "worked on the Labor League line." Where is the Royal Labor Commission? A gang of good and competent men driven from their work because they were not Knights of Labor. Is there no law that can be interposed in behalf of non-union men?

We reproduce in another column an editorial from the *Hamilton Spectator* lamenting the opportunity that Canadian manufacturers will soon enjoy to enter the markets of the United States, if the proposed Mills tariff bill becomes law. The reference to "the wood-screw industry" of Hamilton, the promoters of which are actively preparing for the anticipated event, alludes, we suppose, to the Canada Screw Company, whose extensive new plant was recently illustrated and described in these pages. It will be remembered that this company was first established in Dundas, where they own a large, valuable and well equipped plant; and that, because of their exceedingly large and rapidly increasing business, they erected their present works in Hamilton. It seems that now the Dundas works are to be again put in operation, and also that the Hamilton plant is to be considerably enlarged. Surely the National Policy is doing wonders for Canada.

The Grand Division of the Order of Railway Conductors of America, which had been in session in Toronto for several days, adjourned on Wednesday of this week. There were over six hundred members present, many of whom were accompanied by their wives and other lady friends. They were an exceedingly intelligent body of men, and they created a most favorable impression upon our citizens, who entertained them with royal hospitality. One of the principles of the order is that its members shall not participate in any strike, and this was further enlarged at their convention by the declaration that no coalition shall ever be formed with any labor organization. Of course this brings upon the association the antagonism of the Knights of Labor, whose object is to absorb into their organization all such associations; and from this time on it

may be expected that the jawsmiths of the Knights of Labor will be unceasing in their denunciations of the railway conductors' organization. But the latter can stand it, and the general public will respect them all the more because of it.

It is no unusual sight in some cities of the United States to see gasoline stoves in full operation occupying attractive places in show windows on business thoroughfares. In some instances a storeroom, or a part of one, is used for the exclusive purpose, where a skillful cook is employed making and cooking bread, pastry, etc., in sight of the multitude, illustrating how easy the process is, and the advantages to be derived from the use of the stove. Ladies in passing are attracted by the exhibition, and have ocular demonstration of the ease and comfort with which all such work can be done; and learn how to manipulate one of the most convenient appliances known to modern house keeping. In hot weather these stoves are of special value, as there is neither heat, dust, ashes, or any of the inconveniences attending the use of coal or wood-burning stoves; nor are they as dangerous. Any articles that can be cooked upon an ordinary stove can be cooked equally well upon a gasoline stove; and they are specially serviceable in preparing preserves, jellies, etc.

The *St John N. B., Progress* tells a pitiable story of woeful want occurring in that city that bears strong resemblance to one that came from Hamilton, heretofore alluded to in these pages. For some past, so *Progress* says, an aged woman has supported herself and others by scrubbing. Unexpected drains upon her small resources reduced her almost to beggary a few weeks ago, and since that time she has hardly been able to procure food. On the day in question she began her day's work at five o'clock—without breakfast, for she had none to eat. In going from one office to another, faint and dizzy from her hard labor at scrubbing, she fell to the sidewalk twice. An officer, learning that she was actually starving, helped her into a restaurant, where she was supplied with nourishment. A letter carrier certifies that she is a respectable woman. We are not informed regarding this case farther than is here related; but, as we remark, it strongly resembles that of Mrs. Farr, of Hamilton, only we don't observe that any Mr. D. R. Gibson, or any financial secretary of any "union" rushed to the front and proclaims that her husband "is, and has been for years, a member in good standing" of a labor union.

It is stated that during the year 1887 the membership of the Knights of Labor in the United States decreased over 200,000; its treasury became bankrupt, and its resources insufficient to meet current expenses. The cause of the downfall of this once numerically powerful association of workmen is not hard to find. The loss of members is due principally to the insane policy of the leaders regarding strikes and boycotts, and their dictatorial interference with the rights of employers and employes in every labor trouble that has arisen during the past three or four years. The workmen are too independent to submit to the despotism of the leaders, and instead of openly rebelling they are quietly severing their connection with the order. Many there were too, who opposed the expenditure of \$60,000 for a brown stone building in which

Mr. Powderly and his associates could pass their time amid luxurious surroundings, and \$17 a day and expenses has been considered a rather steep price to pay for the services of the members of the general executive board. This item alone amounted to \$31,000 last year, and will probably reach \$25,000 this year.

As alluded to elsewhere, at the recent meeting in this city of the Grand Division of the Order of Railway Conductors of America, a resolution was passed affirming the principle of the order to the effect that members of the order shall not participate in strikes, and that no coalition shall ever be formed with any labor organization. Of course the Knights of Labor take this as a personal affront, and already the Division is denounced as "a craven organization," and the dictionary is ransacked for opprobrious epithets to hurl against it and its members. Following are a few of the expletives hurled at Grand Chief Conductor Wheaton: "A man after the monopolists own heart;" "clumsily worded and servile address;" "sycophantic fashion to curry favor;" "selfish and cowardly;" "hireling capitalistic scribe;" "self complacent and obsequious wage-slave;" "creatures of the Wheaton type;" "abject servility;" "pitiful whine;" "every spark of manhood eliminated from the bosoms of wage-serfs;" "miserable poltroon," etc., *ad nauseam*. This *recherché* style seems to be that which the jawsmiths of the Knights of Labor deem best fitted to appeal in to the intellects of their dupes.

THE *Australasian Ironmonger* records the fact that a machinery-building firm of Ipswich, Queensland, had been awarded a contract for the construction of a number of locomotives for a railroad in that country at prices only 6½ per cent. above what similar engines could be imported for from England. It also mentions that the South Australian Government, which had advertised for bids for the manufacture of fifty-two locomotives, of four classes, to be built in the colony, had awarded the contract to a concern at Gawler, South Australia, the prices bid being only twenty-three per cent. above the average cost of locomotives supplied from England. £9 060 will be paid as duty on patented parts. The evidence given before the South Australian Stores Commission was to the effect that locomotives could not be manufactured in the colony for a less advance than forty to seventy per cent. on the price of imported engines. The extra twenty-three per cent. amounts to £31,358 on the total of £167,700, so that the South Australian Government are paying this bonus for the manufacture, within the colony, of fifty-two engines, or £603 an engine.

A COMMITTEE of the Dominion Senate is investigating the damage claimed as being done by the sawmill men along the banks of the Ottawa and Gatineau rivers at and near Ottawa, who dump the sawdust from their mills into the rivers. It is said that not only are the channels being filled up to the peril of navigation, but that the gases formed by the decomposition of the sawdust is a fruitful cause of sickness. At a meeting of the committee a few days ago, Mr. John Stewart, a mining engineer, in discussing how best the sawdust could be disposed of, said that it could be used in making indurated compressed articles, such as dishes, pails, etc., and brick, as

well as in the manufacture of gas for the roasting and re-heating of iron. Portions of the refuse could also be utilized in making charcoal. The Rathbuns, of Deseronto, Mr. Stewart said, make gas and charcoal out of their sawdust. In Michigan this material was used in boiling brine drawn from the salt wells which exist in that district. The mill refuse of the Chaudiere is probably equivalent to 30,000 tons of coal. If all the lumbermen there would grant the product free, he could form a company which was prepared to handle the material. At Three Rivers sawdust has been bought for manufacturing purposes at the rate of 3½ cents per bushel. If it is a fact that the sawdust waste of the Ottawa mills reaches the equivalent of 30,000 tons of coal a year, and it probably is a fact, it is to be hoped that some profitable method may be adopted for utilizing the article and stopping the enormous waste.

THE non union laboring men of Hamilton had a hard time of it in perfecting their organization, but they got there finally. Their first call was for a meeting on April 28th, but when they assembled they found the hall packed with gangs of noble-hearted and honorable members of the different labor organizations who had gone there determined to disturb and break up the meeting, and they accomplished their purpose. But another meeting was called for and held on May 3rd, and the arrangements were such as to prevent a recurrence of the outrage perpetrated at the previous meeting, and an organization was perfected. It was stated at the meeting that the object of the organization was for the purpose of mutually joining together all branches of the working classes and their employers on a broad, liberal, progressive and humane platform. The preamble of the main resolution set forth the arbitrary and objectionable action of certain of the existing labor unions by which free born citizens are debarred from liberty of action, and the opportunity of bettering their condition according to their own judgment; and that should they exercise that judgment against the decisions of the unions, they were liable to the severe penalty of being expelled, blackmailed, boycotted and deprived of work. There are about three hundred of these independent non-union workmen in Hamilton, and the association of them here alluded to will probably prove to be the nucleus of a labor organization for similar purposes, which will extend and ramify into all portions of the country. The Hamilton non-union workmen are, most likely, building better than they know.

HON. CARROLL D. WRIGHT has sent us *Art in Industry*, a handsome illustrated volume compiled from the Seventeenth Annual Report of the Massachusetts Bureau of Statistics of Labor, of which he is chief. The topics discussed are arranged under the following heads:—Art as a Profession; Applied Art; Educational Facilities, and Conclusions Drawn from the Schedules.

The American People is the name of a new paper published in Pittsburgh, Pa., by the National Iron and Steel Publishing Company, in the interests of the American people. It will contest for the unquestioned supremacy in the industrial policy of the United States of the idea of complete protection to American industries and American labor. The struggle for Protection now going on in that country is also to decide whether government "of the people, by the people and for the people" shall continue; that is, whether the industrial legislation shall continue to be legislation which shall permit that nation to remain in the future, as it has been in the last twenty-five years, under Protection, a land of happy homes, of abundant employment, of high wages, of large earnings and all the blessings that flow from them. We wish our new contemporary every success.

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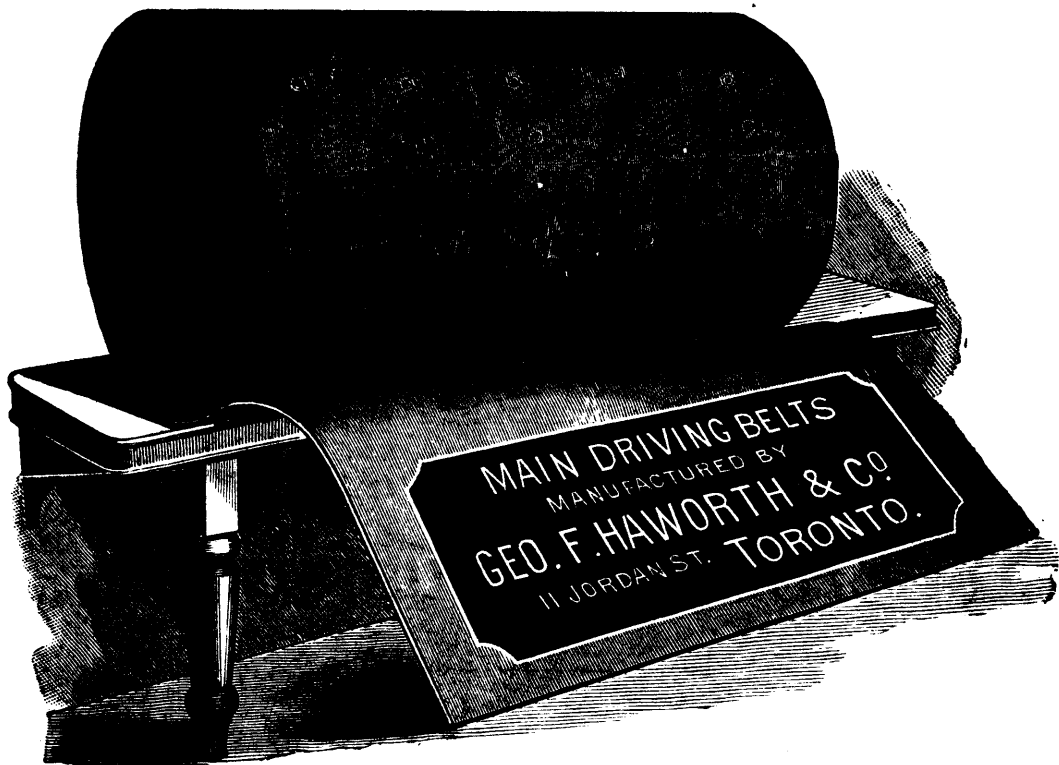
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Progress is a new weekly paper, published at St. John, N.B., the first and second issues of which have reached us. The editorial bow is made in the following ornate style:—"We have come to stay; let us make the best of one another. No idle promises are included in our introduction. We are here to do our best for our country, for you and for ourselves. And we want you to help us do it." The characteristics of the new-comer include good typographical work, good taste in arrangement of matter, well-chosen matter, and good paper and presswork. If *Progress* will give some special attention to the manufacturing industries of the Maritime Provinces it will help wonderfully in "booming" Canada. We hope our new contemporary will meet with unbounded financial success.

Do you know that there are about eighty thousand commercial travellers in the United States? Surprised to hear it? Yes, most people are when they are told of it; but it's a fact, nevertheless. You may also be surprised to learn that each one of them spends on an average \$3,000 a year, or a total of \$240,000,000. If you add to this their salaries, averaging at the least \$1,000, you have a total expenditure by commercial travellers of \$320,000,000 a year. This is naturally spent in all parts of the country; but the hotels and railroads get the lion's share of it. During the last ten years there has been a great change in the character of the commercial traveller. The old Bohemian type has almost entirely disappeared from the road, and drinking men are much more rarely met with than formerly.—*A Drummer in Jewellers' Weekly.*

THERE is a great deal of discussion upon the tariff nowadays, and intelligent men,—men of great business ability who have achieved a high degree of success—hold diametrically opposite views on this question. Unquestionably the prime cause of progress and prosperity in America is invention. If he who makes two blades of grass grow where but one grew before is a benefactor of his race, then he who renders it possible to multiply production in manufacturing at a saving of time and labor, increases the wealth-producing power of the people. Labor-saving machinery has multiplied agricultural products many fold; improved processes of manufacturing iron and steel have been of incalculable benefit in promoting general welfare, and so in other lines, whatever facilitates cheaper production brings blessing to all the people.—*American Artisan.*

OUR OPPORTUNITY.

OUR neighbors across the line seem likely to afford us an opportunity of entering their markets as they did ours before the days of our National Policy, when they slaughtered their surplus stocks at prices with which our own manufacturers were unable to compete. That such an opportunity may come to us seems well-nigh incredible, but many of our manufacturers are forecasting the results that must, they say, inevitably follow the passage of certain tariff legislation now before the United States Congress, and said to be so strongly supported as to warrant the belief that it will pass and become law. We are advised of several leaks in the proposed legislation that will let in our manufacturers—for a time, at least, or until the Americans discover the flaws and mend them by amendments. Some years ago the manufacture of shellac varnish was carried on here in bond for the United States market, from United States alcohol and gum that with us is on the free list—this enterprise netting its promoters a fortune before our United States friends could mend the hole their clumsy methods had made in their tariff. We have one local industry equally enterprising, namely, the wood screw industry—the promoters of which are actively preparing to go for the United States market with their product, if the legislation spoken of is passed. They are now running every machine in their works overtime, and piling up stock, and have withdrawn from sale their large mill in Dundas, which they occupied before they removed their works here, and are pushing the work of getting it in order to receive machinery from a United States screw company, which has capital invested in the Hamilton concern, and which will fill the old works at Dundas with its machinery at once, when the time comes. The president of the Hamilton company tells us that the engines, boilers, main shafting, piping, etc., are all in position at the Dundas mill, and nearly ready to put in operation. He is also preparing plans to add an extra storey to the new mill here, which will, he thinks, be sufficient to take full advantage of the proposed break in the United States tariff, and all those would be prudent to invest here for the United States markets alone, for he is sanguine that the United States Government will sooner or later stop the hole in its tariff. We have other industries, such as the manufacture of knitted goods, which are likely to find their opportunity as well.—*Hamilton Spectator.*

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. J. C. WILSON, Montreal, is about building an extensive paper box factory.

A FINE steady flow of natural gas has been struck at Collingwood, Ont., at a depth of 130 feet.

MR. C. H. DOXSEE, Campbellford, Ont., has recently placed a Toronto-built Corliss steam engine in his planing mills.

THE St. Catharine's Natural Gas Company, St. Catharines, Ont., has been incorporated with a capital stock of \$125,000.

MESSRS. GRAY, YOUNG & SPARLING, Seaforth, Ont., during the month of April shipped 102 cars of salt from their salt works.

THE manager of the Erie Iron Works, St. Thomas, Ont., proposes to extend operations, and will ask for a bonus of \$3,000.

MR. A. J. GREEN, Essex Centre, Ont., will build a fine grist mill at Belle River, on the site of the one recently destroyed by fire.

MR. W. L. KEIR, Campbellford, Ont., manufacturer of woolen goods, has just introduced a fine Corliss steam engine into his mills.

MR. JOHN REID, whose wooden mill at Osceola, Ont., was destroyed by fire some time since, is building a new mill at Portage du Fort, Que.

A NEW milling company is in process of formation at Birtle, Man., with a capital stock of \$15,000, who will build a large flouring mill.

MR. J. A. TESKEY, Appleton, Ont., manufacturer of woolen goods, will enlarge his works so as to include the production of some special lines of worsteds.

MESSRS. TAYLOR & BATE, St. Catharines, Ont., suffered the complete destruction of their brewery May 10th; loss about \$30,000. They will probably rebuild.

MR. GEORGE STEEL, Smiths Falls, runs one of the largest planing mills of that place. He also manufactures doors, sashes, blinds, counter shelving, flooring, etc.

THE Campbell Sewer Pipe Company, Hamilton, Ont., have been awarded the contract for supplying Winnipeg with all the pipe to be used during the ensuing year.

MESSRS. LAW & PEARSON, Neepawa, Man., are about calling for tenders for the erection of a 50,000 bushel elevator. It will be fitted with the best machinery throughout.

MESSRS. WORKMAN & WATT, Brantford, Ont., are substituting new and expensive steam machinery in their brick works in the place of the horse-power formerly used.

MR. H. D. EVERETT, St. John, N.B., is manufacturer of Everett's flexible wire-bound fence, ornamental fencing for gardens and lawns, and of standard fencing for railroads, farms, etc.

THE Chatham Harvester Company, Chatham, Ont., are making average shipments of five of their new steel twine binder harvesters per day, and about an equal number of mowers.

THE Nanituck Silk Co., St. John's, Que., have commenced work in their new factory. When fairly started, the company will bring some practical operators from its factory in Nanituck.

MR. JAMES CROSSEN, proprietor of the Crossen Car Works, Coburg, Ont., has been awarded a contract for building a large number of freight cars for the Canadian Pacific Railway.

MR. FRED THOMPSON, electrician of the Royal Electric Co., Montreal, has been invited to lecture before the Art Association of Sherbrooke, Que., upon "The Wonders of Electricity."

THE Western Lumber Company, with headquarters at Toronto,

have applied for incorporation with \$300,000 capital stock, for the purpose of manufacturing lumber, flour, paper, etc.

Mr. L. Bousquet, St. Johns, Que., who recently added much new machinery to his extensive sash and door factory, is now erecting another very large warehouse for storing his goods.

A JOINT-STOCK company has been formed at Sackville, N.B., who will acquire and operate the Colonial Foundry at that place. Work will be resumed as soon as the plant can be put in order.

THE planing and lumber mills of Mr. George Augustine, Port Colborne, Ont., were recently totally destroyed by fire, loss about \$5,000. It is understood that Mr. Augustine will rebuild.

A BY-LAW granting a bonus of \$6,000 to Mr. Still, of Tilbury Centre, Ont., to move his wood-work factory to St. Thomas, Ont., will be voted on by the ratepayers of the latter place, May 22nd.

MESSRS. SCHULTZ BROS., Brantford, Ont., have been awarded the contract for the construction of the buildings for the new works of the Brantford Wagon Works, recently largely bonused by that city.

THE J. C. McLaren Belting Co., Montreal, manufacturers of belting, hose, lace leather, card clothing, loom reeds, etc., display a very beautiful card in the front cover of this journal. It should be inspected.

THE Berthier Beet Sugar Works, at Berthier, Que., of which Mr. Skaife is manager, have contracted to take large areas of beet root from neighboring farmers the coming season to be converted into sugar.

MR. J. W. BRALEY, Montreal, will establish a laboratory for the manufacture of dyes for domestic use. Mr. Robert Mercer, formerly head dyer at the Rosamond Woolen Mills, Almonte, Ont., will be superintendent.

MESSRS. J. E. ELLIS & Co., Toronto, are to place one of their No. O Howard clocks in the Peterborough, Ont., city hall at a cost of \$730, giving a written guarantee that it will give good satisfaction for twenty years.

THE new pulp mills at South Bay, near St. John, N.B., heretofore alluded to in these pages, will be constructed without delay. Contracts have been let, and it is expected that manufacturing will be begun next fall.

MR. D. J. O'KEEFE, Hespeler, Ont., desires a situation as finisher in a woolen factory. He has had charge of such business for many years, is thoroughly competent and reliable, and can produce the best references.

MESSRS. R. H. SMITH & COMPANY, St. Catharines, Ont., proprietors of the St. Catharines Saw Works, have resolved themselves into a joint stock company (limited), without change of name, with a capital stock of \$75,000.

MESSRS. JOHN BERTRAM & SONS, proprietors of the Canada Tool Works, Dundas, Ont., have built the machinery, etc., to go into the pressed and stamped goods factory of the Stone Manufacturing Company, Hamilton, Ont.

THE by-law voted on a few days ago by the ratepayers of Oshawa, Ont., granting a bonus and tax exemption to the Williams Piano Company, of Toronto, was carried almost unanimously, only six votes being cast against it.

THE Ever Ready Dress Stay Company, Windsor, Ont., have met with such large success in business that they are compelled to move into more commodious quarters. This new industry in Canada is in a most flourishing condition.

A WEALTHY New York syndicate proposes to start extensive iron works—employing about 5,000 men—at New Glasgow, N.S. Concessions have been granted by the town council, and the agent has gone to Ottawa seeking a subsidy.

MESSRS. HARDING & SHERIFF, Brockville, Ont., manufacturers of wringers, wooden ware, etc., report business good, having to turn out an immense quantity of goods daily to supply the demand. Their works are being run over-time.

MR. FRED KNELL, Berlin, Ont., manufacturer of hosiery and knitted goods, has recently been adding a steam engine and boiler and a quantity of machines and machinery to his works, and is now turning out large quantities of goods.

W. H. GOULD, proprietor of the Rideau Foundry, Smiths Ont., manufactures mowing machines, horse rakes, etc., also

Barnum Wire & Iron Works, WINDSOR, ONT.

Bank and Office Railing, in Brass, Iron, Steel, Bronze or Plated.
Church Metal Work, Altar and Pulpit Rails, Lecterns, etc.
Architectural Iron Work of all kinds. Stairs, Gates,
Fences, Stable Fixtures, Elevator Cabs and Enclosures, Grates, Fire Places, Andirons,
Fenders, Fire Screens, Hall and Newel
Lights. Fine Brass Castings, Fine
Forging, Nickle, Brass and Copper
Plating, Spinning, Artistic
Metal Work.

DESIGNS AND ESTIMATES SUBMITTED. SEND FOR CATALOGUES.

TORONTO AGENT:

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For Specimen of Work, see Bank of Montreal, Toronto.

McMillan, Kittredge & Co.

Head Office, - PETROLEA, ONT.

BRANCH, - STRATFORD, ONT.

MANUFACTURERS OF

OF THE  **OILS**  HIGHEST QUALITY.

— FOR —

CYLINDERS, ENGINES, SCREW CUTTING, ROLLS, WOOL,
HARNESSES, BELTS, SEWING MACHINES, ETC., ETC.

Black Oil (Summer and Winter), Pure Surface Oil, Paraffine Oils,
Red Oil 22° and 25°, and Benzine 62° Gravity.

STOVE GASOLINE, 72° GRAVITY.

IF YOUR DEALER DOES NOT KEEP OUR BRANDS, ORDER DIRECT.

YOUNGER'S COUNTING-HOUSE GUIDE.

Price 75 cts. at Bookstores, or from R. R. Younger, Gananoque, Ont.

" . . . Whole subject clearly though briefly explained without unnecessary verbiage, yet scientific enough to give points to the experienced accountant. . . ."—*Cosmopolitan Shorthand.*

drag and circular saws, horse-power seed drills, stoves, turbine wheels, grist and sawmill machinery, etc.

MESSRS. HOWELL & Co., Ottawa, who propose starting a paper pulp factory in that city, using sawdust for the purpose, will be granted exemption from municipal taxation for ten years provided as many as twenty hands are regularly employed.

THE Patton Woolen Manufacturing Company, Sherbrooke, Que., have contracted with the Dominion Government to make all the scarlet cloth necessary for manufacturing uniforms for the Canadian volunteers, the contract to extend through three years.

MR. J. HOWARD HUNTER, inspector of the insurance branch of the Treasury Department of the Ontario Government, has sent us his abstract report of the affairs of those insurance companies which make annual returns to the Provincial Government.

THE roller mills at Blytheswood, Ont., belonging to Mr. J. J. Minnis, were totally destroyed by fire May 10th inst., loss about \$10,000. The mill was new and contained all the latest and most improved machinery. It has been in operation but a few days.

THE Osborne-Killey Manufacturing Co., Hamilton, Ont., have been awarded the contract for building the pumping machinery for the Kingston, Ont., water works. There were eight other competitors for this work, mostly Americans. The contract price is \$13,500.

MESSRS. WATTERWORTH, SELDON, GIBSON & WHITE, Ingersoll, Ont., have bought out the plant and business of Messrs. Evans Bros. & Littler, piano manufacturers of that place, in liquidation, and will resume operations immediately with a full complement of hands.

MESSRS. A. HARRIS, SON & Co., Brantford, Ont., manufacturers of agricultural implements, are reported in the local papers as saying that never in the history of their concern have so many orders for implements been on their books at this season of the year.

THE Gowdy Manufacturing Co., Guelph, Ont., have been making some heavy car load shipments of agricultural implements to various parts of the Dominion, including New Westminster, B.C. They have recently received a large order for lawn mowers to go to Australia.

MESSRS. LAWSON & BANCROFT, Sherbrooke, Que., manufacturers of the Edison electric light dynamos and Armington and Sims electric light engines, have in course of construction an electric light plant of 125-light capacity for the Jenckes Machine Company of that city.

YOUNGER'S "Counting House Guide," a simple and comprehensive work on bookkeeping, published by Mr. R. R. Younger, Gananoque, Ont., and for sale by all booksellers, is growing rapidly in public favor. It is an exceedingly meritorious little book, well worth the price.

MR. JOHN DONALDSON, Almonte, Ont., is fitting up a new factory which he intends to run in connection with his furniture business. It will be fully equipped with planers, stickers, shapers, turning lathes, and hand and gig saws. The boiler and engine have already been placed in position.

MR. PETER HAY, proprietor of the Galt Machine Knife Works, Galt, Ont., is making considerable additions to his works included in which are a 48x24-foot building, to be used as a grinding shop, and a 40-horse power Wheelock steam engine, built by Messrs. Goldie & McCulloch, of that town.

THE Magog Textile and Print Company's works at Magog, Que., have been using petroleum as a fuel with success. It is thought that twenty-five per cent. will be saved by its introduction. The company will not depend entirely upon petroleum, but will fire some of the boilers with coal and wood.

MR. G. W. CORNWALL, Lachute, Que., manufacturer of organs, has been voted a bonus of \$2,500 and exemption from taxes for fifteen years. The concern will turn out 150 organs a month, and give employment to a large number of men. The erection of the new factory will be begun immediately.

A RECENT invention by Mr. T. Fox, Owen Sound, Ont., of an attachment to facilitate the harvesting of peas, which it is claimed will save the labor of two or three men, has attracted attention in Russia. Mr. Fox has received a letter from Moscow, making enquiries respecting it with a view to adopting it there.

MESSRS. D. A. McCASKILL & Co., Montreal, have offered \$300 to the managers of the Toronto Industrial Exhibition as prizes for carriages varnished with their goods. This firm are extensive and well-known manufacturers of varnishes, etc., and they intimate that they will make a large exhibit at our forthcoming exhibition.

THE new works of the Edison Electric Light Company, at Sherbrooke, Que., are being operated to their fullest capacity filling orders for electric apparatus. The company have just completed a plant to go to British Columbia, which includes one hundred incandescent lamps of sixteen candle power, and one of 150 candle power.

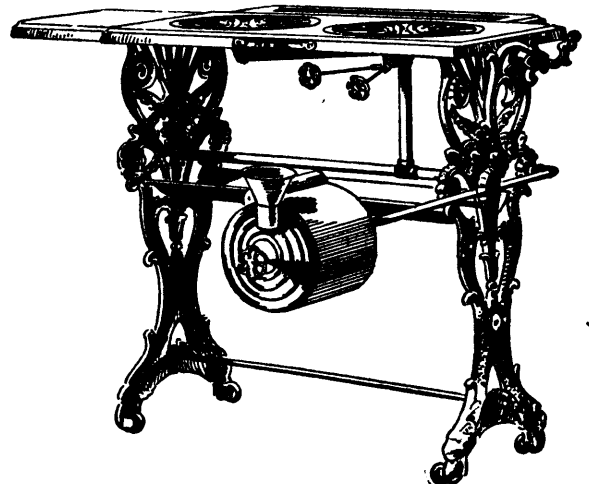
MESSRS. GEO. WILLIAMSON AND THOMAS MEARNS, Windsor, Ont., have secured the right to manufacture and sell in Canada a patented device for turning the leaves of sheet music. By simply tapping a small key the pianist is able to turn the leaves without the assistance of a second party and without in any way interrupting the harmony.

THE Wm. Cane & Son Manufacturing Co. have just placed another second-hand engine in the machine shop of their factory by which they can add from fifteen to twenty horse power to their large engine, or, when necessary, can do work that is pressing over-hours in that department without running all the machinery in the factory. *Newmarket, Ont., Era*

THE Bain Wagon Company, Woodstock, Ont., are making generous use of advertising space in these pages to direct attention to the line of goods manufactured by them, and in which are included light running farm, spring, freight and delivery wagons, carts, heavy sleighs and steel skein log trucks, etc. Descriptive catalogue and price list sent on application.

MONARCH VAPOR

STOVES



(ALL SIZES.)

The manufacturers feel safe in saying that no means of summer cooking ever introduced has gained such a marvellous hold on the public favor. Though only a few years since first introduced, to-day they are felt to be a part of the family economy. So widespread has become the demand for these Stoves that it is claimed that over

ONE HUNDRED THOUSAND

Were sold in the United States during the past year.

They are especially servicable for summer use, doing the entire work of any ordinary cook stove, and with an absence of heat so desirable in hot weather.

These Stoves are very simple in operation and no more dangerous than an ordinary Lamp.

EVERY STOVE WARRANTED.

MADE BY

McCLARY MANF'G. CO'Y

London, Toronto, Montreal & Winnipeg.

THE M.C.R. appears to be doing its level best to drive all manufacturing establishments from their line. The latest is the Still handle factory at Tilbury Centre. One of the reasons for removal to St. Thomas is that the freight on manufactured goods is eighteen cents per 100 lbs., while on raw material it is only five cents per 100 lbs.—*Amherstbury, Ont., Echo*

A new industry in Pennsylvania is the manufacture of brick from the refuse at the slate quarries. A sample recently shown was a beautiful specimen, and the polish equal in many respects to the glazed brick. All the colors of slate can be utilized. They absorb very little moisture, and it is claimed that they can be manufactured at a profit at \$6 per thousand.

THE Stone Manufacturing Company, Hamilton, Ont., will soon occupy their new factory. The company will manufacture lanterns, pressed and stamped tinware, and other specialities. The building is of brick, two stories, 130x36 feet, and is very solidly built. The machinery was manufactured by Bertram & Sons, of Dundas, and is ready to be placed in position. About fifty hands will be employed.

THE great demand for cedar, especially during the past fifteen years, has served to develop an industry second only to that of pine. The supplies necessary for street paving, telegraph and electric poles, and cedar fence posts has sent large gangs into the cedar swamps and to-day the cedars of Canada alone far transcend in the yearly value of the output the historic cedars of Lebanon.—*Brantford, Ont., Expositor.*

MESSRS. AVIS & Co., Toronto, are introducing machinery into their mills for spinning flax. It is claimed that this will be the first machinery of the kind in Canada, and that this concern will be the pioneers of the linen industry. Mr. Avis claims to have produced the most perfect flax twine machine yet invented. The firm are now putting in thirty machines for the manufacture of braided cord and shoe and corset laces.

THE Ontario Rubber Company's factory at Port Dalhousie, Ont., which has been closed for over a year, started up May 15th. A large quantity of material which was on hand will be manufactured into finished goods as fast as possible. The property has been purchased by a joint stock company, and the works are under the management of Mr. Thos. J. Shean, formerly of the L. B. Smith Rubber Company, of Setauket, R.I.

THE Victoria Mills, Almonte, Ont., owned by Messrs. Elliott & Co., are among the most important concerns of that thriving town. Water and steam supply the motive power. There are two steam engines the aggregate power of which is one hundred and fifty horse power. The mills contain 3,000 spindles and forty-one broad and narrow looms, the goods manufactured being fine and medium tweeds. One hundred and fifty hands are employed.

THE Imperial Fire Insurance Company are making very extensive alterations in the building recently occupied by the Canadian Pacific Railway Company, as offices, in Montreal, and contracts have been awarded in the matter to some of our friends in that city, as follows:—Messrs. H. R. Ives & Co., for iron work, \$30,000; Messrs. Miller Bros. & Mitchell, for elevators, \$10,000; and Messrs. Robert Mitchell & Co., for plumbing, \$6,000.

MR. GEORGE CASSADY, of Chatham, N.B., and Messrs. Leamy & Kyle, of Vancouver, B.C., have formed a partnership under the name of George Cassady & Co., for the purpose of manufacturing sash, doors, etc., at Vancouver. They have commenced the erection of their factory, the main building of which will be 75x50 feet, two stories high. Machinery for the plant is on the spot. A shingle mill will also be run in connection with the factory.

THE Smiths Falls Stove Works Co., Smiths Falls, Ont., make a special line of cooking and heating stoves, and manufacture castings of all descriptions. The proprietors of these works, Messrs. Johnston and McGregor, established the business five years ago, since when they have built up a large business. They have recently issued a catalogue calling attention to their special line of stoves, stovepipe registers, hollow-ware, castings, etc., which can be had on application.

We are indebted to Mr. James M. Swank, general manager of the American Iron and Steel Association, Philadelphia, Pa., for his annual statistical report to his Association, in which is contained complete statistics of the American iron trade for 1887 compared with 1886, and

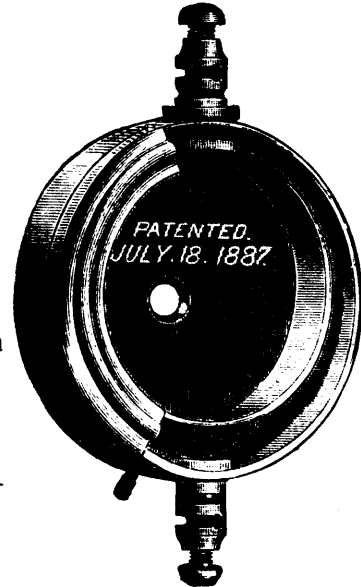
W. C. HIBBARD, MONTREAL, MANUFACTURER OF

Campbell
Water-proof
Wires.

Annunciator
and
Office Wire.

Silk and Cotton
Covered
Magnet Wire.

Aerial and Sub-
marine Cables.



Superior
Water-proof
Tape.

Telephones.

Hotel & House
Annunciators.

Gas Lighting
Apparatus.

Burglar Alarms.

AUTOMATIC FIRE ALARM APPARATUS

And all Electrical Appliances and Supplies.

a brief review of the present condition of the iron industry in foreign countries. The report bears date May 1st instant, and is therefore the latest authoritative information extant.

MESSRS. ROBIN & SADLER, Montreal and Toronto, manufacturers of leather belting, etc., have been making shipments from their factory of the belting made by them for the Lake of the Woods Milling Company's new mill in Manitoba, previously alluded to in these pages. Included in the shipments were about 7,000 feet, of all sizes ranging from two inches to two feet in width. One piece was a double leather driving belt 24 inches wide, and 360 feet long, weighing about 1,400 lbs.

THE officers in New York of the Kingston and Pembroke Iron Mining Company have been informed that the first cargo of ore since the reopening of navigation had been shipped. The letter contained the more gratifying intelligence that the shipment was to one of the largest consumers of iron ore at Pittsburgh, who promises to take the entire product of the principal mine if the present consignment should prove to be satisfactory. The officers look for a large business.

MR. D. G. MCKAIN, representing a syndicate of New York capitalists, has been in New Glasgow, N.S., negotiating for privileges looking to the erection there of an immense iron manufacturing plant. It is said the company would be able to put four million dollars in the enterprise, and would give employment to at least five thousand men. The scheme looks big, and it is said that a bill was passed at the last session of the local legislature incorporating this company.

ROMPTON '1888' WOOL COMBS.

ROMPTON Loom Works.

WORCESTER, MASS. COTTON, WOOLEN, SILK. TAPE & CARPET LOOMS.

THE severity of the sentences passed by British rural justices upon poor unfortunates who have been driven by hunger to steal some trifling article of food, has often been commented upon by Canadian and American newspapers. Justice in the State of Georgia must be every whit as stern. Recently a man was sentenced to six months in the convict camp by the Savannah City Court for stealing two tomatoes!

THE Maritime Machine & Car Company, Sackville, N.B., has been incorporated with \$25,000 capital stock, for the purpose of the manufacture and sale of brass and iron hardware, builders' hardware, mill machinery, engines, locomotives, boilers, cars, stoves, ploughs and castings of all kinds, and all kinds of wooden machinery; for the purchasing, repairing and selling second-hand engines, locomotives, boilers, cars, and machinery of every description, and for a variety of other purposes.

THE Courtright Salt Company, Courtright, Ont., who began boring for natural gas near their salt works a few days ago, have been rewarded by striking a remarkably fine flow, at a depth of 104 feet, which, when coming to the surface, exploded with a loud report, throwing the sand, water and debris to the height of 100 feet. The gas is burning, and at night the country for miles around is illuminated by it. There is great excitement, and arrangements are being made for the sinking of other wells.

THE Town of Smiths Falls, Ont., is a thriving and industrious place. Nature assists the town with a splendid river, giving ample water power to an unlimited number of mills and factories, and good railway facilities go towards making it a most desirable situation for manufacturers of all kinds. Among the more prominent manufacturing concerns of the place is the Smith's Falls Woolen Mills, owned by Mr. D. Allport which produces a splendid line of tweeds, blankets, flannels, stocking yarns, etc.

MR. THOMAS BARROW, Montreal, has obtained patents for new and useful improvements in the process of smelting iron ore by the use of peat and mineral oil gas. By means of a small tube placed in the tuyere, a jet of gas is produced by the evaporation of mineral oil, and this gas, having a very high temperature, coming in contact with the burning peat augments the intensity of the heat and gives a great activity to the combustion. The process, Mr. Barrow says, has been employed in England with success, and he hopes to see it introduced into Canada.

A SILLY rumor was floating about town lately to the effect that the Cortland people had decided to drop all negotiations and the offer of the city to bonus them and give up the project of a Canadian factory. There has, it is true, been unexpected delay in the letting of the contract for the erection of the buildings, but there is no truth in the report that they had decided not to locate here. That is a settled conclusion. The factory will be built and there is no necessity for all the vague rumors that are being continually circulated.—*Brantford, Ont., Ecpositor.*

MESSRS. FIELD BROS. & Co., Montreal, manufacturers' agents and importers, are now occupying their new premises at 30 Lemoine St. They deal largely in sulphuric, muriatic, and nitric acids, chemicals, dyewoods and extracts. This firm established their business in Montreal a little over a year ago, but were burned out in February last. They have now leased the premises alluded to, which are much more commodious than their old quarters. They are agents for The Canada Chemical Manufacturing Co., London, Ont., and the Harway Dyewood and Extract Co., New York.

THERE was a fire at the cotton duck factory in Yarmouth, N.S., a few days ago, caused by a spark from a nail passing through the cotton picking machine, which ignited the cotton. The automatic sprinklers were opened by the heat and kept the fire down till the men, who have a complete fire brigade, got the hose from the several hydrants to work, and after some trouble got the burning cotton out without the building catching. About twenty bales of cotton were damaged, and the loss will be some \$200 or \$300. Messrs. Robert Mitchell & Co., Montreal, are manufacturers of automatic sprinklers.

MESSRS. C. W. ALLEN & Co., Toronto, are manufacturing the "Dandy" patent bag holder for which they are enjoying a large and increasing demand. The holder may be conveniently attached by the jaws to the front of a grain-bag, the head of a barrel, the tail-board of a wagon, to a bar screwed under the handles of a truck, to two staples or screw-eyes, or any other suitable support. The jaws will fit any ordinary width of board, and they allow of the holder being tilted at an angle when commencing to fill a bag. Then

NOTICE TO CREDITORS.

Williams vs. the Burn & Robinson Manufacturing Company.

The creditors of the above-named, the Burn & Robinson Manufacturing Company, are required to send in their names and addresses, and the particulars of their debts or claims, to Henry Stephens, of the City of Hamilton, the official liquidator of the said company, on or before the 29th day of May, A.D., 1888. And if so required by notice in writing from the said official liquidator, they are to come in and prove their said debts or claims at my chambers at the City of Hamilton at such time as is specified in such notice, or in default thereof they will be excluded from the benefit of any distribution made before such debts are proved.

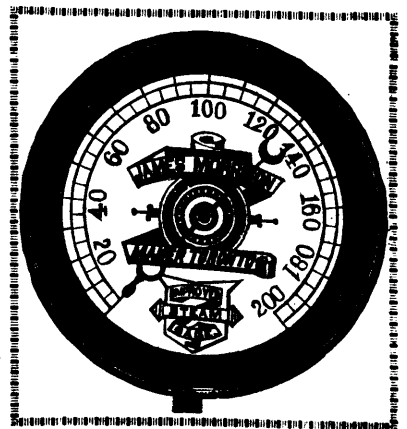
And notice is further given that I have appointed Monday, the 18th day of June, 1888, at 11 o'clock in the forenoon, at my office, in the Court House, in the City of Hamilton, for hearing and adjudicating upon the said debts and claims.

Dated this 7th day of May, 1888.

J. E. O'REILLY,
Local Master at Hamilton.

PARKES, MACADAMS & MARSHALL,
Solicitors for Liquidator.

Crown Water Closet.
Inodoro Water Closet.
Perfect Water Closet.
Enning's Valve Closet.
Demarest Valve Closet.
Alexander Valve Closet.
A full stock of Washbasins, Urinals, etc.
Also, complete stock of Wrought Iron Pipe and Fittings.
Brass and Iron Valves.
Plumbers' and Steamfitters Brass Work.
Rubber Hose, Belting, Packing, etc.
Sole Canadian representative of the Celebrated Hancock Insulator.

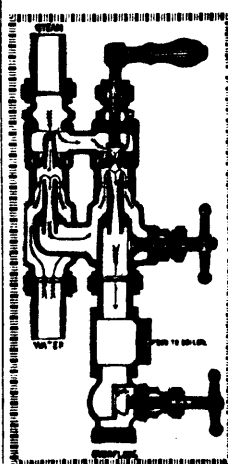


JAMES MORRISON,

IMPORTER AND MANUFACTURER
OF

**Steamfitters' and
Plumbers' Supplies**

**75 & 77 ADELAIDE ST. WEST,
TORONTO.**



SANITARY EARTHENWARE Now in Stock: Morrison's Washout Hopper National Water Closet.

when the bag is nearly full, a slight touch with the shovel under its front causes the holder to assume a level position.

MR. FRED WATEROUS, manager of the Waterous Engine Works Company, St. Paul, Minn., gives a glowing account of the prospects of Mr. G. Goodson, a native of Brantford, Ont., but now of Minneapolis, Minn., the inventor of the electro matrix typesetter. Mr. Waterous states that the president and vice-president of the company formed to push the invention are two of the richest men in Minneapolis, and can easily command \$6,000,000 between them. Mr. Goodson has already been offered \$300,000 for his patent right, but has refused it, and it is generally conceded by experts that the invention will prove even a bigger gold mine than the Bell telephone inventions.

MESSRS. GEORGE F. NESBITT & Co., New York, have sent us "Combinations: Their Uses and Abuses," with a history of the Standard Oil Trust; by Mr. S. C. T. Dodd, solicitor of the Trust. The facts set forth in the book are derived from the testimony given before a committee of the Legislature of the State of New York during its recent investigation relative to trusts. As unpopular as "trusts" generally are at this time, this book presents some remarkable facts which will no doubt commend themselves to the attention of all who are desirous of solving one of the most important economic questions of the day.

THE new steamer *Macassa* built for the route between Toronto and Hamilton, was successfully launched from the yards of Messrs. Wm. Hamilton & Co., Glasgow, Scotland, April 14th, last. The is described as being a handsomely modelled steel twin-screw vessel of the following dimensions:—Length over all, 166 feet; breadth of beam, 24 feet; depth of hold, 16 feet 3 inches; gross tonnage 459 tons. She is fitted with two sets of triple-expansion engines of 750 indicated horse power. Her accommodations are all first class throughout, and she will be one of the very finest vessels that sail upon Canadian waters. It is expected that she will arrive in Toronto at an early day, and begin her regular trips between the cities indicated.

Wide Awake, for May, is before us, and, as usual with all other *Wide Awakes* for all other months, is brimful of just such literary matter as boys and girls, and men and women, take pleasure in reading; for while intended particularly for young people, it contains a great deal of valuable information that older people are glad to acquire. We suggest to all our readers that no more welcome gift could be bestowed upon a boy or girl than this beautiful magazine. The number before us closes the half-yearly volume, in which is comprised nearly 400 pages of the choicest reading matter; while the illustrations are worth many times the cost of the book. *Wide Awake* is published monthly by the D. Lothrop Company, Boston. Price, twenty cents a number, \$2.40 a year.

MR. PETER HAMILTON, Peterborough, Ont., has sent us his new illustrated catalogue of agricultural implements manufactured by him, included in which are self-binders, reapers, mowers, seeders, and all varieties of agricultural tools. These works were established in 1848—forty years ago—and in the introduction to the book Mr. Hamilton calls attention to the great strides that have been made during that time in the improvement and cheapening of this class of manufactures, the cumbersome machines of yore being swept out of existence. The different machines manufactured by Mr. Hamilton are fully illustrated by suitable cuts, and descriptions of them are given in detail, while copious testimonials from Canadian farmers who have them in use testify to their merits. The book is well printed on fine paper and enclosed in a beautiful and appropriate cover, which includes a birdseye view of the Hamilton Works, lithographed in several colors.

THE Rosamond Woolen Co., Almonte, Ont., of which Mr. Bennett Rosamond is manager, is the most extensive and important industrial establishment in that town. It was established in 1857 by Mr. James Rosamond, and operated by him until 1862, when he leased the concern to his sons Bennett and William. The present company was formed in 1870, under the management of Mr. Bennett Rosamond, since which time it has prospered wonderfully, and compares most favorably with any like concern in the country. The company's immense mills were erected in 1866. They are built of stone and cover an area of 310x30 feet, the main building being six storeys high. There are, in addition, dye houses, picker-rooms, storerooms, boiler-rooms, etc., and the business offices are well-arranged and most complete. There are 8,300 spindles in operation and eighty broad and narrow looms, giving employment to over 400 hands. The motive power is both steam and water, and aggregates 500-horse power. The goods produced consist principally of fine tweeds and worsteds.

TERRA COTTA FIREPROOFING

FOR USE IN NEW AND OLD BUILDINGS.

The best thing made. Endorsed by leading Architects Absolutely Fireproof, and "brimfull" of other good qualities. Address,

THE RATHBUN COMPANY,
DESERONTO, ONT.

TORONTO MILL STOCK & METAL CO.

Wholesale Dealers in and Graders of

SCRAP IRON, OLD METALS

PAPER STOCK,
WOOLEN RAGS,

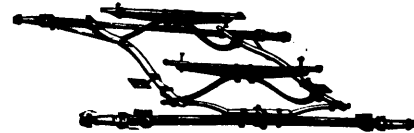
COTTON AND WOOLEN WASTE,

ETC., ETC.

ESPLANADE, NEAR BAY ST.,

Telephone 1319. TORONTO, ONT.

Armstrong's Improved Defiance Gear.



A few reasons why this Gear should be handled by every Carriage Maker, and every Carriage Supply Dealer, are:—1st, They make the lightest and neatest appearing two or three passenger Buggy on the market. 2nd, Hung with our perfect Two Plate Springs they ride easily when light or full loaded, WITHOUT JERK, JOLT, TREMOR OR UNDUE MOTION. 3rd, NOISELESS, and every spring and part of Gear warranted in fair usage. 4th, They go out complete with steps and spring bars ready to bolt to body; the handiest Gear to buy. 5th, The Trade only supplied, AND AT RIGHT PRICES. Send for descriptive Circulars.

J. B. ARMSTRONG M'FG. CO. Ltd., Guelph, Can.

MR. W. G. RICHARDSON, of Montreal, purser of the Dominion Royal mail steamship *Vancouver*, has recently patented in Canada, the United States and England, inventions of his own by which billiards, croquet and cricket can be played on deck. In billiards the deck is used for the table. The cushions are similar to those in use in the ordinary table, and brackets connect the pockets. The framework is thirteen feet by six feet six inches. For the balls flat discs of heavy wood are used, and the cues are adapted for pushing them. Quite a good and amusing game can be had in this manner. In deck croquet the hoops are thin wires standing in heavy discs and placed in position as if they were in a lawn. For balls discs are used similar to those in billiards, and the mallets are the same as the cues. When a number of parties are playing, and there is a good swell on the ocean, there is no doubt but what the game will develop plenty of fun, and while away the tedious hours. Deck cricket is a little more boisterous. The wickets are fixed in a board with bails on top, and an ordinary ball is used. The ball is composed of solid india rubber, attached to a string twenty-five yards long. When the ball is struck the fielders have to go for the rope and pull it in. Mr. Richardson's inventions or adaptations are novel and likely to prove popular.

THE J. B. Armstrong Manufacturing Company, Guelph, Ont., call attention to the Armstrong improved "Defiance" gear manufactured by them, and illustrated elsewhere in these pages. The company give a few reasons why this gear should be handled by every carriage maker and supplies dealer, included in which are that they are exceedingly light and of neat appearance; specially desirable for two or three passenger buggies; are hung with the Armstrong perfect two-plate springs, which ensures easy riding when either light or full loaded, without jerk, jolt, tremor or uncomfortable motion of any kind, and that they go out complete with steps and spring bars ready to be bolted to the body. This gear is supplied only to the trade. Descriptive circulars sent on application.

At a meeting of the Fire Committee of the Montreal Board of Aldermen held May 4, chairman Stevenson spoke of the visit of the committee to the establishment of Mr. W. C. Hibbard, where the "Thermostat" manufactured by him was shown in full operation. The important question for the consideration of the committee was Mr. Hibbard's application to extend the wires of his system into the fire engine houses. It was not a question whether the wires should be strung overhead or underground. The thermostat, he said, was a great invention, and would be a source of great saving of property by giving prompt alarms of fire. Montreal had suffered enough by fires of late years to make the authorities glad to adopt a system which would tend to prevent such losses. If every building were fitted with thermostats the fire risks would be greatly lessened. Mr. Badger, Superintendent of the Fire Alarm, considered the thermostat a good and practical invention that ought to be adopted.

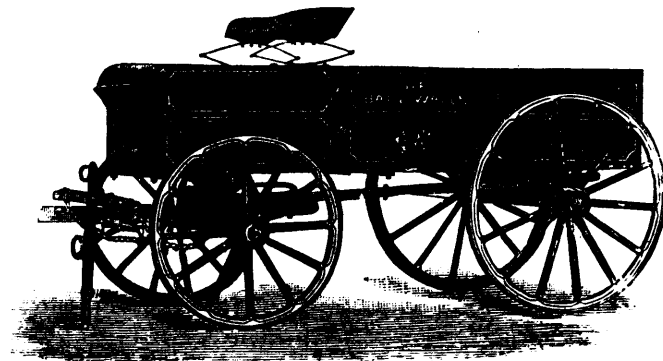
THE Hamilton Steel Wire Nail Company, Hamilton, Ont., are a new concern who have just completed their factory and were to have put it into operation this week. Their present plant includes six machines of the most improved pattern, which plant will be still further increased in a few days by the addition of four more machines, and others will be added as the business may require. It is the intention to manufacture all standard sizes of common and barbed cast steel nails, moulding nails and brads, copper, iron and steel shoe nails and rivets—in fact, every description of nail known to the trade—the material being cast steel instead of iron. It will be the only manufactory in Canada which will exclusively manufacture these nails, and the output at the start will be one ton per day. Mr. Phillips, who will have charge of the manufacturing process, is thoroughly conversant with every detail, and leaves a lucra-

tive position with the Ontario Tack Company to engage in this enterprise. The gentlemen principally interested in the enterprise are Messrs. J. M. Phillips, W. L. Phillips, John H. Foster, Walter Foster and R. H. Labatt.

MR. H W PETRIE, Brantford, Ont., machinist's and general machine dealer, has sent us his lists Nos. 13 and 14, both of which have reference to the machinery and machinery supplies handled by him. Included in these lists are illustrated descriptions of engine, turret, bench, foot power and other lathes of all descriptions, chucks, drill presses, drilling posts, continuous motion ratchet and crank drills, power and hand nut tappers, shell and spiral reamers, automatic bolt cutters and nut tapping machines, milling machines, speed indicators, pressure blowers for cupola furnaces and forges, vises of all descriptions, counter shafts, hangers and pulleys, exhaust fans, tube expanders, steel wire and other tube brushes, jack screws, wagon jacks, case hardened set screws, grindstones, emery wheels, saw gummets, boiler cleaning compound, cylinder lubricators, inspirators and injectors, safety valves, governors, brass and iron steam fittings, rubber and cotton belting, lace leather, belt punches, Dodge wood split pulleys, wood splitting machines, spur and bevil gears, water wheels, spice mill machinery, scales, cracker and biscuits machinery, blacksmith's and machinist's forges, traction engines, stationary horizontal and vertical steam engines in all sizes and for all purposes, portable engines, with boilers both attached and detached, plain horizontal and upright tubular boilers of all sizes, fire box boilers, fire engines, circular and band sawmills and machinery, wood working machinery, etc. Mr. Petrie has recently erected a substantial three story brick addition to his already large warehouse, that portion of it devoted to offices being fitted up with every convenience, the whole establishment being supplied with every appliance required for conducting a very large business. Besides handling new machinery of every description, Mr. Petrie buys, refits, and sells large quantities of second-hand machinery. In connection with his extensive showrooms are his machine shops where every second-hand machine received by him is thoroughly overhauled and repaired, and put in complete order. Embodied in Mr. Petrie's system of doing business are catalogues in which every machine he has for sale is numbered, illustrated and described, so that, the catalogue number and the machine number corresponding, easy and quick reference and information is had whenever desired. A railroad switch along side the warehouse enables the handling and care of all machinery at smallest possible expense.

Bain Wagon Co.

MANUFACTURERS OF



LIGHT RUNNING

FARM, SPRING AND FREIGHT WAGONS

Also Heavy Sleighs and Steel Skein Log Trucks.

SEND FOR PRICES TO

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OPEN FREE TO THE PUBLIC

We are special agents for leading manufacturers of Mill Machinery, Mill Supplies, Belting, Hose, Packing, etc., and will be glad to quote prices and discount to intending purchasers.

Samples of the following lines may be seen in our Permanent Exhibition :—

Wood Working Machinery,
Circular Saws, Mill Saws, etc.,
Saw Grinders, Gummars, Files, etc.,
Belting, Hose, Packing, etc.
Steam Pumps, Power Pumps, Centrifugal Pumps, etc.,
Valves, Steam and Water Gauges, Emery Wheels,
Machine Knives, Platform Scales, etc., etc., etc.

The Permanent Exhibition of Manufacturers
AND COMMERCIAL EXCHANGE,
NICHOLLS & HOWLAND.

THE

MINERAL DEVELOPMENT CO.

OF ONTARIO (Limited).

Capital, - - - \$200,000

In 40,000 Shares of \$5 each, payable \$1 per share on application, and
the balance as may be required for the Company's business.
First issue limited to 10,000 Shares.

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SOLICITORS :

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IMPERIAL BANK OF CANADA.

SECRETARY : ALEX. RANKIN, 20 Toronto Street, TORONTO, ONT.

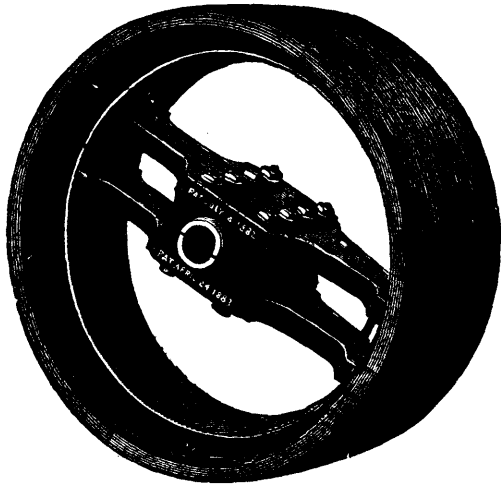
ABRIDGED PROSPECTUS.

1. This Company is being formed to develop mining properties of promise in Canada to a marketable point, and to place them for sale.
2. To act as agents in examining, reporting on and selling mines and mineral lands, and in placing specimens and information concerning them before manufacturers and capitalists.
3. It is not intended that the Company will do mining in the proper sense of the word. The operations will be confined to developing and selling.
4. The money expended on any property will be limited to a fixed sum, which will, in the opinion of the Directors, be sufficient to ascertain the value of the property.

Subscription list is now open at the Secretary's Office, from whom prospectus can be obtained
All cheques to be made payable to HENRY S. HOWLAND, ESQ.

ALEX. RANKIN, Secretary, 20 Toronto St., Toronto, Ont.

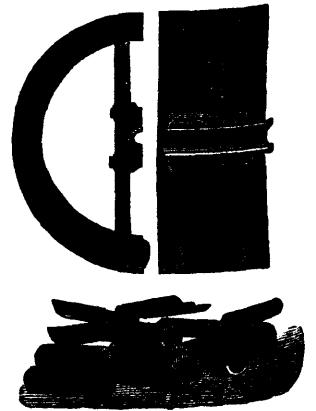
Dodge Patent Wood Separable or Split Pulleys.



Best Belt Surface, Lightest, Strongest, Best
Balanced and Most Convenient
Pulley in the World.

With our Patent Bushing System

Every pulley will fit 22 different sizes of shafting, and guaranteed to give from 30 to 60 per cent. more power from same belt and like tension than any iron or steel pulley. Every pulley a split pulley, 70 per cent. lighter than cast iron, and 50 per cent. lighter than wrought iron or steel. Strong enough for any power required. Made in any size from nine inches to sixteen feet diameter.



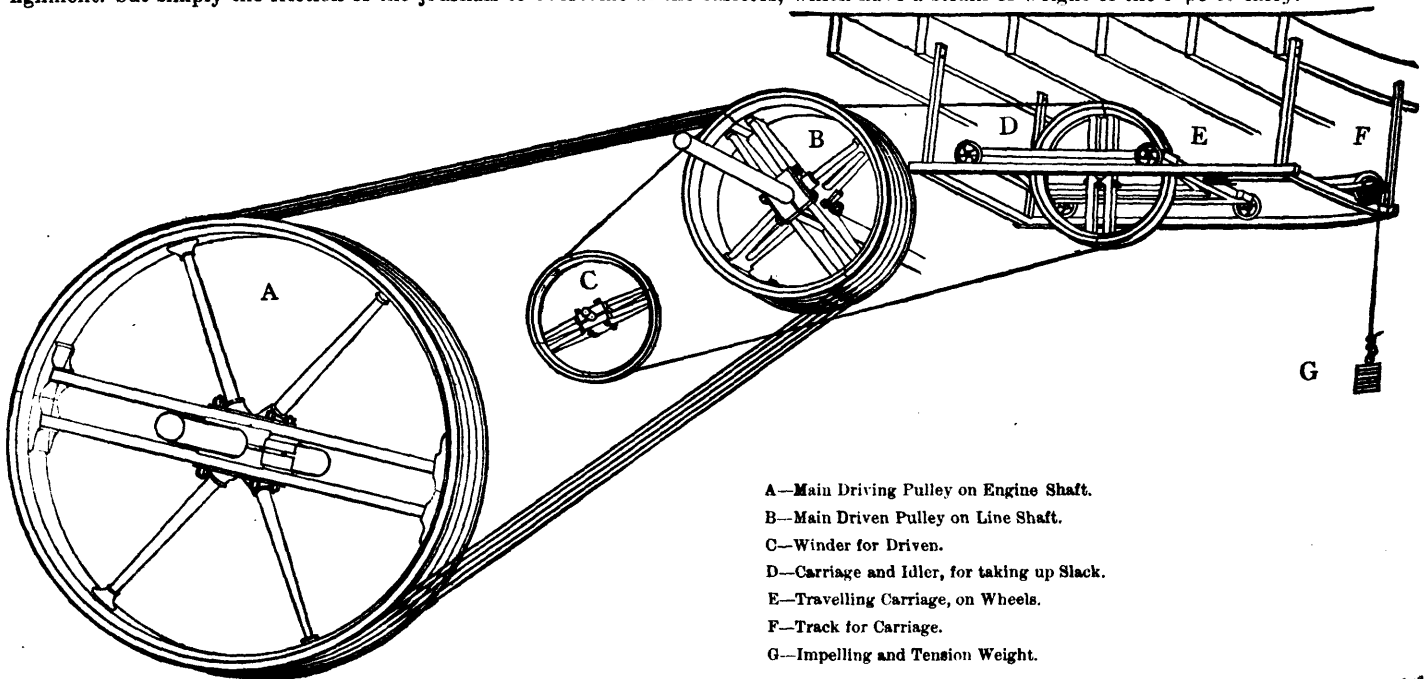
THE TRANSMISSION OF POWER BY ROPES AND THE DODGE PATENT WOOD PULLEYS.

The great advantage of Wood over Iron as a material for belt pulleys (or drums) to transmit power economically, has induced the DODGE WOOD SPLIT PULLEY CO., of Toronto, to introduce grooved hardwood pulleys for the special purpose of transmitting power by ropes (manilla tallow laid), and in this connection Mr. Dodge has taken out Canadian Letters Patent for a system of applying the ropes, adjusting the pulleys, and taking up slack, that is giving the most unqualified satisfaction.

This system of transmitting power by ropes is cheaper and superior belts in many cases, such as where the driven shaft is at right angles with the driver, also where the drive is perpendicular, particularly when it is quarter twist and perpendicular; also where the driver and driven are

close together; also for long drives, such as across a street, or a stream, etc. For transmitting power from an engine to the line shaft this system is unequalled; steady all the time, not like a heavy belt, which is always more or less flapping, jerking and stretching, then slipping and losing power. It is safe to say that an engine hitched up by the Dodge Rope System will do 25 per cent. more work on the same consumption of fuel than the same engine would do with a belt. We have put up a number of the Dodge Patent Rope transmissions during the past year, all of which are in most successful and satisfactory operation, as certified by the testimonials published in our catalogue of well-known manufacturers who have them in use.

WITH OUR SYSTEM OF MANILLA ROPE TRANSMISSION is overcome the objection to Wire Rope (because of crystallizing) and gearing, (because of loss of friction) and shafting (because of the liability to get out of alignment, hence loss of power by friction), and a separate engine plant (because of its great expense); on the contrary, with the Manilla Rope System, under the Dodge patents, the power is transmitted with the same efficiency as though the shafts were close together, there being no loss of power by excessive tension, or bad alignment. but simply the friction of the journals to overcome at the carriers, which have a strain of weight of the rope to carry.



A—Main Driving Pulley on Engine Shaft.
B—Main Driven Pulley on Line Shaft.
C—Winder for Driven.
D—Carriage and Idler, for taking up Slack.
E—Travelling Carriage, on Wheels.
F—Track for Carriage.
G—Impelling and Tension Weight.

The illustration, as shown above, is one of peculiar construction, and represents an engine transmitting its power to the line shafting by the Dodge Patent System of manilla ropes and grooved hardwood pulleys. Transmissions similar to the above are now in use at the works of the following well-known manufacturers in Toronto:—

Wm. A. R. Clark & Co., Leather and Glove Manufacturers, 50 H.P.; T. Tushingham & Son, Builders, 35 H.P.; J. R. Black, Carriage Works, 50 H.P.; Barber & Ellis Co., Stationers, 8 drives, 87 H.P.; Jas. Lochrie, Rope Manufacturer, 60 H.P.; J. P. Wagner & Co., Show Case and Keyboard Manufacturers, 50 H.P.; J. Taylor, Morse Soap Works, 60 H.P.; Joseph Simpson, Knitting Mills, 80 H.P.; and numerous others whose testimonials can be seen in our catalogue. Parties who are in want of anything in this line, or who are interested in the efficient and economical transmission of power, are cordially invited to call at our works and see the ropes and wood pulleys in operation, as we are driving our whole factory by this system. Send for Price List, Catalogue and Cypher Code, for ordering by telegraph, to

THE DODGE WOOD SPLIT PULLEY CO., 89 ADELAIDE ST. W., TORONTO.

Every Instrument **“ BELL ”** ESTABLISHED
 Warranted. **25 Years.**

UPRIGHT PIANOS **CABINET ORGANS**

We have just commenced the manufacture of Pianos—which contain all the best known practical improvements. In quality, the best that can be produced with first-class material and skilled labor.

Have a universal reputation as being strictly first-class, and are recommended by Highest Musical Authorities. In tone, design and workmanship unsurpassed.

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W. BELL & CO. HEAD OFFICE AND FACTORIES, GUELPH, CANADA.

Branch Warerooms at Toronto, Hamilton, St. Thomas, Winnipeg, London, Eng. and Sydney, N.S.W.

Maw & McFarlane
DUNDAS, ONT.

IRON FOUNDERS, ENGINEERS AND MACHINISTS,

MANUFACTURERS OF

Drop Hammers,
 LIFTERS, DIE SINKERS AND PRESSES.

CORRESPONDENCE SOLICITED.



NOTICE.

The Select Committee to examine into etc, combinations said to exist with reference to the purchase and sale, or manufacture and sale in Canada, of any Foreign or Canadian Products, hereby invite all parties aggrieved by such combinations to correspond at once with the undersigned, giving the names of witnesses who are likely to give material evidence on the subject, and to furnish such information and data as may enable the Committee to judge of the testimony offered.

Address
 N. C. WALLACE, M.P.,
 (Chairman Com.)
 House of Commons, Ottawa.

House of Commons, }
 6th March, 1888. }

WHAT OUR CUSTOMERS THINK OF THE
BEAUDRY UPRIGHT CUSHIONED POWER HAMMER.

Office of FROTHINGHAM & WORKMAN, Iron Merchants,

MONTREAL, February 3rd, 1888.

MESSRS. MILLER BROS. & MITCHELL.

GENTLEMEN,—Your enquiry of the 30th ult. as to my opinion of the BEAUDRY UPRIGHT POWER HAMMER, 125 lbs. Head, purchased from you about a year ago, to hand. Would say, it has given perfect satisfaction, and during my experience I have seen nothing to equal it for our work.

Yours truly,

JOSEPH DUNN,

Manager St. Paul Shovel Works.

Can be seen at Permanent Exhibition of Manufactures in Toronto.

MILLER BROS. & MITCHELL, Sole Makers for Canada, MONTREAL

TO USERS OF LEATHER BELTING

SOME PERTINENT SUGGESTIONS.

FIRST { We tan our own Leather especially for Belting.
 We have increased our trade threefold during the last few years.
 We sell our Belting according to a list that is 25% to 30% lower than the American list, which some sell by in Canada.

BUT { We have heard some consumers who are N.P. manufacturers say that they cannot get good Belting made in Canada.

NOW { **WE HAVE CUSTOMERS** { To whom we have sold 3,000 to 40,000 Dollars worth of Belting.
 AMONG THE { One firm alone buying from us last year to the amount of \$10,000 for their Mill.
BEST MILLS IN CANADA.

CAN YOU { **HARMONIZE THESE FACTS WITH** { 1st. That our PRICES are RIGHT?
 ANY OTHER THEORY THAN { 2nd. That our LEATHER is GOOD?
 { 3rd. That our BELTS are WELL MADE?

IF NOT { Send us a Sample Order and see if we cannot please you.

ROBIN & SADLER,
 MANUFACTURERS,

129 Bay St., TORONTO.

Notre Dame St., MONTREAL.

C. C. CLEVELAND.

J. L. GOODHUE & CO.

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MANUFACTURERS OF

LEATHER BELTING

Canadian Leather,
 Canadian Made,
 Canadian Price List.

Thoroughly Stretched.
 Carefully Made,
 Runs Straight.

— AND —

LACE LEATHER,
DANVILLE, - QUE.

OUR BELTING IS MADE FROM

CANADIAN TANNED LEATHER

Tanned in the most careful manner expressly for Belting in our own Tannery. We warrant it equal to any imported, either American or English, or any made from imported American or English Oak Leather. All widths, single or double, for any duty Saw Mills, Cotton Mills, Woollen Mills, Electric Light, etc., etc.

Canadian Manufacturers should use Canadian Belting.

Specimens of these goods are to be seen at the Permanent Exhibition of Manufactures, 63 to 69 Front Street West, Toronto.

By Royal



Letters Patent

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— AND —

FUEL ECONOMIZER

FOR ALL HORIZONTAL BOILERS.

AT PRESENT BEING APPLIED TO FLUED BOILERS.

PRICE IN MONTREAL, \$100 PER FURNACE.

AT MONTREAL WATER WORKS; C. P. R., SHOPS; AND
CANADIAN RUBBER WORKS.

BOILERS SET AND TRAVELS CONVERTED TO NEW SYSTEM.
CORRESPONDENCE INVITED.

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General Merchants and Manufacturers' Agents.

BLEACHED SHIRTINGS,
GREY SHEETINGS, TICKINGS,
WHITE, GREY AND COLORED BLANKETS,
FINE AND MEDIUM TWEEDS, KNITTED GOODS,
PLAIN AND FANCY FLANNEL,
LOW TWEEDS, ETOFFES, ETC.

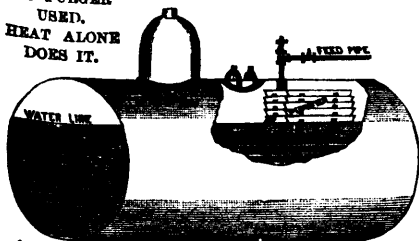
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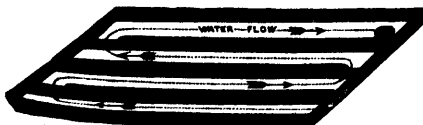
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TORONTO.

PATENT BOILER WATER PURIFIER.

NO PURGER
USED.
HEAT ALONE
DOES IT.



SHOWING POSITION OF PURIFIER IN BOILER.



SHOWING ONE OF THE PANS OF PURIFIER.

THIS PURIFIER ENTIRELY PREVENTS THE FORMATION OF SCALE UPON SHELL AND FLUES OF ANY BOILER IN WHICH IT IS USED. ALL IMPURITIES ARE EXTRACTED FROM THE WATER BEFORE IT REACHES THE WATER LINE, AND ARE DEPOSITED IN THE PANS OF THE PURIFIER.

THESE PANS CAN BE REMOVED, CLEANED AND REPLACED WITH VERY LITTLE TROUBLE, AND IN A VERY SHORT TIME, WITHOUT EMPTYING THE BOILER OF HOT WATER, WHICH MEANS A SAVING OF TIME, LABOR AND FUEL.

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Canadian Rubber Co.

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Patent Pressed Double Strip Rubber Belting,

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etc., etc.

Mould Goods of Every Description.

LADIES' & GENTLEMEN'S TWEED and GOSSAMER CLOTHING

OUR RUBBER GARDEN HOSE IS THE
BEST IN THE MARKET.

J. H. WALKER, - Manager.

FOR SALE.

HORIZONTAL ENGINE

CYLINDER 14 in. x 30 in.

Made by G. BRUSH, complete with Judson Governor, Cut-off Valve, Patent Metallic Packing, Pulley Fly-Wheel 8 ft. 0 in. x 18 in., Hot Water Heater, etc. Also

TUBULAR BOILER 14 feet x 5 feet.

Can be seen working for a short time until replaced by larger Engine.

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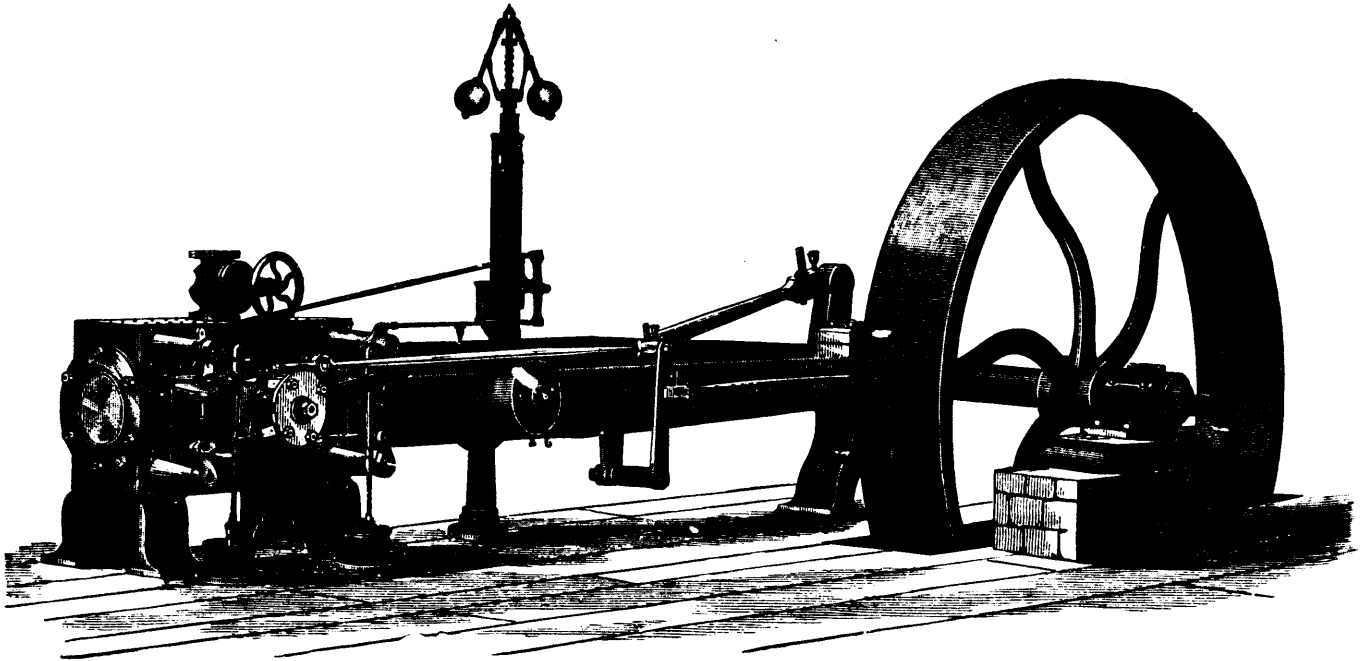
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THE GALT FOUNDRY,

Engine and Machine Works.



THE HARRIS-CORLISS STEAM ENGINE

Is the most perfect Out-off Engine made. For Economy of Fuel, Regulating of Speed, Accessibility of all its Parts, it has many Imitators, but no Equals, and is Unsurpassed.

While many Engines of the same class have been invented, built, tried and abandoned, the Harris-Corliss has steadily gained in public favor, and is now

Without a Successful Rival.

PLEASE NOTICE SOME OF THE ADVANTAGES OF THE HARRIS-CORLISS ENGINE:

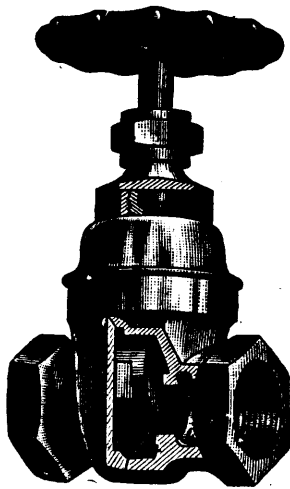
- 1st—**The Steam is admitted at Boiler pressure** to the piston by the main valve and is cut off at the same point, the load determining through the regulator, when the supply of steam shall be cut off. This is the only Engine that thus admits steam at full boiler pressure.
- 2nd—**The success of the Harris-Corliss Engine** lies in the simplicity and precise action of the governing elements; **the Governor** is an independent mechanism, with no extraneous load, and free to instantly respond to all variations in the angular velocity of rotating parts.
- 3rd—**No parts of the regulating medium enter the steam chest** and hereby be out of sight of the engineer, and subject to the corrosive action of steam and the oil used for lubricating the valves and piston.
- 4th—**Regularity of Speed** under varying loads of steam pressure
- 5th—**Recessed Valve Seats** which avoid the liability of wearing shoulders on them
- 6th—**Stop Motion on Regulator** of Engine which effectually stops the Engine whenever the regulator by any means fails to perform its work, thus preventing the Engine from running away.
- 7th—**Having four Valves** either can be adjusted independently of the other with the greatest ease
- 8th—**The increased amount** of power it develops.

We would draw special attention to our new and improved Adjustable Pillow Block, which is pronounced by all practical men who have seen it to be the very best in Canada.

COWAN & CO.,

Galt, Ont., Canada.

Manufacturers of Engines, Boilers and Wood-Working Machinery—all kinds, new Patterns, highly finished.



**WEBER'S PATENT
Straightway Valves**

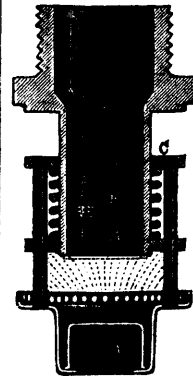
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STEAM, WATER AND GAS,
BEST VALUE IN THE MARKET.

**KERR BROS.
Walkerville, Ont.**

Sole right to manufacture in the Dominion.
Send for Price Lists.

Also manufacturers of COMPOUND MARINE
AND STATIONARY ENGINES.

FIRE PROTECTION.



BUILDINGS EQUIPPED
WITH

**AUTOMATIC
SPRINKLERS**

BY

ROBERT MITCHELL & CO.

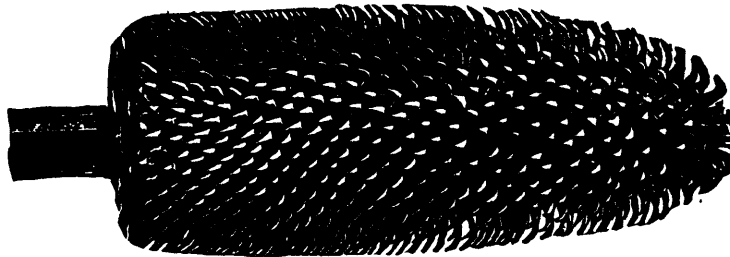
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Write for estimates.

MONTREAL

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SKANEATELES N.Y., U.S.A.,**

Teasels are Grown, Cured and
Packed on own Premises.
NEW YORK OFFICE,
100 & 102 Beards Street
A. H. KELLOGG, Manager.



DEALERS LIST
AND
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American Teasels.
CLIPPED AND PACKED
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Samples sent by Mail upon Application



BUTTERFIELD & CO.

ROCK ISLAND, P.Q.

MANUFACTURERS OF

PIPE TAPS, REAMERS

Pipe Stocks and Dies, Tongs, Cutters, Vises,
and Labor-Saving Tools for Blacksmiths',
Carriage Makers', Machinists'
and Gasfitters' Use.

Send for Illustrated Catalogue, 1887.

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SPOOLS AND BOBBINS

OF ALL SIZES AND PATTERNS,

FOR COTTON AND LINEN THREAD, MACHINE TWIST, SEWING
SILK, AND FOR COTTON, WOOLEN AND SILK
MANUFACTURERS.

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We respectfully solicit your patronage and guarantee our work to be first-class.

TORONTO LITHOGRAPHING CO.

Globe Building, Toronto

MAKE A SPECIALTY OF
Fine Color Work

CHROMO ADVERTISING

CARDS and NOVELTIES

also a Superior Class of Wood Engraving

ST. CATHARINES SAW WORKS.



R. H. SMITH & CO.,
ST. CATHARINES, ONT.,
Sole Proprietors, in Canada, of the
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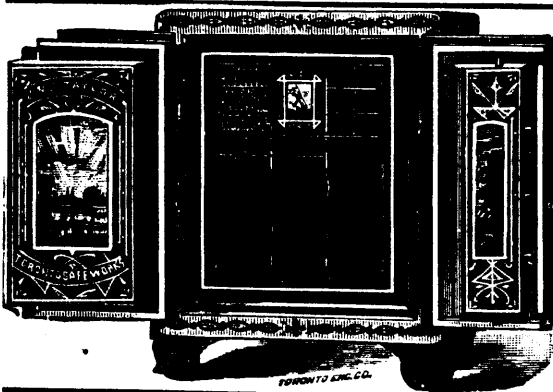
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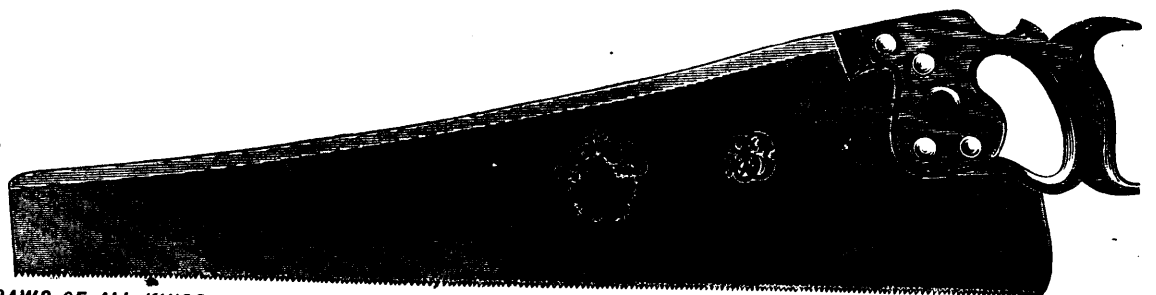
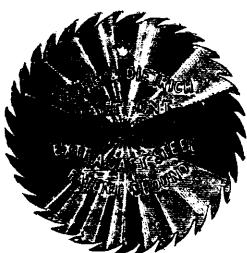
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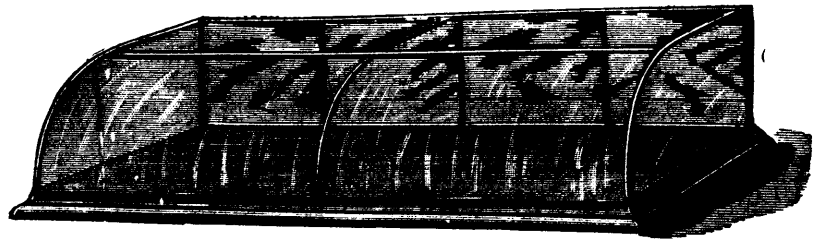
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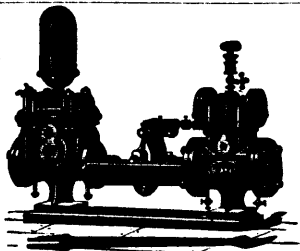
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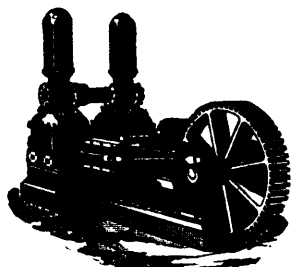
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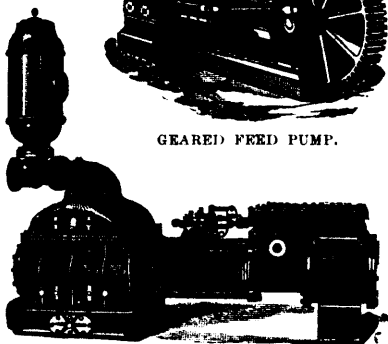
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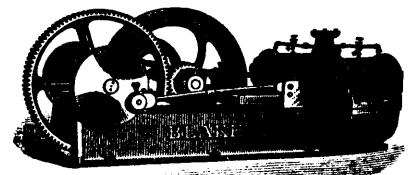
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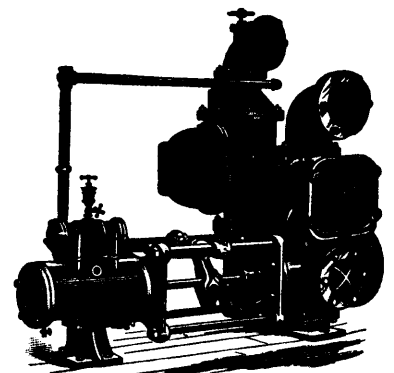
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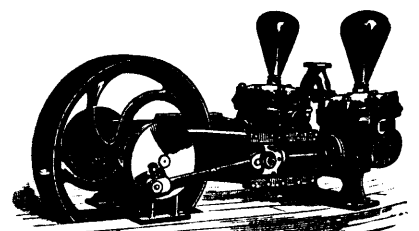
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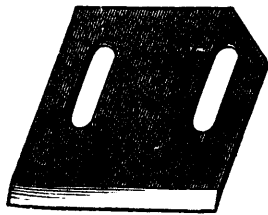
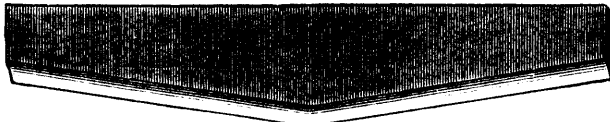
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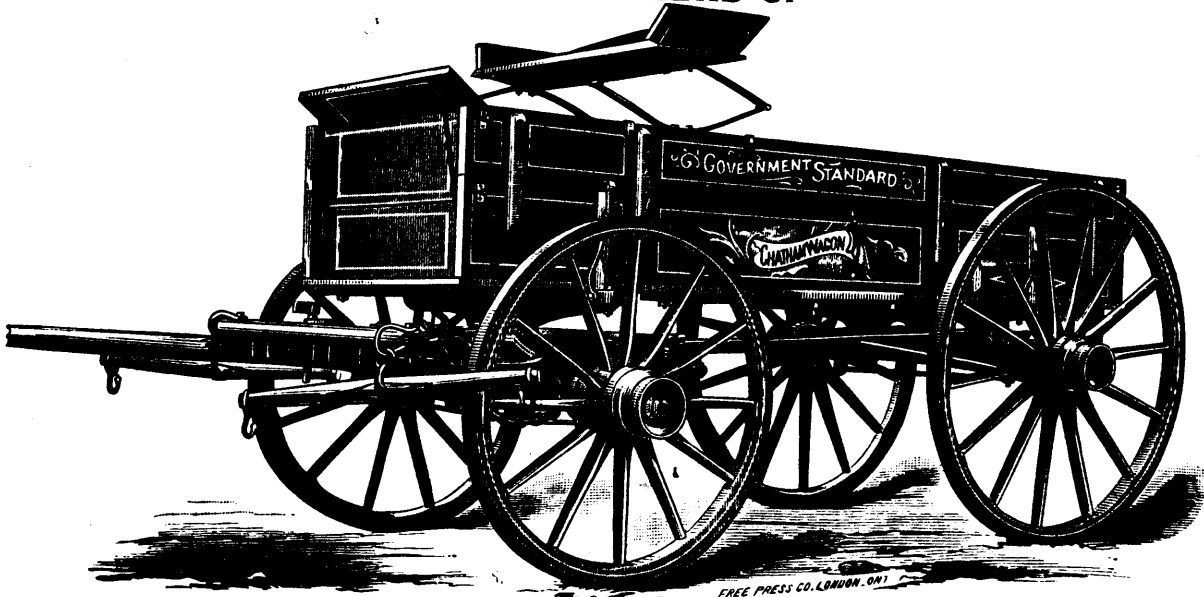
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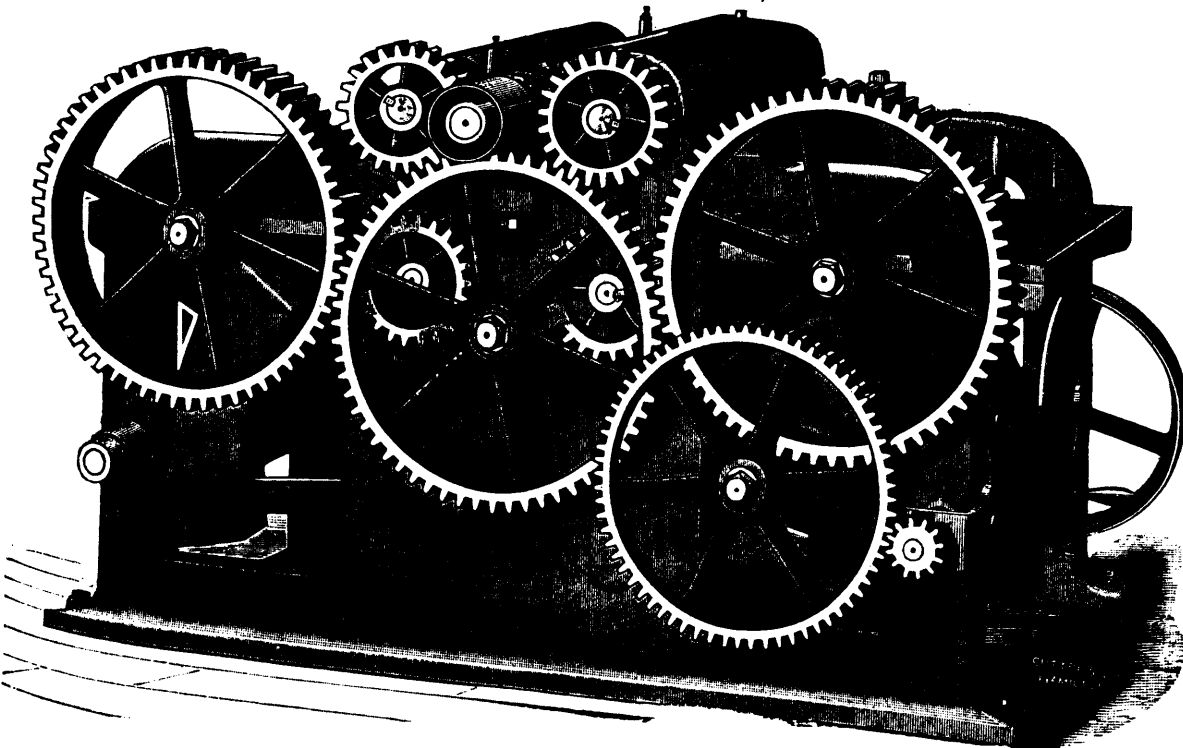
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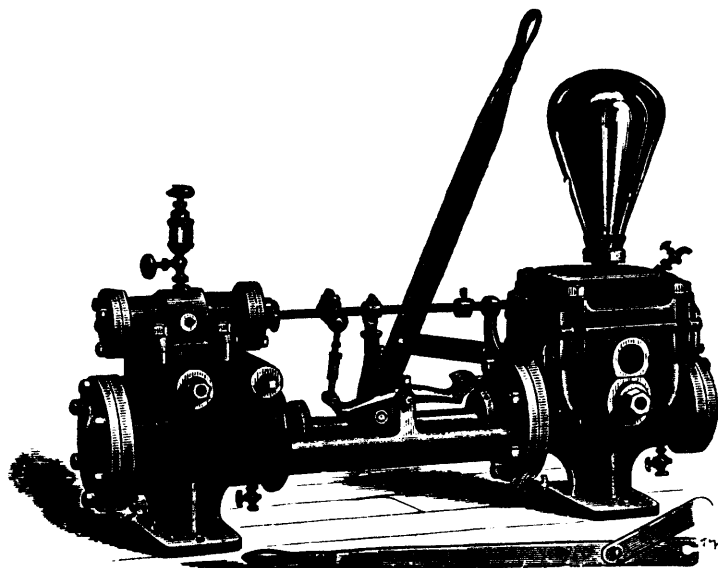
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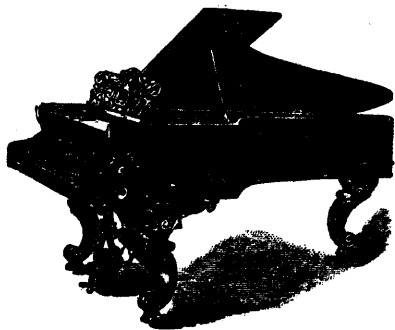
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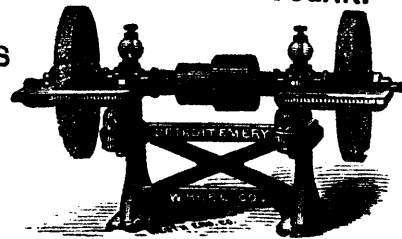
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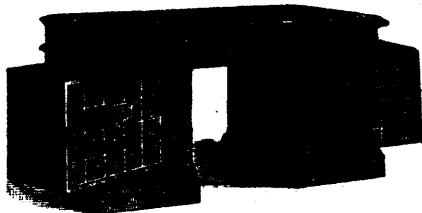
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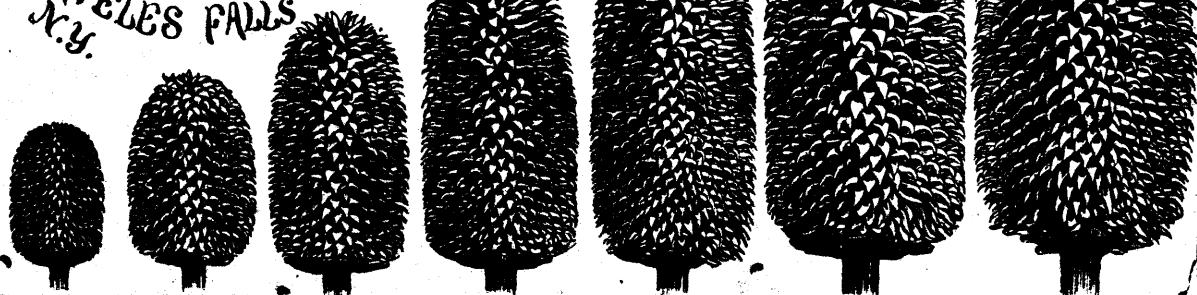
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