

MARITIME MINING RECORD

Dr. R. Bell
Geol. survey dept.

COAL AND METAL TRADES JOURNAL

Cumberland. * Pictou. * Cape Breton. * Inverness

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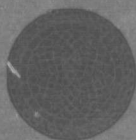
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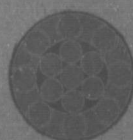
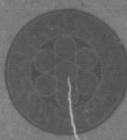
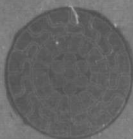
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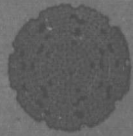
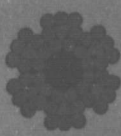
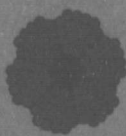
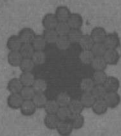
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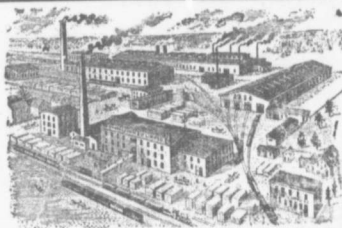
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61 Express from Pictou	7 30
18 Express from New Glasgow	7 35
21 Mixed from Hopewell	7 40
56 Mixed from Trenton	8 00
22 Mixed from New Glasgow	10 55
67 Mixed from Pictou	10 55
55 Mixed from Mulgrave	11 30
19 Express from Halifax and St. John	11 30
139 Mixed from Halifax and St. John	11 30
20 Express from Sydney	11 30
23 Mixed from Pictou Landing	11 30
77 Mixed from Hopewell	11 35
22 Mixed from Pictou	11 35
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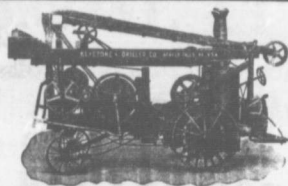
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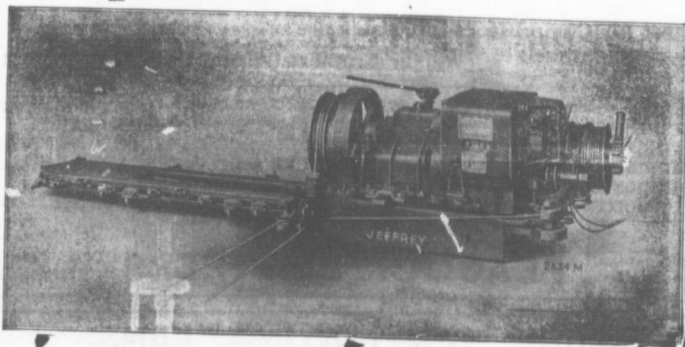
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To No....

MARITIME MINING RECORD

Vol. 11, No. 9. Stellarton, N. S., Nov. 25th. 1908. New Series

SELECTED QUESTIONS AND ANSWERS.

(Science and Art of Mining.)

PRACTICAL MINING.

Q.—Describe the best apparatus with which you are acquainted, and the means of using, for driving a hard heading where the use of explosives is not permitted.

A.—Different kinds of instruments have been described in this Journal from time to time as substitutes for explosives, and these do not need any description here.

The appliance I propose to describe as suitable for driving a hard heading, where explosives are not permitted, is the Hydraulic Mining Cartridge. This appliance differs from nearly all others in this respect, that it does not work on the wedge principle, thus avoiding a large amount of energy which is otherwise wasted where a wedge is used; also it is simple in construction, light and handy to work, and quick in action, as compared with other appliances. The cartridge consists of a steel cylinder, 20 inches long, and 3 inches diameter, and has 8 duplex or double-acting pistons fitted into it. Simultaneous action of the pistons is obtained by means of a small bore-hole, which passes along the cylinder, and communicates with each piston. The pistons, as stated, are double-acting, the top portion, which is solid, fits into the bottom portion of the piston which is hollow; they are then secured together by means of a loose sliding collar which has threads on its inside, these screwing on to threads on the outside of the bottom part of the piston. The pistons are prevented from coming out of the cylinder altogether by means of a shoulder piece cast on the bottom portion of the piston; when the piston has worked out its full travel this shoulder piece meets against a loose plate, which is slid into slots in the cylinder. The cartridge is worked by means of a specially constructed hydraulic pump, which is connected to the cartridge by a pipe, the pump being mounted on a telescopic stand, as shown, and is fitted with a small water tank holding about 112 pints of water. I should have stated that underneath each piston leathers are screwed on to prevent leakage of water. The standard sizes are made to give a pressure of three tons per square inch, which amounts to a total pressure of over 60 tons on the coal. Special cartridges are made for greater pressures. The means for using it are as follows:—

After the coal has been bored (say 3 or 4 feet deep) a 3 1/4 inch hole is bored rather less than the depth of the boring, which is done by means of an ordinary machine and special core drill supplied by the company, this core drill being quite a late adoption, giving good results. The hole is put in parallel with the roof, and as

near as possible along the parting to which the coal usually comes off. It is then cleaned out, and a thin liner 20 inches long is put in to prevent the pistons forcing into the coal. The cartridge with pump attached is then pushed to the back of the hole. The water tank is then hung on to the pipe, the rubber suction pipe coupled to water tank and pump, the suction tap opened, and pressure tap closed. The small handle is then inserted in the pump, and worked for a few strokes until the pressure gets on. The stand is then fixed under the pump, and the extension handle slipped over the small handle. Pumping is continued until the back part of the coal is forced off. The sprags are then slightly slackened, pumping continued again; the pressure spreads over the front part of the coal, and forces this portion off. Pumping being finished, the exhaust tap is opened, which allows the water to run back into the water can. The pistons will then go back into the cylinder, which can be drawn out of the hole. The coal with the sprags still set can either be drawn or left in until the coal is wanted. This operation takes about eight or ten minutes. The machine can be used for stall or long wall work also for lifting coal up or forcing down roofs in mines.

I may state that I have used this machine both for forcing down coal and lifting up coal, both in long wall and headings; also successfully applied it in forcing down roofs in mines, and for lifting or breaking up large masses of concrete and rock on the surface.

This machine has entirely superseded explosives in a large number of mines both in England, Scotland and Wales; also in Germany and Canada. As many as three hundred holes per day have been forced off in one mine by this method, and the demand for the appliance proves its practicability as the most efficient substitute for explosives in forcing down roof or coal in mines.

The advantages over explosives are:

There is no danger of explosions from ignitions of gas or coal dust.

A much larger quantity of round coal is produced.

The roof is not injured after the operation.

Large spaces of unprotected roof are avoided, as sprags can be left in after the operation until coal is wanted.

Its cost is low, as water is used in place of explosives.

There is no obstruction to the workmen as the operation can be performed whilst they are in the place.

Less accidents from flying particles of coal or stone, or owing to timber being blown out.

No dust is caused.

GEOLOGY.

Describe the principal characteristics of the geology

ical formations immediately below and above the Carboniferous System.

A.—In describing the principal characteristics of the above question, it is as well to know what systems lie above and below the Carboniferous System. Above we have the Permian system, which is composed of Magnesian Limestone and Marls and Sandstones, whilst below is the Devonian and Old Red Sandstone.

The limestone of the Permian System is of an impure character which breaks up into thin irregular layers, with similar shaly material made of hardened clay, some of which becomes quite soft on exposure to the atmosphere. Unlike the Red Sandstone, these beds contain fossils, all of which are marine, such as corals, 'stone lilies' (encrinites), etc. The hardened clay under great pressure becomes shale, with a tendency to split into thin layers.

Marl is a calcareous clay—that is, with a mixture of from 10 to 60 or 70 per cent. of carbonate of lime.

The Devonian and Old Red Sandstone are divided into three separate sections—the upper, middle and lower. The Old Red Sandstone is what is termed a group of rocks. The group of rocks agree in the mode of their formation, and differ mainly in the size and nature of the material of which they are composed. A sandstone is made up of grains of sand bound together by something which acts as a cement. In the Old Red Sandstone of the Mendips this cementing material is mostly iron rust and it is the same in many other cases, but we have also calcareous sandstones, in which the grains are united by carbonate of lime, and sometimes the cementing material is more or less siliceous and felspathic.

VENTILATION.

Q.—How would you satisfy yourself that a fiery colliery is adequately ventilated.

A.—In order that I may satisfy myself that a fiery colliery is adequately ventilated, I would, in the first place see that the condition of the ventilation complied with the requirements of General Rule 1, which requires an adequate amount of ventilation to be constantly produced in every mine to dilute and render harmless noxious gases to such an extent that all working places and travelling roads will be in a fit state for working and passing therein.

In my investigation as to the adequacy of the ventilation, my first step would be to examine the fireman's report of their inspection of their respective districts, to see if any gas was reported to be found present in any district. If any of the reports showed that gas was found in any place in any one of the districts, I would at once consider that that particular district was not adequately ventilated. But, on the other hand, if gas was not reported to be found in any one of the districts, this would not be sufficient for me to pronounce the colliery adequately ventilated. Before I could satisfy myself that a fiery colliery was adequately ventilated, and to pronounce it so, I should make an actual and most detailed personal examination of the colliery, and see to my entire satisfaction that it was so ventilated.

Provided with a delicate fire-damp detector, my next step would be to go round the mine

In travelling along the main roads, I would bring my fire-damp detector into operation and test for gas

in each of the return air currents. I would also examine the separation doors and other ventilating arrangements which may be situated in the main roads, to ascertain that the air was properly directed into the air current in the respective splits, in my opinion, to be able to ascertain whether a mine was adequately ventilated or not. If the doors, brattices, air-crossings and other ventilating arrangements of any mine are not properly fitted and arranged, a good quantity of air may pass into the mine and yet be far from being adequately ventilated. So the next step in my investigation would be to examine all the ventilating arrangements and satisfy myself that the air would be properly coursing and directed to every part of the mine so that all gases produced in the mine would be diluted and rendered harmless.

Fiery mines, as a rule, are dry and dusty, and it is now a recognized fact that even as little as 1 per cent. of gas in a dusty atmosphere makes a very explosive mixture; therefore, if I were to find a 'cap' in the main return air current indicating 1 per cent. of gas, I would consider the colliery inadequately ventilated. If 1 per cent. of gas was found in any one of the return air currents, the district from which that particular current came could not be said to be adequately ventilated, and, consequently, it would be impossible to pronounce the whole mine adequately ventilated.

In the faces, where, practically speaking, there is very little of that dangerous fine coal dust, the presence of not more than 1 per cent. of gas in a few places would not render the mine liable to be pronounced inadequately ventilated.

Therefore, before I could be satisfied that a fiery colliery was adequately ventilated, it would be necessary to ascertain not only that there was, practically speaking no gas to be found, but that the air currents passing along the faces were comparatively cool and fresh, so that the workmen would be able to do hard work without exhaustion.

CLERGYMEN AND SOCIALISM.

Dr. Eckman, of New York, in the Christian Advocate, gives some sound advice to the ministers who think Socialism is a sort of practical Christianity. He thinks the minister: "Should not hastily conclude that Socialism is applied Christianity, as is frequently urged, though this contention may have the support of very great names, and though by Christianity may be meant simply the social message of Jesus. There is, doubtless, a strong temptation to link Christianity with Socialism, when one sees the alarming disposition of the working classes to prefer the halls where Socialists are declaiming their doctrines, to the churches where the Gospel of Christ is being preached. But before allowing himself to be persuaded that the churches can arrest this tendency by the adoption of the social teachings of Jesus, the Christian minister should carefully examine the materialistic basis of Socio-socialism, and observe its point of view respecting the process of authority, the highest good of humanity, and He will then discover some fundamental differences which will give him pause. He will see, for example,

that while Socialism teaches that a change of circumstances will effect a change of character, Christianity teaches that a change of character will effect a change of circumstances. This is but one hint, out of many which might be suggested, to mark the essential distinctions which exist between these competing faiths. As he scrutinizes these differences one by one, the student will perceive at length that even those who call themselves Christian Socialists are in many instances Socialists first, and Christians afterward, if they find that Christianity can be used to buttress their opinions; while the true disciples of Jesus are Christians first, and Socialists afterward, if they find that logically, and in loyalty to their Master, they must become such.

He should not forget that the current interest in social problems is traceable to nineteen centuries of Christian teaching more than to any other cause whatsoever, and in countries where Christianity has never been a dominant influence in the lives of the people there is no serious agitation on these questions; He should at the same time frankly admit, in the interests of truth, that organized Christianity has often been a long distance behind the social ideals it was charged with proclaiming and exemplifying by its Founder. This should be credited, however, to human infirmity, and not to Christianity itself. In any case the Christian minister, like every other student of contemporary history, is bound to distinguish between the social spirit of the age, which may have one origin, and any economic scheme which is co-existent with it, and may have a totally different origin.

Going on to discover if possible a "via media" between the extremes of acceptance and rejection of the doctrine, Dr. Eckman declares that "the minister should apply the social teachings of Jesus fearlessly, but equitably, never being deceived into supposing that all Socialists are altruistic and all individualists are selfish."

"On the one hand, extreme Socialists lie open to the charge of caring little for the Golden Rule, when it stands in the way of their accomplishing the revolution which they are inciting; and on the other hand, there are individualists who are proving by heroic sacrifices their faith in the brotherhood of humanity. There are, as Kingsley and Maurice recognized long ago, 'unsocial Christians and unchristian Socialists.'

"As the authorized interpreter of the social teachings of Jesus, he should strive to meditate between the radical Socialists, who are hostile to the Church, and the conservative churchmen, who are impatient of Socialism's methods and ignorant of its motives. One way to deal with Socialism is to regard it as an unmitigated menace to modern civilization, to anathematize it as anarchism (which of all things in the world it is not), and to denounce it as a wicked fanaticism which must be exterminated at any cost. But this is a very bad and futile way to meet it. Too many ministers have already adopted this misguided policy, with the result that they have helped to widen the breach which yawns between the Church and the hand-workers. It is their business to relieve instead of increase the misunderstanding of organized Christianity's attitude toward economic and social reform, which clouds the minds of so many working people. It is perfectly fatuous to tear away from Socialism as though it were a malignant contagion to be shunned by all self-respecting persons. As N. P. Gilman says, 'A people that refuses to talk of Socialism declares its own Philistin-

ism; a church that dreads to inquire how far Jesus Christ was a communist has lost too much of his spirit.'

"It would seem as if the Christian minister were in a peculiarly advantageous position to deal fairly with the economic aspects of the social problem. He is not personally identified with those capitalistic interests which might be presumed, under other circumstances, to influence his judgement. It is true that he derives a large share of his financial support from those who are essentially committed to things as they are. But the average clergyman is much beyond the reach of the bread-and-butter argument, so far as it relates to his own comfort; while over against any disposition which might lurk in his bosom, to permit himself to be unduly affected by the advocates of the current economic regime is the traditional alliance of his profession with the interests of the unfortunate classes, whose miseries, it is claimed, are accentuated by the deplorable conditions of our modern civilization."

WHAT IS SMOKE?

The gases leaving a chimney weigh approximately 30 pounds for each pound of coal burned, this weight consisting of one pound of elements in the coal and 29 pounds of air. This figure (30 pounds) is not arbitrary, as these proportions vary more or less, but for the purpose of illustration will suffice. A portion of this amount of air enters into combination with the fuel in the combustion process, while another portion is not used, but is present as a surplus. Thus a large amount of gas escapes from the chimney. If combustion is complete this gas may be considered as composed of two groups: (a) Products of complete combustion; (b) unused air, which are imperceptible gases giving no visual indication of their presence at the chimney top, so that one would not know whether fire was present in the furnace below or not, yet such gases are the legitimate and proper products of combustion. But if combustion is incomplete, the gases are composed of three groups: (a) and (b) as before, with the addition of (c), the product of incomplete combustion, and it is from this imperfect combustion that the material which gives the black color to the gases is derived. This coloring matter consists of minute particles of carbon which are derived from the gases that are distilled from the coal. When placed on the fire carbon is in combination with hydrogen as one of the components of the fuel. This hydrocarbon gas is expelled by the heat of the fire, and by further heating the combination is broken up, the carbon and hydrogen being separated. Inasmuch as carbon in its free state at all known ranges of temperature is a solid body, it assumes a black appearance after it leaves the furnace and becomes cooled. Thus when the combustion gases from the chimney are of a dark hue, it is because they are coloured with minute particles of carbon, or soot. Thus smoke may be more particularly defined as the coloring matter in the combustion gases rather than the entire mass, although when smoke is present a condition of incomplete combustion necessarily prevails, resulting in the escape of invisible but combustible gases, and it is this condition rather than the black particles of carbon which are instrumental in carrying away undeveloped heat,

EIGHT HOURS FOR MINERS.

The points raised by Mr. A. L. Stevenson, of Durham, in a letter to the Newcastle Chronicle, are of interest, and for this reason we produce the letter herewith:

"The present seems to be a suitable time for taking a dispassionate view of the prospect before us, if and when the Bill as it now stands becomes an Act. If you agree, let us view a few of its features. I give the clauses in a short form.

Clause 1 (1 and 2). A 'workman' which, of course, means those of all ages, shall, after the first of June, 1910, not be below ground for more than 8 hours. From this are excluded officials.

2. (1) The owner, agent or manager is required to keep a register in the form prescribed by the Secretary of State, giving the time in which any man is below ground for more than the time fixed, and the cause of such breach.

2 (2) The workmen in a mine may, at their own cost, station one or more persons as check timekeeper to observe the times of lowering and raising, and (3) any person making a false entry is liable to be summoned, and, on conviction, to be fined not exceeding five pounds.

Here it is well to point out that in what follows, workmen as well as owners incur equal responsibility.

6 (1) If any person contravenes or permits any person to contravene any provision of this Act he shall be guilty of an offence against this Act. (a) In the event of any such contravention the owner, agent, or manager shall not be guilty of an offence if he proves that he has taken all reasonable means to prevent the contravention. (b) A workman shall not be guilty of an offence in case of failure to return to the surface within the time limited by this Act, if he proves he was prevented from returning to the surface owing to means not being available for the purpose. (2) A person guilty of an offence shall in respect of each offence be liable, if he is the owner, agent or manager of the mine, to a fine not exceeding two pounds, and in any other case to a fine not exceeding ten shillings.

This last no doubt applies to workmen.

Now, let us see where we are, for so far as I have experience not one workman in one hundred is aware of the pains and penalties he will be subject to as soon as the act comes into operation.

The first thing an owner will do is to provide that standard time is available on each pithead to meet the workman's excuse which is sure to be raised when summoned, that according to his watch the clock was wrong. He will also be in a position to prove that at a certain time coal drawing ceased, and the winding shaft was at liberty, the engineman was there and ready, the banksmen and onsets were at their posts, and that at a time agreed by the management and workmen notice was telephoned down the pit and into each district. That done, it will remain for the workman to prove if he is late that it was not his fault. Whose duty it will be to examine all these registers and take proceedings is not specified. Our present inspectors will probably say their duties are already quite as heavy as they can manage. New officials will have to be provided to attend to this question, both by the Government and the owners.

I am not gifted with the power of prophecy; therefore, I don't attempt to picture the result in magisterial proceedings, but I want the many underground workers who are your readers to be fully aware of the noose they are putting their necks into when the Eight Hour Act comes into operation.—Science and Art of Mining.

A SOCIALISTIC MINE FAILURE.

The experiment of miners running a mine in the Saint Etienne district, according to a Paris correspondent, has ended in a disastrous failure. The "Mine for Miners," a co-operative society of production, was started in 1890. A grand fete marked the inauguration ceremony, which was attended by several deputies who spoke of the intelligence of the miners who had emancipated themselves. Three years later the managers of the mine quarrelled among themselves. Then litigation began. It ended in several of the founders being evicted from their positions; the rest terminated their connection with the Miners' Union of the Loire, which had co-operated in starting the mine. Afterwards the mine was carried on by share holders and workmen, who were described as auxiliaries. Now it is announced that the mine has failed. There is no money to carry it on, and no further financial assistance can be got. The miners were informed that they would be responsible for finding their own wages. In spite of this announcement 50 miners descended the pit, though they have no guarantee that they will be paid for their work.

The greatest mine disaster in many years in Germany occurred lately at the Radbod mine, about three miles from Hamma, Westphalia. There was a heavy explosion in the mine about 4 a. m., and almost immediately the mine took fire. Of 380 miners working underground at the time only six escaped without injury. Thirty-five were taken out badly injured and thirty-seven were dead when brought to the mouth of the pit. The remaining 302 have been given up for lost. The explosion which was unusually violent, destroyed one of the shafts which had been partly repaired before the work was begun. In addition the flames and smoke proved almost insurmountable obstacles in the early efforts of the rescuing parties. A special corps, composed of the men who rendered such valuable aid in the terrible mine disaster at Courrières, France, 1906, arrived upon the scene shortly before noon, but were unable to enter the mine being forced to await the result of the determined efforts of the firemen to keep the flames in check. In the meantime heart rending scenes were being enacted at the mine when the dead and wounded were brought to the surface, and there was similar scenes in the towns when the injured was transported through the streets to the hospitals. At one o'clock the fire had made great headway and later in the afternoon, after a consultation of the engineers, it was decided that any further attempts to rescue the entombed men were vain, owing to the impossibility of entering the galleries. At the same time an order was issued to flood the mine. First reports indicated that the accident was the result of an explosion of coal dust, but the statements of the injured men render this improbable. The nature of the explosion would now appear not to be very clear.

It is understood that the matter of U. S. tariff upon coal will come up for consideration in a preliminary way before the Ways and Means Committee of the House of Representatives on the 28th of this month. Some of the coal men who interested themselves in the matter when other tariff revisions were under way advise that they do not contemplate taking any action this time.

MARITIME MINING RECORD.

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- Rubs by Rambler.

Equity Lodge, of the P. W. A., has passed a long resolution, giving the Morning Chronicle fits for its reference to the action of the miners in having so strongly supported the liberal conservative candidates in C. B. and Cumberland counties. My own impression is that Equity attaches an exaggerated importance to the hasty remark of Chronicle and it is very doubtful if a majority of the miners would not have passed the reference bye, as an ill natured remark, had not the Halifax Herald waded and kept waving the red flag. The editor of the Chronicle has only one head and if that head buzzes when the unlooked for happens, whats the good of making out of a hasty remark a capital offence. Politics is becoming, sorry to say, more and more a rough and tumble game, and those who engage in them must expect hard knocks, as had as they give. The miners of N. S. have a right to vote for whom they choose, just as has every other worker or voter, without being reproached as turn coats. The Chronicle was disappointed. It naturally, I must confess, had concluded that as the liberal governments had done so much for those miners the miners should reciprocate. But it was not so much the resolution, I wished to call attention to as the following part of a sentence:—

"... the largest body of workmen in the province of Nova Scotia, and a class of workmen who are known throughout the whole world as being most loyal to their friends."

I like to hear that. It was said some time ago that a large number of the workmen of Caledonia were desirous of turning their backs on the P. W. A. and going over to the U. M. W. I must have been misinformed, for here is the bold, unequivocal assertion that they are loyal to their friends. I suppose it may be inferred, the greater the friend, the stronger, the more whole hearted, their loyalty. For over a quarter of a century had the miners of Nova Scotia, any friend, so true, so tried, so trusty as the P. W. A.? Most assuredly they had not; therefore I rejoice to hear the statement of Equity that its members are "loyal to their friends." If some went back it was only for a time.

While the railway men of Canada are seeing

the futility of a trades union connection with an American order, and are breaking away from them and forming a purely Canadian order, some misguided men among the miners of Cape Breton and Cumberland counties, are seemingly bound to bring we upon themselves by asking a foreign order, expensively officered, to control them and shape their destinies.

The committee of the C. P. R. union of employees has censured the president and sec'y of the union for having agreed upon a settlement that brought a reduction to many of the mechanics. The censure has led to the resignation of Bill Hardy, the president, while it made the sec'y militant. His back went up and he retorts by saying that the settlement saved some 8000 men from a starvation which stared them in the face. The false hopes raised by a connection with a foreign order led to the strike and the disastrous results that followed.

As was anticipated by those who gauged the motives of those mal-contented in the P. W. A. who sought for an injunction to restrain the executive of that body from exercising its proper authority, the supreme court in banco has unanimously refused to continue the injunction. The mal-contented are muled in costs. It is to be hoped that the executive of the P. W. A. have taken steps to prevent the costs and expenses being taken from the funds of the two lodges with which the complainants are connected, or rather were connected, for the judgement of the court is equivalent to a condemnation of their conduct.

The following are among the demands of the U. S. Socialists who voted for Debs, as formulated by the New York Call and published in the Detroit Tribune:

"The earth for all the people. That is the demand

"The machinery of production and distribution for all the people. That is the demand.

"The collective ownership and control of industry and its democratic management in the interest of all the people. That is the demand.

"The elimination of rent, interest and profit, and the production of wealth to satisfy the wants of all the people. That is the demand.

"The end of class struggles and class rule, of master and slave, of ignorance and vice, of poverty and shame, of cruelty and crime—the birth of freedom, the dawn of brotherhood, the beginning of man. That is the demand."

It is a good thing to have some idea of what the Socialists want. Some may say the demands are vague, but I cannot see that there is anything vague about a demand for the whole earth. That embraces everything, and yet though the demands are given in short measure, they could still be further condensed. The demands of the Socialists can only be filled when there comes a reign of righteousness, when righteousness reigns o'er all the earth. Not a second sooner. Before they can succeed in getting one-twentieth part of their demands they must make their strivings for things temporal subordinate to their longings for things spiritual. The law may re-

strain mens hands from doing evil, but never their hearts from thinking guile. Do the socialists not think that before slavery, poverty, ignorance, vice, etc. etc., can be rooted up, and cast out, that there must be a change of heart, an all round change? Isn't there law now against crime and shame and wrong-doing, and yet these abound. If hearts are still unregenerate will a criminal law enacted by Socialists act differently from one framed by ordinary mortals?

A correspondent of the Sydney Post writing from Halifax, and who in some other of the tory papers signs himself Ajax, gives his views on some points in the late election. "Next to Halifax one of the finest triumphs of the party was the defeat of Mr. Alex. Johnston, of Sydney, by 223 votes. He was backed by the two governments and by the Dominion Coal Co. . . . The Sydney Record, the Glace Bay Gazette, the Halifax Chronicle and the Mining Record, of Stellarton—one of the Coal Co's side lines—were all in full cry after Mr. Madden, and his triumphant election is evidence of the thorough independence of the miners' votes." 'Ajax' as the name signified may think himself a brave man, but a brave man tells the truth and that what Ajax misses. When I read the above I was forced sadly to say 'Virtue is its own reward.' The Record took no part in the late election and did not go in whisper even, let alone 'full cry' after Mr. Madden or any other candidate, good, bad, or indifferent. The Record thought it best to make no reference to matters political in C. B., as there was unrest among some of the workmen and it did not want to step in where it could not gauge the situation. If the Post cannot 'hew to the line' itself it might insist that its special correspondents do so, that is, if they can.

Is it really true that politics is after all nothing but a game of chance, all luck and no science. If what we read in the official and semi-official government press is the true philosophy of politics then there is no alternative; we must come to the conclusion that at all times, but more especially at election times, politics is really and truly a big game of chance. The people of a city or a county who wish to see the city or the county prosper, from a material point, and who believe that the government should assist toward that consummation, should never in conventions consider principles in the abstract or otherwise. They should not bother about the qualifications of candidates or any such thing, but meet for the purpose of trying to come to some conclusion as to which party was likely to be successful in the election. 'How are the elections going,' is the paramount question. On an answer to that hangs all. If the government is likely to be sustained, no matter its character, then self interest demands that they vote for the government candidate. If they think the opposition may win then all should be 'agin' the government. Why? Because we are solemnly assured by the press aforesaid that the government dispenses assistance to those only who support it. Don't you see then that the plain duty is for needy cities and needy counties to vote always and ever for the party likely to come into power. Its all a chance. The

electors of the said cities and counties may mis-calculate, and then, where would they be? Out in the cold—if they had elected the wrong man. We are told that a railway costing a fabulous sum, is to be changed from its intended course, because three counties in N. S. did not return government candidates. This is carrying the joke a little too far. The Transcontinental is either a great Canadian undertaking or it is a political kite. If the former, then its terminal, will, as it should, be in the place best suited for that purpose. One paper alleges that Mr. E. M. Macdonald will get the terminal diverted from Halifax to Country Harbor. In that event we will conclude that that Port is the best for the purpose, and gratefully say 'Its an ill wind, etc., etc.'

The labor party in Great Britain do not now love John Burns. It may be jealousy. There are some workmen who do not like to see other workmen succeed. John Burns is not only being advised in Britain, but also in Canada by the press, from the Toronto Globe down, what to do. He goes his own gate notwithstanding. The papers are telling us that he and Mr. Asquith do not pull, and says that John won't resign because he wants to hold on to his job. If that be so it is not for the salary attached but because he is in a position to do much good. The celebrated English preacher Mr. Meyer, compliments Mr. Burns on his treatment of the unemployment question. Said Mr. Meyer:

"John Burns had been criticised because he dared to say in the House of Commons that workmen spent too much on drink. A man who spoke thus made him proud, and he was going to write to his friend John and tell him he admired his pluck. The 'Spectator' is also standing as sponsor for the President of the Local Government Board, and in its last issue, writing from personal knowledge, says: 'We are convinced that there is no man whose heart is more deeply touched by the miseries of poverty and destitution than John Burns.'"

It does'nt do to be 'unco guid' in this wicked world. A candidate for municipal honors in Blackpool, Eng., told with pride that he had never drank, smoked, or walked out with a woman. The Blackpoolers can forgive a non-drinker, but because of his other two goodnesses gave him only 23 votes.

A Scientist who dabbles a little at times in political economy sends the following:—

'Judge McDonald has given decision which means that the fair wage clause can not be enforced in public contracts. The city discovered that contractors who were building a bridge were paying their men much less than demanded by the fair wage clause. Accordingly the city withheld payment of \$1,500, the difference between the wages paid and what should have been paid. The contractors sued and the judge ordered that they be paid in full.'

Has not this always been so since Adam, first labor candidate, was compelled by a woman suffragette to give up government legislation for

labor in the garden?

Was not the Lemieux Act inoperative to prevent a three months strike at Springhill? Is it fair to either Labor or Capital?

Can the Wages Lien Law protect the laborer? Are not its limitations unjust and arbitrary? Can it be enforced?

Is there not some foundation for the assertion made by dwellers in "the Jungle" that governments legislate only for those who are making millions, by oppressing and robbing the laboring man? Is not this suspicion answerable for such recent political overturns as those in Cape Breton, Colchester, Cumberland, Maisonneuve, and other labor centres?

Is not the time appropriate for the consideration of some of the labor problems that have arisen, when a strong Liberal government is in power in Canada? Would not MacKenzie King just now be more useful in Canada than in China? Might he not help the older ministers, in view of recent developments, to consider the relations of stock companies, insurance and loan companies, and other wild-cats of the aristocracy to humbler citizens of the country?

Rosy stories of prosperity, proofs that the laboring man is more comfortable in Canada than in other lands, cannot persuade the thoughtful, reading mechanic and laborer that he receives all that is his due, even if he rank himself far below kings of finance, insurance magnates, bankers, and captains of industry, for whom lawyers schemed and governments make laws.

And cannot something more be done to soften the lot of the farmers, the hardest workers of all?

Sir Hiram Maxim is at one with John Burns in his assertion that the British workman spends too much on drink. In his place in parliament a while ago, Mr. Burns stated that the workmen on the banks of the Clyde spent £4,000,000 annually in drink. This amount is disputed by some. Let me put it down therefore at £3,000,000 or \$15,000,000. What does this large sum represent. Let me tell of something which recently happened on the Clyde. There was much rejoicing in Greenock over the announcement that a firm of ship builders had received an order from Germany for five large steamers for the Volunteer fleet, which plies between Holland and New York. The five steamers were to cost \$1,800,000. The building of them would have given employment to a large number of men for over a year. A German firm had offered to build them for \$2,000,000. It withdrew that tender and offered to do them at the Clyde price and not ask any payment for some 18 months. The order went to Germany. It is supposed the German government loaned the money to the builders free. The government thought perhaps it was better to do that than to provide funds or work for the unemployed, and though this is protection it is almost justifiable. If five big steamers can be built for \$1,800,000 then for \$15,000,000, the money said to be spent on the Clyde, over 40 steamers could be built. The building of that number of steamers would mean all hands fully employed on the Clyde. Drink is not only a big social question, it

is the biggest economical problem of the day. The abolition of the drink traffic would put socialism completely out of business.

Says the Star:—"A Montreal gentleman, recently returned from the works of the Nova Scotia Steel & Coal Co., and states that this corporation is not only doing exceedingly well in its coal department, but that the steel plant is also busy and orders are being entered in goodly numbers. Concerning the Wabana ore field in Newfoundland, this gentleman, who is a mineralogical expert, states that the company's field is being proven, and comes fully up to the most sanguine expectations. Already an immense subterranean field out under the waters near Wabana has been investigated, with the result that a body of ore of fine quality and immense magnitude is in sight. The company has, therefore, nothing further to worry about in this respect."

"An important meeting of British rail makers is called for Friday in London to discuss the serious situation created by the keen competition of the Dominion Steel Company and a Russian firm neither being in the international rail combination. Those concerned maintain that if a new compact cannot be devised to contest unlooked for competition, it would be better to break up the combination and give British makers a free hand."

To which the Montreal Star replies:—

"The British rail makers are easily scared if they cannot stand the loss of the few foreign orders received by Dominion Steel."

Of the boom in N. S. Steel the Montreal Star says:—"There were some good buying orders in the stock from people who keep posted on the property, and some other buying was possibly based on the interview in last night's Star with a scientist who had recently returned from the Wabana ore fields, where matters have taken on a much rosier hue in regard to the known extent of the company's areas. This information combined with authentic reports on the business being done at the steel plant proved sufficient to create a much healthier sentiment in regard to the company's future."

The late Mr. George Stubble, J. P., of Carlton, Yorkshire, who sixty years ago was earning 12s a week as a 'fettler' in a woolen mill, left a fortune of £298,195. While he and his brother, the late Mr. James Stubble were boys, earning but a small amount weekly, they lost their father and had to support their younger brothers and sisters. Despite this they managed to save steadily and when they had accumulated £150 started the woolen manufacturing business which is now widely known as Messrs G. and J. Stubble, Limited, of Wakefield, and Batley. Mr. George Stubble was eighty-five years old when he died in April last, but regularly visited his mills almost up to the time of his death.

AROUND THE COLLIERIES.

As yet no men have been discharged at the Drum Colliery. There has been some arrangement effected whereby any immediate discharges may be avoided.

On a day recently the Allan Shafts and the Vale Colliery, between them, sent up a thousand tons, less sixteen, of coal. This is counted a creditable performance.

The Nova Scotia Steel and Coal Co. have received through the Dominion Steel Co. an order for fish plates for a foreign railway. This is the order which the Montreal Star says is being filled by the Dominion Steel Co. The plant at Sydney does not make fish plates.

The revival of the iron trade in the U. S. is putting a little heart into the management of the two Steel companies in N. S. The Nova Scotia Steel and Coal Co. is not rushed, but is receiving now and again sufficient orders to keep the plant in operation.

A Cape Breton paper says that there have been few accidents at the collieries of the Dominion Collieries for the past few weeks, due to the fact that there has been no necessity to rush things. This view is no doubt correct, as experts claim that rushes have a tendency to increase accidents.

With the close of the St. Lawrence shipping season, there will be a slackening off, at the C. B. collieries especially. The Nova Scotia Steel and Coal Co. is not now making any effort after big outputs. There will be a little broken time from this out until banking actively commences.

If one result of the 'Drummond eight million dollar merger' is the starting of the blast furnace at Londonderry, it will be a good thing for Pictou Co., more especially to the workmen of the Drummond Colliery, which in the past has supplied the Londonderry works with a large quantity of coal.

The papers have it that Charles Fergie lately of the staff of the Dominion Coal Co., is on a coal mission to C. B. on behalf of the C. P. R. The coal areas he is said to have an eye on are the McVey areas at Port Morien. This will make not one but two fields. The Dominion Coal Co., who furnish the C. P. R. with much coal, are not, as yet, worrying over the probability of the loss of a customer.

We are told that the Hocking Valley counties have decided to try the plan of prohibition for two years, and if the vote cast shows what that part of the country wants, perhaps other mining sections may make the experiment. There is no doubt but that if the conditions are improved materially the better class of miners will find their "women folks" urging them to go and live where life is secure against some of the drunken brawlers who now make it almost as bad in the mines where coolness and caution are so needed as it was in old western frontier days when the cowboys shot up a town. Coal Trade Journal,

The latest reports from the United States, on the coal trade are to the effect that while there is a little better demand for bituminous, prices continue to sag.

Though it was announced a few days ago that a large number of miners were wanted in the Connelsville district, it is a fact that throughout the several mining states there is much slack time at the collieries.

It has become known through the friends of John Mitchell that the former president of the U. M. W. is anxious to be re-elected to that office, from which he retired last spring and was succeeded by Thomas L. Lewis. It is stated that he will probably be a candidate at the forthcoming election.

The 'Iron Trade Review' says: "Heavy buying of pig iron, with some advance in prices, has been the leading feature of the market. Although the improved conditions, so far as actual transactions are concerned, have been felt principally in pig iron, the general tone of the market is much better. There is a strong conservative influence being exerted against piling up orders rapidly or advancing prices too suddenly, as it is felt that caution is necessary to prevent reaction."

The statement in some of the papers as to the number of men discharged at the collieries in Pictou Co., is greatly exaggerated. The total number is about 175, and these are not, as it were, fully discharged, their services are dispensed with for the time being. The Acadia Colliery at Westville has been the biggest sufferer, as there about 116 men are temporarily thrown out of work. About thirty were dispensed with at the Allan Shafts, and the remainder at the other two collieries.

The report of the experts sent out to Ungava by the Ungava Prospecting Co., and which has just been issued, deals sledge hammer blows at the geological report. Mr. Low comes in for several hard raps. The report declares that at one point Mr. Low's lines are out some eight miles. That is more than a slight deflection the iron ore that Mr. Low said he saw, the explorers could not locate. Mr. Lindsay, the promoter of the prospect, says he will try again next year taking a different route. Meantime the prospect has not turned out profitable for the investors.

The question, 'Does good times' tend to idleness on the part of the workmen?' has been rather unexpectedly answered strongly in the affirmative. Since the services of some one hundred and seventy five men were dispensed with at the collieries of the Acadia Coal Co., the output has actually increased by the remarkably large quantity of three hundred tons per day. And this has been brought about by the fact that the men retained have realized that their services may too be dispensed with, and their places filled if they do not heed to the line. It may be asked, "How came it about that the Acadia had so big a force of workmen?" One reason was that provision had to be made for the number of men daily of work,

AROUND THE COLLIERIES.

The fire section of Sydney No. 1 is being unwatered. There were only a few places affected.

At Sydney No. 1 considerable attention is being paid to the securing of increased ventilation.

Springhill is still enjoying a fair measure of prosperity; splendid weather, and—the criticisms of certain of the press.

The new lift of No. 3 mine, Springhill, is producing some excellent coal and steady progress is being made in developing it.

In a few weeks the Record hopes to be in a position to give some figures in reference to the Wabana ore areas of the N. S. S. & Coal Co., which will delight the hearts of those shareholders who held on.

The newest mining machine in use at Sydney No. 2 makes a cut 6 inches high, which takes out all the stone. The machine formerly used cut only about two inches. This did not take out all the stone parting.

The J. W. Cumming firm, of New Glasgow, who make a specialty of high grade mining tools are doing a fine business, and have orders booked sufficient to keep them busy until February. There are seventeen hands now employed.

With the laudable intention of keeping ground ahead, the management of the C. R. & C. Co. will at once prepare to sink No. 2 slope another lift of 700 ft. The seam to the deep is clean, high and regular, and of well known excellent quality.

It is possible gossips may be astray in saying that Mr. Fergie is to examine the properties in the 'Atlantic' group for the C. P. R. It is quite possible Mr. Fergie may be seen tramping the ground a mile or two back of Port Morien instead of on the opposite side.

The C. B. miners will please take notice that 'Canada' makes this short comment on the C. B. election. "Mr. Alex. Johnston who defeated Sir. Chas. Tupper twelve years ago, himself suffered defeat in the present campaign at the hands of J. W. Madden, SOCIALIST. The C. B. trades unionists are fore-warned, let them pay heed.

Several steel experts from the United States visited the Dominion Steel plant lately, and they expressed surprise at the completeness of the works and the economical manner in which it is operated. In fact, the statement was made by one of the gentlemen from Pittsburg that for size and equipment the plant of the Dominion Iron and Steel Company is one of the most modern on the continent. The presence of these experts from across the border has given rise to the rumor here, that an important deal is on the tapis, which will greatly benefit the local corporation financially.

It is reported that at least two parties are negotiating for the taking over of the Mabou Coal property, or rather a party is negotiating and another party is ready to bid if he fails. Meantime the present holders are footing the bills though the government is nominally in charge of the mine.

They are face to face with a geological problem at Inverness. The tunnel to tap the thirteen foot seam has been driven the distance at which the seam should have been encountered, but no thirteen foot seam is there. The question is: 'where is it.' The management have not given up hope of striking it, or finding its equivalents.

For the benefit of certain Sydney Mines sympathizers with the U. M. W. the Record gladly states that dull and all as the times are in Glasgow, the socialists were utterly routed at the late municipal elections. They were even routed at the meeting of the American Federation of Labor. Where will our C. B. friends go now?

Mr. Alexander Bigney, a miner, was lately accidentally killed in No. 3 mine Springhill, by a fall of coal. An informal meeting of the men of the section of the mine in which the deceased worked, resulted in the mines being idle the day of the funeral, which was very fairly attended by the workmen. The Orange society took charge of the body.

The Morning Chronicle in an attempt to palliate the conduct of certain Dalhousie students who tore down signs, and did other deviltry on a night in Halifax lately, says they should not have been committed to jail as ordinary criminals. Perhaps the Chronicle will enter more fully into the reason, why. Indeed, it is possible there is more excuse for the untamed 'street arab' who thoughtlessly damages property, than for those who are supposed to have had and to have superior advantages.

In view of the statement, alleged to be correct, that the Dominion Steel Co. has not been ordering the anticipated monthly quantity of coal the following despatch from Sydney to Montreal is interesting:—"The plant of the Dominion Iron and Steel Co. is being run to its fullest capacity in order to meet the increasing orders for rails, and other manufactured products, which are coming in from all parts of the world. The demand especially from foreign railway companies and corporations is beyond all expectations for this season of the year, and the management is considering the advisability of increasing the present day and night shifts so as to turn out as fast as possible the rails ordered. The output for November and December, according to calculations, is certain to break all previous records, and if the present rate of business continues the current fiscal year will prove a record breaker.

The parties who are boring for coal at the back of Woodburn, Picton Co., are in high hopes of having struck oil shale or coal of good quality. The country around Woodburn is rather interesting, at least one small seam of coal runs across county all the way from the East River to Little Harbor. A four foot seam is what the borers are looking for.

Indications point to a general resumption in the Klondike and Connellsville coking fields. Fred. C. Keighley, superintendent of the Oliver and Snyder Steel Company's three plants at Oliver, to-day received orders to put every oven in full operation on Dec. 1.

The fact that the independents are preparing for a resumption in full is regarded as evidence that the H. C. Fricke Coke Company will soon send out notices of a general resumption. The price of coke is advancing, and there are increasing inquiries for the product. At least fifty per cent of the ovens are now idle. There is a shortage of miners and other workmen that may delay for a time full resumption.

Speaking to the Cincinnati Commercial Club, of which he has been a member for fifteen years, Wm. H. Taft, brought every member of the club to his feet in his address, sounding the key-note of prosperity for the country for the next four years. "Every business man who is obeying the law may go ahead with all the energy in his possession; every enterprise which is within the statutes may proceed without fear of interference from the administration when acting legally, but all interests within the jurisdiction of the Federal Government may expect a rigid enforcement of the laws against dishonest methods."

Formerly it was largely the opinion that there could be no fire without smoke. Smoking chimneys were taken as a matter of course and people were disposed to be rather proud of the fact that their chimneys discharged black clouds, thinking that it indicated enterprise and industry. It has been known for some years, however, that smoke can be prevented, and that it is not only economical to do so as far as fuel is concerned, but that a clean chimney is a credit to the owner, just the same as a carefully kept lawn or a well arranged tradesman's show window, and it has thus come to be realized that there is a financial advantage to be derived from the favorable advertising secured by the appearance of a smokeless chimney.

MINERS AND LABOR PARTY.

In his monthly circular to the Northumberland miners Mr. Burt, M. P., referring to the Labor party and the Miners' Federation, says the decision to join the Labor party ignores the constituencies that are concerned. His own mind is definitely made up, but the policy, he thinks, will be disastrous to Labour representation, and it will surprise him if there is not considerable diminution in the number of Labour members returned at next election if this policy of isolation and hostility be relentlessly pursued. The chief mining districts of Great Britain are at length

united in a federation which, for numbers and influence, is wholly without parallel in the history of the labor movement, and, just when this consummation has been reached, a new element of possible discord and disintegration is introduced and is being inconsiderably pushed forward. This new factor, too, has no direct practical bearing upon the real interest of labour.

The late Mr. George Stubbley, J. P., of Carlton, Yorkshire, who sixty years ago was earning 12s a week as a 'fettler' in a woolen mill, left a fortune of £298,195. While he and his brother, the late Mr. James Stubbley were boys, earning but a small amount weekly, they lost their father and had to support their younger brothers and sisters. Despite this they managed to save steadily and when they had accumulated £150 started the woolen manufacturing business which is now widely known as Messrs G. and J. Stubbley, Limited, of Wakefield, and Batley. Mr. George Stubbley was eighty-five years old when he died in April last, but regularly visited his mills almost up to the time of his death.

The master of one of the Welsh workhouses states that during twelve years only one total abstainer has been admitted as an inmate. The man is still a total abstainer, although the Guardians allow the inmates beer for their Christmas dinner. This inmate does not mind being singular.

Sir Andrew Reed, speaking at Dublin, said that his forty one years' experience in the Royal Irish Constabulary taught him that eighty per cent of the crime in Ireland was attributable entirely to drink.

In New York there are 378,000 rooms which are practically without daylight. They are occupied by more than a million persons.

LIGHT AND THE EYES.

Strong electric light has been found by doctors to be highly injurious to the eyes, and a German specialist has come forward with a new kind of spectacle with yellow-green lenses as a preventive of the danger. At the Royal Eye Hospital, a press representative was informed that strong electric light was hurtful to the sight. "Men who have to work very close to a brilliant electric arc lamp or other highly intense electric light, frequently suffer from injury to the retina and of the optic nerve, and the mischief done is sometimes great," said one of the specialists of the hospital staff. "Those who attend to the strong electric light in light houses sometimes suffer in the same way. One phase of the treatment is the use of spectacles with lenses coloured yellow-green or peacock green, and we are at present using an increasingly large number of them." It is not the ordinary household electric light that does this mischief so much as the brilliant electric light of the workshop and the factory, but a powerful light which is allowed to shine directly into the eye is bad. The men who are sent round by gas companies to inspect and repair incandescent gas installations often suffer from injury to the eye caused by the constant exposure to a too fierce illuminant.

Amatite

ROOFING



PAINTING a roof is work. Buying the paint is expense. Both are needless if your roof is Amatite.

When you finish laying Amatite, take away your ladder, pick up your hammer and knife, go away and leave the roof to take care of itself. A few years later you may go back and look at it if you care to, but it won't be necessary, and there won't be anything to do.

This is due to the fact that Amatite has a real mineral surface—a surface that is too strong to need protection—too durable to require painting.

If you buy one of the smooth surfaced roofings you will have to paint it every two or three years to keep it from leaking. In fact, such roofs depend on the paint almost entirely for their waterproofing qualities.

Amatite on the other hand depends for its waterproofing upon double layers of Coal Tar Pitch,—the greatest known enemy to water.

Amatite comes in rolls of 110 square feet ready to lay. No special tools are required, and anyone can lay it properly.

A sample of Amatite will be forwarded free on request. Send for it and see how much better it is than the kind which requires painting to keep tight.

The **CARRITTE - PATERSON M'F'G C'O'Y., Ltd.**
St. John, N. B., Halifax, N. S.

FUEL WASTFULNESS.

Says the Electrical Review, London:
"As a nation we have been prodigal of our fuel. The best of it has gone already. There is little now left at shallow depths, except isolated pillars that will some day pay for removal, and that day will come only too soon if prices go up as fast as they have done this last twenty years. There is not the slightest present assurance that when our coal has gone there will be any substitute for it. In face of all this, how little do our big coal users care for economy! . . . Every pound of coal or coke burned in a blast furnace evolves an amount of combustible gas that will produce nearly as much power in gas-engines as the original pound of coal would produce if burned under a steam boiler. . . . Yet such of this gas as is utilized is burnt under boilers to produce steam power, at about a fifth the efficiency that it will give in gas engines. We build coal-burning power stations within a stone's cast of blast furnaces waving fiery flags of flame into the sky, and our engine shops complain of slackness of trade in face of the thirty firms building gas engines in Germany for utilizing blast furnace gas on the lines laid down by an English inventor. Of all English blast-furnacemen, how many had the intelligence to appreciate what blast-furnace gas would do?—One can count them on the fingers of one hand."

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TARRED AIRPROOF

ALSO

FIRE-PROOF.

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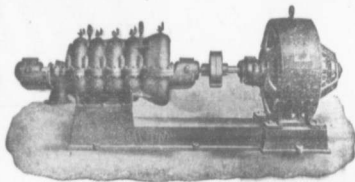
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 wear **Priestleys Dress Goods.**
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H. & H. Coal Cutters & Tornado Coal Drills
Belleville, Ill., U. S. A.



Synopsis of Canadian North-West. Homestead Regulations.

ANY even numbered section of Dominion Lands in Manitoba or the North-West Provinces, excepting 8 and 30, not reserved, may be homesteaded by any person the sole head of a family, or male over 18 years of age, to the extent of one-quarter section, of 160 acres, more or less.

Application for entry must be made in person by the applicant at a Dominion Lands Agency or Sub-agency for the district in which the land is situate, by proxy may, however, be made at an Agency on certain conditions by the father, mother, son, daughter, brother or sister of an intending home-seeder.

An application for entry or cancellation made personally at any Sub-agent's office may be wired to the Agent by the Sub-agent, at the expense of such application, and if the land applied for is vacant on receipt of the telegram, any papers to complete the transaction are received by mail.

In case of "presentation" or fraud the applicant will forfeit all priority of claim or if entry has been granted it will be summarily cancelled.

An application for cancellation must be made in person. The applicant must be eligible for homestead entry, and only one application for cancellation will be received from an individual until that application has been disposed of.

When an entry is cancelled subsequent to institution of cancellation proceedings, the applicant for cancellation will be entitled to prior right of entry.

Application for cancellation must state in what particulars the homestead is in default.

A homesteader whose entry is not the subject of cancellation proceedings may, subject to the approval of Department, relinquish it in favour of father, mother, son, daughter, brother or sister, if eligible, but to no one else, on filing declaration of abandonment on form.

The homesteader is required to perform the homestead duties under one of the following plans:

(1) At least six months' residence upon and cultivation of the land in each year during the term of three years.

(2) A homesteader may, if he so desires, perform the required residence duties by living on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of his homestead.

(3) If the father for mother, if the father is deceased, of a homesteader has permanent residence on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of the homestead or upon a homestead entered for by him in the vicinity, such homesteader may perform his own resident duties by living with the father (or mother).

(4) The term "vicinity" in the two preceding paragraphs is defined as meaning not more than nine miles in a direct line, exclusive of the width of road allowances crossed in the measurement.

(5) A homesteader intending to perform his resident duties in accordance with the above will, if living with parents or on farming land owned by himself must notify the Agent for the district of such intention.

Six months' notice in writing must be given to the Commissioner of Dominion Lands at Ottawa, of intention to apply for Patent.

Before making application for patent the settler must give six months' notice in writing to the Commissioner of Dominion Lands at Ottawa, of his intention to do so.

W. W. CORY,

SYNOPSIS OF CANADIAN NORTH-WEST MINING REGULATIONS.

COAL. Coal lands may be purchased at \$10 per acre for soft coal and \$20 for anthracite. Not more than 250 acres can be acquired by one individual or collected on the gross output.

QUARTZ. A free miner's certificate is granted upon payment in advance of \$5 per annum for an individual, and from \$20 to \$100 per annum for a company according to capital.

A free-miner, having discovered mineral in place, may locate a claim 1500 x 1500 feet.

The fee for recording a claim is \$5.

At least \$100 must be expended on the claim each year or paid to the mining recorder in lieu thereof. When \$500 has been expended or paid, the locator may, upon having a survey made, and upon complying with other requirements, purchase the land at \$1 per acre.

The patent provides for the payment of a royalty of 2 1/2 per cent on the sales.

Placer mining claims generally are 100 feet square; entry fee \$5 renewable yearly.

A free miner may obtain two leases to dredge for gold of five miles each interior.

The leases shall have a dredge in operation within one season from the date leased. Royalty at the rate of 2 1/2 per cent collected on the output after it exceeds \$10,000.

W. W. CORY,

Deputy of the Minister of the Interior.

Miners Wanted To Chew BULL DOG TOBACCO,

Because it is the only Tobacco
which does not excite Thirst
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TRY IT!

The St. Lawrence Tobacco Co., Ltd.

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The Westellar Terra Cotta Company

having taken over the business of the Stellarton
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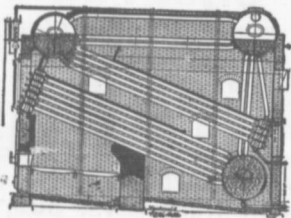
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FREE EXPANSION OF TUBES.

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DRY OR SUPERHEATED STEAM

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Aerial Ropeways, Suspension Bridges, etc. Specially
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The Nova Scotia Steel & Coal Co., Ltd., who use our Ropes largely, write that one of our Haulage Ropes at Wabana Mines **has been in service for over 5 years**, drawing over 1,700,000 tons in that time and is still good for further considerable service.

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—First Class both for Domestic and Steam Purposes.—

BUNKER COAL Shipping facilities of the most modern type at Port Hastings, C. B. for prompt loading of all classes and sizes of Steamers and sailing vessels.

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Time Table No. 26, Taking effect at 1 a. m. OCT 11TH., 1928

EASTBOUND		STATIONS.	WESTBOUND	
Read Down	No. 52		No. 54	Read Up
a. m.	p. m.		No. 51	No. 53
				p. m.
L 10 45	L 8 50	P. TUFFER JUNCT. N	A 10 25	A 8 25
R 10 55	R 2 5	PORT HAWKESBURY	S 10 27	S 3 27
A 11 10	A 4 00		L 10 07	L 8 10
	L 4 13	PORT HASTINGS	A 10 52	
	F 4 25	THOY	F 9 52	
	S 4 30	CREGINISH	S 9 59	
	P 4 36	JL HALLS	P 9 54	
	S 4 55	CHAIGMOLE	S 9 52	
	F 5 18	CATHERINE POND	F 8 45	
	A 5 35		L 8 32	
	S 5 35	PORT HOOD	A 8 27	
	R 6 10	GLENCOE	R 8 14	
	S 6 20	MABOU	S 7 4	
	R 6 48	GLENDYRE	R 7 16	
	S 7 12	BLAIR RIVER	S 7 28	
	A 7 15	STRATHLORE	A 7 13	
	p. m.	INVERNESS	L 6 45	
			a. m.	

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Over 7,000,000 H. P. in use, Fired with all kinds of Fuel

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Coal and Gold Mining Machinery a specialty

Endless Haulage Engines, Revolving Tipples, Picking Tables and Complete Screening Plants for the Cleaning and Picking of Coal. Rope Wheels, Pumps, Valves, Shafting, Belting Etc.

Complete equipments furnished for Coal or Gold mines.

Screening plants are now in operation at Sydney, Springhill, Broad Cove, Port Hood and Westville Mines

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From Coal Washed by Latest Process,
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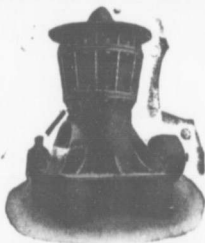
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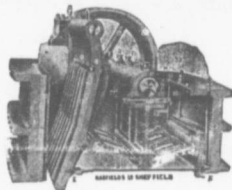
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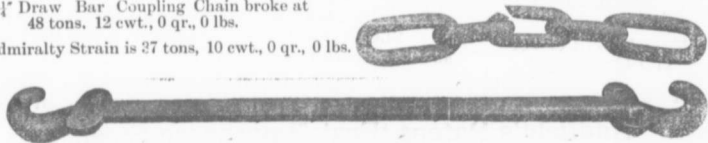
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For Mine Cars, A SPECIALTY.

This 1 1/2" Draw Bar Coupling Chain broke at
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Miners and Shippers of the Celebrated

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Gas Coal and Coal for Household Use

from the well known seams

'Emery,' 'Phalen,' 'Harbour,' 'Victoria' and 'Hub.'

12 Collieries
in Operation.

OUTPUT:
3,500,000 tons Yearly

Used by Railways, Tramways, Steamships, Manufacturers, Water Works, Light and Power Stations in Ontario, Quebec and the Maritime Provinces, also in Newfoundland and the New England States, Mexico, Sweden, South Africa and the West Indies.

Shipping Piers equipped with modern machinery,
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—AT—

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OPERATING THREE
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NOS 1, 2 AND 3.

—Miners and Shippers of the Well Known—

FRESH MINED SPRINGHILL COAL

... ANALYSIS ...

	NO 1	NO 2	NO 3
Moisture.....	2.02 %	1.41 %	2.71 %
Volatile combustible matter	18.94 %	27.93 %	28.41 %
Fixed Carbon.....	75.29 %	67.47 %	64.69 %
Ash.....	3.75 %	3.19 %	4.19 %
	100.00	100.00	100.00
Sulphur.....	1.15 %	58 %	.79 %

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BEST COAL FOR
GENERAL STEAM PURPOSES.

The year Round

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