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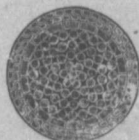
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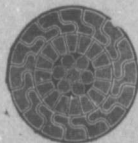
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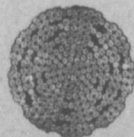
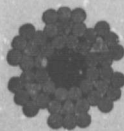
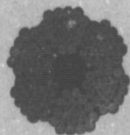
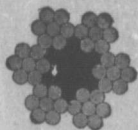
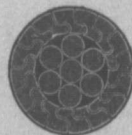
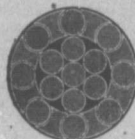
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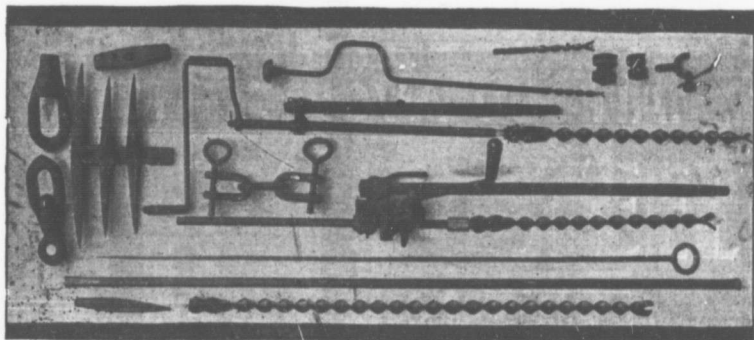
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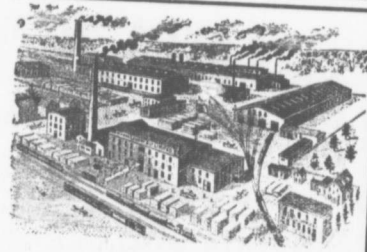
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62 Mixed for Pictou	7.45
19 Express for Sydney	8.15
28 Mixed for Pictou	10.55
56 Mixed for Truro	11.00
80 Express for Sydney	13.35
39 Express for Halifax and Montreal	13.50
140 Mixed for Pictou	16.15
101 Mixed for Pictou Landing	16.05
22 Mixed for Hopewell	16.50
65 Mixed for New Glasgow	18.10
46 Express Halifax and St. John	18.40
17 Express for New Glasgow	19.45
66 Express for Pictou	21.15

—TRAINS ARRIVE AT STELLARTON

79 Mixed from Hopewell	6.30
78 Mixed from Trenton	6.55
61 Express from Pictou	7.30
18 Express from New Glasgow	7.35
21 Mixed from Hopewell	7.35
62 Mixed from Pictou	8.05
28 Mixed from Pictou	10.35
56 Mixed from Truro	10.45
19 Express from Halifax and St. John	13.15
139 Mixed from Pictou	16.45
83 Express from Halifax, St. John, Quebec	18.35
39 Express from Sydney	18.40
65 Mixed from Pictou Landing	18.50
77 Mixed from Hopewell	18.16
66 Express from Pictou	18.45
80 Express from New Glasgow	18.55
66 Express from St. John	21.05
17 Express from St. John and Halifax	21.10

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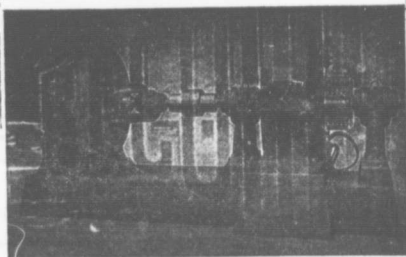
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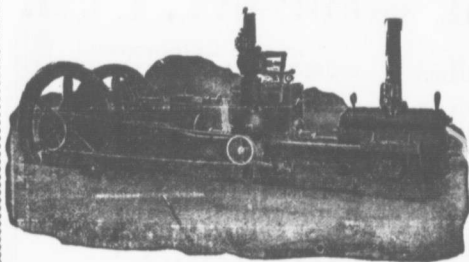


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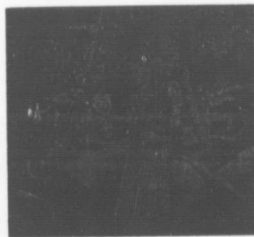
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To No....

# MARITIME MINING RECORD

Vol. 8, No. 4. Stellarton, N. S., AUGUST 22nd, 1906 New Series

COAL DUST, ITS RELATION TO COLLIERY EXPLOSIONS,  
AND HOW TO DEAL WITH IT.

For the RECORD by WILLIAM OLIVER, Kings Medalist in Coal and Metal  
Mining, New Seaham, England

(CONCLUDED)

The principal facts which appear to have been more or less conclusively demonstrated by the results obtained in the experiments with dust from Seaham Colliery may be summarised as follows:

1. Several of the samples of dust exhibited signs of having been effected by heat, being slight in some instances and considerable in others.

2. The two samples taken from the floor and off timbers at the curve in the stone drift, in proximity to where the shot was fired at the time of the explosion, as also a sample from near the Maudlin Engine, exhibited no signs of having been affected by heat.

3. The samples exhibited considerable differences in regard to richness in coal, fineness and uniformity in this respect, density, etc., the proportion of coal ranging from about 96 to below 54 per cent in the dry sifted samples.

4. The chemical and microscopical examination did not furnish any data to lead to conclusions as to extent to which the dust may have taken part in the production or augmentation and transmission of the explosion at Seaham Colliery, but there was evidence of the existence of partially burnt dust at a number of points very distant from each other and in different directions in the mine.

Sir, F. Abel in concluding his report said it must be admitted as possible that with the large volume of flame and the great disturbing effect of a blown out shot, as the initiatory cause of the ignition of dust, and its suspension in the surrounding air, such inflammation may, in the complete absence of fire damp, be propagated to a greater distance than the results of small experiments would warrant one in assuming. But it can scarcely be maintained that the air of a mine in which the coal gives off gas at all, can be, at any time, entirely free from fire damp; and as the existence of very small and unsuspected quantities of that gas in the air of a mine may suffice to bring about the ready propagation of flame by coal dust, and thus to develop violent explosive effect, it would appear needless to assume that coal dust may, in the entire absence of fire damp, give rise to explosions, even of only limited character, in coal mines in order to account for casualties which cannot be ascribed to the existence of accumulations or sudden outbursts of fire damp.

In the year 1891 a Royal Commission was appointed and made its final report in June 1894. The commissioners took a large amount of evidence, but unfortunately the perusal of such evidence shows that a diversity of opinion existed upon the use of explosives and the danger from coal dust in mines. Twenty one witnesses

were examined directly on the coal dust theory, thirteen of these agreeing that very fine dry coal dust is capable of causing a coal dust explosion in the presence of a blown out shot, and in the absence of fire damp; the other eight, whilst not admitting coal dust as capable of causing an explosion in the absence of fire damp, are agreed that an explosion of fire damp once started in a dry and dusty mine, was materially intensified and extended by the dry coal dust distributed along the roadways of a mine. The Commissioners summarise their conclusions as follows:

1. The danger of explosion in a mine in which gas exists, even in very small quantities, is greatly increased by the presence of coal dust.

2. A gas explosion in a fiery mine may be intensified and carried on indefinitely by coal dust raised by the explosion itself.

3. Coal dust alone, without the presence of any gas at all, may cause a dangerous explosion, it ignited by a blown out shot or any other violent inflammation.

4. Different dusts are inflammable, and consequently dangerous, in varying degrees, but it cannot be said with absolute certainty, that any dust is free from risk.

5. There appears to be no probability that a dangerous explosion of coal dust alone could ever be produced in a mine by a naked light or ordinary flame.

In March 1893 the Secretary of State requested Mr. Henry Hall to undertake a series of coal dust experiments to include dusts collected from the principal seams in respective mining districts, each separate dust to be tested as to its inflammability in the same way as had already been done. The dusts selected were found lodged on the timbers or on ledges underground, or on ledges and above the screens at the surface, and all were gathered by hand.

The phenomena presented by these experiments as they progressed, and a careful examination of the detailed results, warranted the following conclusions:

1. That the flame from a blown out gun powder shot in the presence of dry coal dust always ignites more or less of such dust and so increases the burning and charring effects of the shot.

2. That when a large flame, such as that of a blown out gun-powder shot, or the flame from the ignition of a small quantity of fire damp, traverses an atmosphere containing a very moderate quantity of coal dust, the dusty atmosphere will explode with great violence, and the explosion will continue on and pass throughout any length of such atmosphere, its violence and force increasing, as it progresses.

3. That coal dust from several seams in different districts, notably those from Glamorgan, Monmouth, Durham, Lancashire, Yorkshire, and Scotland are almost as sensitive to explosion as gun-powder itself.

4. That coal dust is, as a rule, more sensitive to explosion in proportion to its high quality and freedom from impurities.

5. That a ready supply of oxygen, such as is supplied by a brisk ventilation has the effect of making coal dust explosions more probable and more severe.

6. That certain high explosives are incapable of igniting or exploding coal dust. The difference in the behaviour of gun-powder as compared with the high explosives is said to be most impressive and convincing.

Of the whole of the dusts tested, that from the Albion colliery, Glamorgan, (Aberbare or Merthyr four foot seam or upper four feet,) excelled all others in violence and sensitiveness to explosion, and this seam has the worst history in the Kingdom, upwards of 600 persons having been killed in it by explosions since the year 1845. Indeed throughout the experiments men could not fail to be struck by the great violence and sensitiveness to explosion exhibited by the samples received from collieries with an unfortunate history as regard explosions. It was evident from the experiments that the higher the quality of the coal seam, the more liability there is to explosions of dust, and it is singular that the collected history of explosions in mines in past years show that nearly all sweeping disastrous explosions have happened in seams producing the highest class of coal, such as the Durham Hutton seam, Yorkshire, Barnsley and Silkstone seams; the Lancashire Ark seam, and the South Wales Aberdare a feet and Blllvein. Then we have the experiments of Mr. Wm. Gatloway, whose name will always be prominent in this matter, and from his experiments we have good grounds in accepting that certain coal dusts will render an atmosphere explosive, even in the absence of fire damp, and even if the mine be free from accumulations of gas in the goafs and other accessible places, the current passing is most likely to be charged with from one-third to one per cent of  $CH_4$ , and perhaps more in certain higher side airways near to the returns, so little that it just prevents showing a cap in an ordinary safety lamp and therefore is deemed safe. But if the air roads are in a dry and dusty condition, and shot-firing is carried on in the near vicinity, then under such conditions, although they may have been deemed safe, we may expect, if precautions are not taken, the fearful results of mine explosions.

**HOW TO DEAL WITH COAL DUST:**—When it is seen that coal dust plays such a prominent part in explosions strict measures should be adopted to prevent such havoc, and the following methods of dealing with it, would, if carried out, reduce such accidents to a minimum.

1. Prohibition of certain explosives.—Gunpowder being considered the most dangerous, and Mr. Hall in his report to the Secretary of State says: "I have again to urge the total abolition of certain "high explosives," Many of the larger firms in this country have already of their own motion taken this important step. Mines which are naturally of a dry and dusty character, cannot be artificially damped so as to render gunpowder safe.

2. Restriction of explosives used.—A safety or flameless explosive should be used, and there is little doubt that the employment of flameless explosives in dry, dusty, and fiery mines, under stringent rules as to their application and conditions of firing would greatly limit the risk attendant upon blasting operations in mines. All shots should be fired by electricity and every precaution be taken to prevent blown out shots, whilst strict attention to the provisions of General Rule 12, C. M. F. A. as to using flameless explosives should be observed.

3. Prevention of dust.—To carry this out care should be taken in getting down and filling the coal, so as to reduce slack to a minimum. The tubs should be kept

in good repair, so that dust is not shaken through them during haulage. Horse and haulage roads should be kept as clean as possible and free from pieces of coal which may be ground into dust by traffic. Accumulations of dust should be prevented by the regular filling of such dust. The tubs should only be level filled to prevent pieces falling from them.

4. Watering.—A common and practical method of watering horse roads is by means of a water tub, having one or two plug holes in the ends and sides, or lengths of perforated  $1\frac{1}{2}$  to 2 inch pipes attached to the ends or sides of the tub. Haulage roads have been effectually watered by the following arrangement: water pipes laid along the haulage roads, or the water from the pipes from dip pumps was utilized and small hydrants were let into such pipes at regular distances apart. A hose 25 feet long provided with a spray, was attached to each hydrant in turn and the haulage roads are well watered length by length. This is a common practice and if carried out once a week keeps the dust down on the travelling and haulage roads and the air free from dust from a sanitary point of view.

Sometimes an arrangement is used for saturating the air with fine sprays of moisture. A special nozzle for producing a spray is used and the water is given pressure. In some cases water pressure is got by leading water from tubing in the shaft or from the surface, but in most cases the pressure is got by applying compressed air from any plant in the locality. The water is ejected through these spray producers fixed on upright pipes placed at intervals of 20 or 30 yards apart. In case of compressed air pressure being employed two rows of pipes are laid along the roadways, one for water, the other for compressed air. These are connected at intervals by double nozzles having a small orifice. An exceedingly fine spray is produced and is carried along with the air. The escaping air appears to pulverise the water, as it were, in a more effective manner than the pressure of water acting alone. An objection to the spray arrangement is that it charges the air with aqueous vapour to an extent dangerous to the health of the workmen.

5. Means have been proposed, but come little into practice to lay dust by using salt and angular sand, but these have never been effective enough to recommend continual use.

It may add that there is no probability that an explosion of coal dust alone could be produced in a mine by a lamp flame. When dust meets the lamp flame it becomes enflamed but soon dies out, the burnt particles of dust then clog the wick causing it to burn very dim.

## WANTED!

### 50 Miners and Laborers

BY THE

MARITIME

### Coal, Ry. & Power Co., Ltd,

AT THE

### Chignecto Mine.

David Mitchell,

:-

Gen'l Manager.

**MARITIME MINING RECORD.**

The MARITIME MINING RECORD is published the second and fourth Wednesday in each month.

The RECORD is devoted to the Mining—particularly Coal Mining—Industries of the Maritime Provinces.

Advertising rates, which are moderate, may be had on application.

Subscription \$1.00 a year. Single Copies 5 cents.

**R. DRUMMOND, PUBLISHER.**

STELLARTON, N. S.

AUGUST 22nd 1906

UNSUCCESSFUL CANDIDATES—

—AND BOARD OF EXAMINERS.

In issue of the Record of July 25th it was stated that a very strong letter had been received from a candidate who had failed in the recent examinations for mining officials. As the writer had authorized us to apply for and publish his answers to the questions, we thought it best to withhold the letter. In an interview we had with several members of the Board, prior to the examination, it was agreed that if we secured permission from an unsuccessful candidate to publish his papers they would be furnished the Record. Accordingly we applied to the Chairman of the Board for the papers of our correspondent. We have received word from both the chairman and the secretary of the Board, that while some of the papers of unsuccessful candidates have been preserved, the papers of correspondent cannot be found. This is most unfortunate and places the entire board, we must frankly say, in a most awkward and unenviable position. No matter what reasons may be given for the non-discovery of the papers, these will not be accepted by very many, and least of all by the party who thinks he was treated unfairly. When it was hinted to a member of the Board that the papers asked for were missing he declared he would very much sooner lose a hundred dollars, than that the papers should be lost. If there are those who say the thing has a very fishy look are they greatly to be blamed? We, ourselves, feel more than annoyed. Than the writer, perhaps, no one had as much to do with the establishment of the mining schools, and the composition of the Board of Examiners, and therefore it may be surmised that anything that might impair the efficiency of the one, or reflect on the integrity and honor of the other, touches him keenly. Of course it is but natural that an unsuccessful candidate should be disgruntled, and ready to say hard things about the Board. Knowing this the Board should have at all times taken the precaution, by the preservation of the papers, to vindicate their findings. The Record believes that each candidate gets all the marks he is entitled to, but if the candidate thinks otherwise the mischief remains. The way to shut off a disappointed candidate is to publish his papers. In this case the Board is not in a position to show that its findings were just. The Sec'y of the board takes the position that after an examination all the papers of all the candidates should be destroyed, that the awards being made the final word has been said.

The Board he declares has the confidence of the government and that is sufficient. Not by any means. In many matters we see eye to eye with the Sec'y. of the Board, but on this point we are wide apart as the poles. Whether the government has confidence in the Board is neither here nor there. A fig for that. No doubt the government has full confidence in the criticism of the board in the partizan loyalty and staunchness of its members.

As to the qualifications and general good behavior of the members, the government we fear is careless. That the government is satisfied with the Board is in our opinion a very small matter. The real question is: In what esteem is the Board held by the workmen in the collieries generally? If it has not the confidence of these, the fact of the government's confidence counts for little. Whenever a candidate questions any finding, the Board should be in a position to convince the candidate and the public that its finding was just. Why should the Board claim for itself an exceptional position. If the doings of other bodies are open to review why should those of the Board be above that. A judge is expected to give reasons for his decision and does so. Why should a member flourish of the hand be sufficient in the case of the Board of Examiners. Why should not the candidates be informed wherein they failed? Seeing the publication of the papers would cost the Board neither time, trouble or money, what earthly reason is there for withholding publication? Does the Board not see that by its unwillingness to produce the papers of candidates, with their consent, that it is placing itself in a very suspicious position, laying itself open to the charge of pride or pusillanimity. Of course the Record accepts the statements that the papers asked for at this time have been accidentally destroyed or inadvertently misplaced, but we must condemn the disinclination of the Board to have any of its actions reviewed or any of its findings questioned. Instead of being antagonistic to the publication of papers it should in its own interest desire to give all needed publicity.

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## *= Rubs by Rambler.*

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A writer in the Halifax Herald pays the Editor of the Record a left handed appreciation when he asserts that the editor is a past master at doing out political sophistries. I wonder what is meant by that? What are political sophistries anyway? Just what the popular meaning of the word sophistry is may be hard to express. It is scarcely the same as the dictionary meaning. Are sophistries simply polished fallacies or falsehoods with an ill disguised veneering of truth, or are they fallacies so well baited that only the very wise and the very wary can discover their true character? Seeing I am ignorant of their meaning and their mission whatever censure may apply to the editor for their use none is chargeable to Rambler. I thought for a moment that political sophistries might mean

meaningless sentences', but that won't stand, as the author of this latter phrase says the Record writer can reel them off, while the author of the sophistries phrase asserts that they are 'doled' out. Its a blessing that the word 'dole' is used, its use holds out the hope that the Record writer is not a hardened sinner, and as he just deals out small pieces, at long intervals, grudgingly, there is promise that he may yet, like the "devil" take a thocht an mend. But, seriously, does not the writer in the Herald,—present address Chicago,—see where he makes one sentence render void a preceding one, or vice versa. If an opinion is honestly held, and honestly expressed it cannot be a sophistry, for that is not simply a mistaken opinion but an utterance which the writer suspects has perforations, yet boldly asserts to be impervious, a case in which it is sought to make the worse appear the better reason, by oily craft and quiet cunning. Why is sophistry laid at the door of the Record? Because Mr. Drummond has made "the workers believe that they are free to work where they like, and for whom they like, and to control all the governing bodies by their votes." And thats what is called a sophistry. I call it the truth, without Jaeger or any other under wear. Among the loudest cries I have heard, are, justice to Ireland, justice to Cape Breton, and justice to the workingmen. There may be some meaning still in the first of these, the two latter are out of fashion and meaningless, I had almost said senseless. The new cry and it comes not from the workingmen but is wafted toward them, is Justice to the employer. "The poor workingman' has no longer a meaning, but there is pathos and appeal in the cry. 'The poor employer'". A dozen years or so ago, in a defiant spirit, it was declared that Jack was as good as his master. That is all changed now and the appeal of the master is to be permitted at an odd time to meekly suggest that the master may be as good as Jack. Free to work where they will and for who they will; I should just think so, and free to say when others shall work and when they shan't. You bet, they not only believe they can work when they will but they put it in constant practice, and you 'dars'nt' question their right to run the show just as they please. The poor employers dont count these days. They have to do, and do it gracefully, and no lip about it, just as the employees say. And woe betide the poor employer who has the idea that the command is only make believe. He'll soon find out his error. 'Work where they will? Yes, truly. If they do not like C. B. they will up for N. S. If they do not love N. S. off for the North West. The workingmen are not only their own masters, they are now the masters' masters.

There are idle rich, it is true; there are idle poor, it cannot be denied. Happily the members of these classes form an infinitesimal portion of the whole of the inhabitants of this or any other land. Work, by the vast majority, is accepted as necessary to life. We all were placed here to work; if we do not work then we deteriorate in body and in mind. Nature has laid us under compulsion to work. It lays down the law that if a man does not work neither shall he eat, and further, she has ordained that man can only attain and retain health of body and vigor of mind by

active labor. To some work is irksome and uncongenial, these however, let us hope, are the small minority, who are born tired. There seems to be, these days, an outcry against work, a shrinking from manual labor. Perhaps the outcry is not against work so much as against excessive labor. With such a cry one may have whole sculed sympathy, while he has not a particle for the man who despises work, because he is aware there are some idlers in the country. There are, these days, many restless spirits who seek to convert workmen to the idea that all who do not perform manual labor, are parasites, growing fat on the labors of others. These forget that there are two kinds of sweat, that of the brow and that of the brain, and that of the two the latter may be the more distressing and enervating, in short the severest kind of labor. Instead of scolding and scorning the idle rich, the workers should pity them. If pity should be extended to the over-worked, much more should it be extended to the non-workers. The former may have healthy minds, the latter are surely a prey to many mental maladies. It is right that the workingman should be striving earnestly in every way to better his position materially, socially, and intellectually; it is not right that he should be taught to believe that these things are not now his because he has been deprived of them by moneyed robbers and by unholly methods.

The Halifax Herald is carrying on a nice little semi socialistic seminary of its own. The aim of the seminary is to disseminate rather radical views. It is assisted in its propoganda by four or more specialists. I thought to take a hand in myself but that is scarcely necessary. There is a sufficiency of divergence of views between the Herald's assistants, rendering additions to its staff undesirable. I am going to content myself quietly looking on. I am willing to accept the unenviable part of umpire. 'Excelsior' pretends, to differ from 'Sydney Miner', 'Sydney Miner' from Roundman, 'Roundman' from 'Lawson', and so on. 'Inverness Miner' trends a solitary way. One correspondent thinks the P. W. A. is not fulfilling its mission, has simply a name to live and is dead, and never was of very much account. Another says the society has done excellent work, that its constitution could not well be improved, and that it is capable of great things. Whose opinion should prevail? Again we are told by one that the selling price of coal has little or nothing to do with the rate of wages paid. The price of coal might go away out of sight, yet that would have no bearing on wages for not the price of coal but the necessities of the worker determine the wage. This assertion I take, of course, with a grain of salt, indeed, I might say I know it to be an incorrect statement, but I'll not say so as I do not desire to hurt the story teller's feelings. On the other hand Roundman inclines to the old fashioned antiquated opinion that the law of supply and demand has not been deleted from the foremost works on political economy, is yet a little inexorable and has more than a little to do with the rise and fall of wages. And would you believe it, though I hold to the opinion that the law of supply and demand gets a side slap at times, I am inclined to side with old fashioned Roundman. The present demand for laborers for the North

West and loaders for Cape Breton has caused labor to stiffen its upper lip, and refuse to take the wages of a year or two ago.

I have a little quiet sympathy for Roundsmen of the Herald etc., as the idea has seized me that he is striving heartily to obey the injunction: "Cease to do evil and learn to do well" therefore I am a little disappointed when he makes a small slide from grace, by stating and giving as a whole truth that which is truth in very little part. For instance in his eagerness to hasten the day of nationalization (heeh) of public utilities he assures us that the New Zealand government—New Zealand has been advertised after the most up-to-date fashion—controls and operates the coal mines. How many? What success has attended the operation. Suppose I were to say that the Fundy Coal Co., the Port Hood Coal Co., or the Gowrie and Blockhouse Co's, any one of them, operated the coal mines of Nova Scotia, how would the statement be characterized by people who are familiar with coal mining operations in Nova Scotia. And unless it has done it all of a sudden, within a few weeks, the government of New Zealand operates the coal fields to a very little extent.

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The Herald, through its correspondents and by its own illuminated headlines, is preaching some peculiar and puzzling doctrines these days. Some of them would feign preach socialism, and that not of the christian kind, if they only knew how, and it looks as if the Herald would like to help them if it only could. We are told, not once but many times that the workingman is entitled to all he produces, but we are left utterly in the dark as to what that means. 'To all he produces' A miner produces five tons of coal, is he entitled to all of it. If so where do the banksmen and the screenmen and the trimmers et. al. come in. If a farmer owns some sheep, shears the wool, spins the thread, and weaves it into homespun he certainly can lay just claim to the whole of the web. If the farmer shears and the wife spins and a strange workman weaves, who does the web belong to? Can the weaver claim it because he has produced it. What is to be the share of the farmer who supplied the materials without which there would be no weaving. In short what return is he to get for his capital. Will not the weaver's share be the smallest, in justice. And so with the miner, or the tailor, or the shoemaker, each is entitled to a just reward for his share in the production. Why cannot those people who aim at a reformation, tell us in short measure, what they want really. Again we are told: "Individual effort centuries ago produced food for the man and his family, to-day the individual is dependent upon a vast complex mechanism for every bite of food." Well, what of it. Was he better fed or clothed or freer, centuries ago, than he is to-day. The Indian had a rather free hand centuries ago, and what sort of fist did he make of it. If that individual produced food for the man and his family, that was all he did or could do. He produced no luxuries. He did his golfing with his hoe, and played tennis with a hay fork. He was minus a horse and buggy, and a mower and a rake, and even a dog chura. He had to work like a nigger and sweat like a horse. To-day

he—the individual who produces for the man and the family, — makes the machine do the reaping and the threshing and the raking that were done centuries ago by the swing of the arms, and the sweat of the face. When the individual did it all for himself and his family centuries ago, he didn't make a great fist of it, did he now? I would just like to know where the individual did all this for himself and family centuries ago? He didn't do it in England where he was a vassal, in Scotland where he was a clansman or in Ireland where he was a serf. Where did he do it? The individual referred to must have been an Indian. We'll as between an Indian and his mode of life centuries ago, and a C. B. miner, or mine labourer and his life as he lives it to-day, give me always and ever the individual of to-day. He of centuries ago, had to produce under almost intolerable conditions. He had no costly pipe, no quid of tobacco, no sugar, no tea, no rubber tire buggy. He owns his own locomotive, his own tram car, his own rubber tired buggy and, or, his own roadster.

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I am glad to see the Morning Chronicle come out with a "forward policy." It was about time somebody did. In the reproach of the opposition that the present Local government was guiltless of constructive legislation, there was, dare I say it, more truth than fiction. With its overwhelming majority it could have turned things upside down—statute labor for instance—yet it didn't. However, past lethargy will be overlooked if it plays its part in the Chronicle's programme. I am glad the Chronicle has undergone conversion on the encouragement of iron ore mining question. It will be remembered that the Chronicle a year or more ago, mounted its high horse and clamored for a rearrangement of the bounties. It wanted the government—federal—to relax the bounty on pig made from outside ore, and place it on pig made from native ore. That was a policy, as the Record pointed out at the time, that would hurt the steel trade without benefitting the ore trade. The Chronicle at that time had great delicacy in telling the local government to do its duty, in demanding that it pay some heed to the development of ore mining in Nova Scotia. It has got over its modesty and now backs up the Record in demanding that the government take an interest in ore mining. If I may be permitted to speak, by way of criticism, I might say that it is funny that this iron policy is promulgated after it has been announced that large discoveries of ore have been made in C. B. These days the lisped prayer of an Islander, is more effective than the loudest petition of a Mainlander. Of course the 'encouragement' of the Chronicle will only be given to ore as yet undiscovered. Those who have discovered ore need no encouragement. At least that is the way I feel. If I could only get hold of a big deposit at Whycoomagh or some other convenient place, I think I would not ~~wash~~ wash myself about government encouragement. If there are known deposits in presently inaccessible places the government might well proffer aid.

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I am inclined to the opinion that the Herald's propaganda in favor of labor politics will soon dissolve into vapor. The campaign is not being conducted by generals of ability or those of honesty and sincerity. If a

campaign needs to be bolstered by outre and extravagant devices, it must come to grief when it comes into contact with the matter of fact world. The arguments favoring labor politics would be funny if they were not a reflection on the intelligence and sincerity of the workmen. There should be labor politics because in mining villages we have lame men, and blind men, and asthmatic men! I bet five cents that if a disinterested observer walks the streets of Springhill, Westville, Stelarton or Glace Bay on a holiday he will notice fewer maimed and fewer halt than in railway villages or large lumber camps. A miner's work is hazardous, no doubt, but there are other occupations more so. And a miner works under healthier conditions, under a more equable temperature than men in mills, factories, or farms. And tables of longevity do not go to prove that those engaged in mining have the highest death rate. Not at all. I do not see the good of following up the subject at this time. I maintain that the course pursued by the P. W. A. from 1882 till 1902 was instrumental in obtaining for its members quick recognition, more substantial reforms than had they organized a separate party. Can any one friend or foe, point to a single legitimate or reasonable request of the workmen that was denied. The P. W. A. got more, and got it easier, in the way of reform, than any labor party in Britain, France, or the United States. When the Government in power turns its back upon the reasonable requests of P. W. A. men, then will be time to give the government in power the cold shoulder and make efforts to oust them. Will those clamoring for labor politics admit that all the reforms which have within twenty years benefited the workmen were not initiated or zealously sought for by the workmen? It is a fact whatever the answer be. Can it be denied that which has benefited the workers of to-day more than aught or all else, more than bigger pay and shorter hours, I refer to education, compulsory education if you will, was not sought for but opposed by the workmen, with exceptions of course, and had to be passed in spite of their opposition. The leaders, and the leaders may not have been workmen in the restricted sense, had to thrust this and other reforms down the throats of their followers. The workmen realize that there is no great call for a representative from the working face, or from the ranks of labor. In Bud Paul of Springhill they had one who was to the manor born and yet the majority of the miners of Springhill thought Dan McLeod was the better man to represent them, and gave him their votes. Neil Gillis knows what it is to 'dig coal' and yet a majority, if I am not mistaken, of the miners of Glace Bay gave their votes to a lawyer, thus proving that they did not give a Joe for a candidate from their ranks. And yet they seek to tell us that the toilers should be represented by a toiler. If the workmen of Britain had worked zealously a quarter century ago, and since, with the party that professed to be in favor of reform, ten chances to one they would have been much further ahead than they are to-day, almost as far ahead as are the P. W. A. men of Nova Scotia. The subject I fear won't enthuse, so good-bye to it, during the dog days, at least.

Certain of the papers purpofted to give some of the practical results of Pres. Ross's, of the Dom. Coal Co., late visit to C. B. As one of them stated no circulars have been issued regarding the changes, therefore the Record cannot speak with certainty as to their number. It seems certain however from its repetition that Mr. McIsaac of the Transportation Department goes in with

Gen'l. Sales Agent, Dick; that the manager of the Hub resigns, and that a 'minor' of the survey or construction staff puts on his coat. One paper had it that an office boy earning less than what was fifty years ago the wage of a days laborer, has been sent to the right about. By way of the Underground Railway the Record is informed that Mitchell will take the Hub as being nearer civilization, and that Maxwell, U. G. M. at No. 2 will go to No. 6 to get broken in. By the same line comes the news that another manager was balloted upon for expulsion, but that there was not a sufficient number of black beans. The operator at the other end of the U. G. Railway solemnly asserts that all the changes are but a prelude to the blasting of some more mining reputations. Whatever the fellow means one can only dimly—yes, say dimly—guess at. If changes are being made, because Mr. Ross is annoyed—so the papers assert—at the smallness of the output and the bigness of the cost, then the dismissals may be hasty. The question may be legitimately asked "Why with more men and more places for men is the output not much larger than May, June and July of 1905." But if the annoyance is over the increased cost then it should not be nursed, for the reason that the days of cheap coal are past. Some honest disinterested friend should take Mr. Ross kindly by the arm and tell him quietly yet strongly that the signs are that the Dom. Coal Co. will never again win coal so cheaply as a half a dozen or more years ago. Is the Record interfering in a private matter I hope not. It concerns the peace of mind if not a few individuals, and therefore in a sense is public concern.

#### INVERNESS COUNTY AND ITS COLLIERIES.

(CONCLUDED.)

There are those who think there may be other coal fields in this rich county than those presently known to exist. A party seized with this belief is boring at Judique. It is the intention to bore to a depth of 300 feet. A six inch seam of coal was bored through a short distance from the surface. The boring up to the time of my visit was chiefly through sandstone with an occasional streak of shale. The boring is a little hap hazard, or difficult, as regards locating as there are no exposed metals as guides. Mr. Beaton, the mine manager at Inverness, is an enthusiastic prospector, therefore it was not really a difficult matter to coax him to take a run into the country to see what was doing at St. Rose, better known as Chimney Corner. I had often heard of the Margarees and wished to see them. There are ever so many and so big Margarees. First there is the Forks, Margaree, North West, and South East, or thereabout, and Margaree Harbor. We couldnt take them all in in a day, so at the Forks, after having dined at Dougald Campbell's inn, we went into session, and the votes for Margaree Harbor carried. The proprietor of the Forks inn is one of the cantiest and blightest old fellows one would wish to meet. I shouldnt call him old, his manner is youthful. He has a taking way with him, and he relieves the monotony of a country life by



paying compliments to tourist's wives, most zealously and openly at the times when Mrs. Campbell is doing the carving. And he does it so innocently and neatly, that one, and the one most nearly affected is rendered speechless. Mr. Campbell is a genuine sample of the kindly Scot, and is known as such far and wide as well as in his own countryside.

From the Forks to Margaree Harbor the distance is some seven miles, and the road we take is on the south side of the River. The scenery is not grand, but quietly and interestingly pastoral. I have travelled a bit in my day, and I do not remember having seen so large a stretch of country so thickly studded with farm houses and farm buildings. There were no breaks or gaps at unusual distances, for the whole of the way, till the Harbor was reached; and we were told that the whole way along the shore to Cheticamp is as thickly settled as the portion we had seen. The houses indicate that the people are thrifty. Margaree Harbor is a rather picturesque spot. The entrance to the Harbor is narrow, shallow and difficult. The shifting sands impair the usefulness of the Harbor. From the hill behind the hamlet one has a good view of Cheticamp, and Cheticamp Island and also of the place where is situated the Richfield mine, which it is hoped, at some day not distant, will be producing copper ore of commercial value.

Not long after leaving the Harbor for Inverness, by the shore road, we noticed a coal outcrop and Mr. Beaton could not pass without examination. We found two outcroppings and in a jiffy concluded that there were two seams, one thicker than the other, but neither of the thickness of five feet. They were a long way distant from Chimney Corner, and they had no connection apparently with the seam at St. Rose.

At length we reach the bore hole at St. Rose where Mr. Sands struck the eight foot seam of coal which it is claimed his company will soon work. It is said a shaft will be sunk, but unless the angle is much less than surface indications point to, the doing so will be tedious and expensive, if any good grip of the coal is desired. No work has been done in the way of sinking. We had heard that an engineer and party were at work near the bore hole, but diligent search from the highway—failed to locate them. By diligent enquiry we learned from a countryman where the party were at work and the nature of the work that they were prosecuting. The conclusion came to was that this was a party sent out to hold the fort, that is, doing some 'active operations' in order to retain the municipal subsidy. The season is too far advanced to permit of active operations at the mine or on the railway this summer. It was reported in Inverness that Ira Taylor the promoter of the company was in London with a representative of the Wallace interests, the object being to negotiate for a transfer of the Wallace areas to the Nova Scotia Collieries, Ltd. It is strange that the company has not secured the Lithgow areas. If the coal runs seaward, these areas will be necessary for the carrying on of big operations.

#### —AROUND THE COLLIERIES—

There is no let up to development work underground at the Allan shafts, so that places may soon be obtained for a number more miners. At present there are no fewer than fourteen leading places.

The P. W. A. lodges are celebrating the anniversary of the Society at dates to suit their fancy. Some celebrations have already been held and others are to come off. Olive Lodge will celebrate at the grounds adjoining the No. 3 colliery on Sept. 1st.

A majority of the big collieries show decreases for July. The decreases foot up 37000 against 15000 tons increases, a net decrease of 22,000 tons. It will require something more than the summer picnics to account for this, unless the men are becoming more frolic loving the longer good times continue.

The concrete pillars on which the steel bankhead at the Allan shafts will rest, will be ready for the superstructure in a few days. From the number of these pillars it is evident that the bank head will be large and roomy. A large travelling derrick has been built to handle the massive pieces of steel to be used in the construction of the bank head.

Close on three hundred men lifted their back time from the Dominion Coal Co. in order to proceed to the North West. They will not be gainers from a material stand point by the change, but then they will gain experience by travel. Skilled men also seemingly have a repugnance for unskilled labor at the mines while willing to take any odd job in the wheat fields.

The temperature around the collieries during the hot wave was of course high, but nowhere so high as at a spot some two or three hundred yards from the Senators' corner at Glace Bay. It is said that at this place the temperature was higher than at any previous time in the memory of the O. I. This statement is made on the authority of reliable and disinterested authority. The heat affected different individuals in different ways. The Record cannot comply with the request to reproduce snapshots.

#### EIGHT HOURS FOR BRITISH WORKMEN.

The vote of the Northumberland miners upon the eight hours question is of great importance in the colliery world. Hitherto there has been a majority opposed to the Bill brought forward on behalf of the miners of other districts in the country. Now the number of men agreeable to an eight hours day by Parliamentary enactment shows an increase which is sufficient to turn the scale in their favour. A majority of a thousand may not appear very large, but it is considerable, and especially so when we remember the history of the question in this part of the mining field. Interest in the subject has developed rapidly of late, and the vote indicates that the men realize the importance of the ballot just taken.

## AROUND THE COLLIERIES.

The pits are losing heavily these days owing to the number of pic-nics.

A scarcity of houses at Stellarton is in great part responsible for the short supply of labor at the mines.

Two shifts instead of three has had to be resorted to in a section of the Allan Shafts owing to lack of miners.

Perhaps one reason why so few loaders go to the machine mines in C. B. is that no set or stipulated wage is offered.

Mr. E. Leflamme, formerly of the Springhill staff of the Cumb. Ry. & Coal Coy., is now on the staff of the Montreal office.

The Inverness mine is to be put double shifted as soon as the necessary number of men are secured. Double shift may be now on.

The Inverness Ry. & Coal Co. are putting forth supreme efforts to secure miners. It is likely that some men may be attracted from collieries that have not themselves an over abundance.

Sinking to the deep of No. 3 slope, Springhill, is now being pursued with vigor and the underseam is being opened up east and west of the 3800 ft. lift. The new lift of No. 3 will be between 600 and 700 feet long.

The Dominion Coal Co's contract with the Everett people will expire before a great while, and it is said the Gas Co. is wondering what the Dominion Coal Co. will do. The Everett people talk Southern coal, while the Dominion Coal Co. say higher prices. The Broughton bluff is no longer played. Who will win?

The suicide of H. D. Mayhew, son of the President of the Cape Breton Coal, Iron & Ry. Co. gave the entire community a severe shock on its announcement. It seems the young fellow was not in the best of health for some weeks prior to his death. He was worried about something which drove him insane.

The coal on the bank of the Dominion Coal Co. at Montreal looks better than for many years back. The coal is larger and also cleaner. The coal is not arriving at Montreal from N. S. as quickly as anticipated. The Dom. Coal Co. and the N. S. Steel and Coal Co. bank between them about 130,000 tons. Labor in Montreal is quite as scarce as in N. S. The Railways are offering from \$1.50 to \$2.00 per day.

Two driver lads employed at Dom. No. 3 colliery were fined \$14.00 and \$18.00 or fifty days in jail, and \$10 and costs or 40 days in jail respectively for trying, in short, to effect a strike of the drivers at that colliery. The lads quit work and tried to induce others to do so. The wage paid drivers is \$1.35. The boys intended by a little strategy to get \$1.65. The stipendiary magistrate gave them some wise counsel, and surprised the lads when he told them his charges for the same. This is the first case of the kind that we have heard of, and it is not improbable that if the remedy proves effective it may be adopted by other mine managers.

There has been considerable time and much coal lost lately in Springhill through the men laying off.

The levels west of the 3800 ft. lift, No. 3 mine, Springhill, has been driven a mile through untroubled ground of a uniform grade 23'. It is generally conceded that No. 3 mine workings have now got beyond the troubled zone and both new lifts will permit of a better method of handling the coal than by chutes although the steeper ground is being very successfully and safely worked.

After much discussion, of a geological nature, many surmises, and a deal of good natured bantering and cutting, amongst the official staff, No. 5 slope, Springhill, was holed through to No. 2 slope without fault, or blemish, although apparently threatened from all sides by troubled ground. What this means for Springhill may be surmised from the fact that there is now in view two miles and a half of unbroken ground in No. 2 mine, of coal unequalled anywhere; and in No. 1 mine, a mile and a half at the least, of a 9 foot seam, that is the equal of No. 2 in every particular, and possibly the superior of the latter as a coking coal.

The Maritime Mining Students Association has taken a fresh lease of life. The live mining students of the town finding great benefit and interest in exchanging views on the several subjects treated in the study of mining. Two papers were recently read before the society on "Mine Gases, their danger and how to deal with them" by Wm. Hartley. "Mine Fires, their origin, and how to prevent or extinguish them", by W. D. Matthews. A paper bristling with facts based on personal experience, and shrewd suggestions of a practical nature, the result of a careful study of various conditions under which mine fires have been met and overcome. The paper may later be prepared for publication.

The meetings of the Maritime Mining Students Association recommenced on July 20th, at the residence of Mr. W. D. Matthews, Springhill. The following officers were elected: President James McNeil; Vice Pres. Charles Kent; Treasurer, W. D. Matthews; Secretary, Wm. Hartley. Committee:—Chairman, J. G. Evans. Chairman to name balance of committee.

The meetings will be held each successive Friday at 8 O'clock at Mr. Mathews residence, when papers will be given on practical mining subjects, discussion of papers to follow.

Activity around the Allan shafts is very noticeable. The concreting at No. 1 shaft from the surface fifty feet down is about completed. The timbering of the shafts and the placing of the slides is keeping pace with the concrete work. The timbering conveys the impression of great strength, solidity and permanency. The shaft is divided into three compartments. It is a satisfying shaft to look at.

**Coal Shipments JULY, 1906.**

DOMINION COAL COMPANY, LTD.

—Output and Shipments for July 1906.—

	—Output—	—Shipments—
Dominion No. 1	45 266	
Dominion No. 2	52 701	
Dominion No. 3	34 876	
Dominion No. 4	49 751	
Dominion No. 5	59 298	318 291
Dominion No. 6	6 005	
Dominion No. 7	11 381	
Dominion No. 8	25 052	
Dominion No. 9	33 961	
	<u>318 291</u>	<u>318 291</u>
Shipments July 1905		342 962
Decrease July 1906		24 671
Shipments 7 mos. 1906		1 748 887
“ 7 “ 1905		1 499 772
Increase 7 “ 1906		249 115

**INTERCOLONIAL COAL CO.**

Shipments July 1906	24 177
“ “ 1905	14 864
Increase July 1906	9 313
Shipments 7 mos. 1906	163 720
“ 7 “ 1905	102 953
Increase 7 “ 1906	60 767

**CUMBERLAND RY. & COAL CO.**

Shipments July 1906	20 504
“ “ 1905	27 706
Decrease “ 1906	7 202
Shipments 7 mos. 1906	251 180
“ 7 “ 1905	222 587
Increase 7 “ 1906	28 593

**ACADIA COAL CO.**

Shipments July 1906	19 083
“ “ 1905	25 570
Decrease “ 1906	6 487
Shipments 7 mos. 1906	144 403
“ 7 “ 1905	140 861
Increase 7 “ 1906	3 542

**INVERNESS RAILWAY & COAL CO.**

Shipments July 1906	19 702
“ “ 1905	14 009
Increase “ 1906	5 693
Shipments 7 mos. 1906	92 160
“ 7 “ 1905	70 090
Increase 7 “ 1906	22 070

**NOVA SCOTIA STEEL & COAL CO.**

—SYDNEY MINES.—

Shipments July 1906	71 692
“ “ 1905	71 501
Increase “ 1906	191
Shipments 7 mos. 1906	336 605
“ 7 “ 1905	258 963
Increase 7 “ 1906	77 642

**Prince Edward Island Railway.**

**TENDER.**

Sealed Tenders, addressed to the undersigned, and marked on the outside "Tender for Car Shop at Charlottetown," will be received up to and including TUESDAY, SEPTEMBER 4th, 1906, for the construction of a Car Shop at Charlottetown, P. E. I.

Plans and specifications may be seen at the Resident Engineer's office, Charlottetown, P. E. I.; at the office of the Secretary of the Department of Railways and Canals, Ottawa, Ont., and at the Chief Engineer's Office, Moncton, N. B., where forms of tender may be obtained.

All the conditions of the specification must be complied with.

Railway Office, D. POTTINGER,  
Moncton, N. B., 17th Aug., 1906. General Manager

**Intercolonial Railway.**

**TENDER FOR BRIDGES.**

Sealed Tenders, addressed to the undersigned, and marked on the outside "Tender for Bridges," will be received up to and including MONDAY, SEPTEMBER 3rd, 1906, for the construction and erection of the steel superstructure of a bridge at Doaktown; the steel superstructure and masonry substructure of a bridge at Boisstown (both on the Loggville-Fredericton Section), and also for the construction and erection of the steel superstructure of a bridge at Boyer River, near St. Charles Junction, P. Q.

Masonry plans and general specification may be seen at the Chief Engineer's office, Moncton, N. B., and at the office of the Superintendent of the Canals of the Province of Quebec, Montreal, where forms of tender may be obtained.

All the conditions of the specification must be complied with.

Railway Office, D. POTTINGER,  
Moncton, N. B. General Manager  
August 14th, '06.

materials in connection with the excavating and grading for new tracks between North Street Station and the grain elevator at Halifax, N. S. Plans and specifications may be seen at the Terminal Agent's Office Halifax, and at the Chief Engineer's office, Moncton, N. B. where forms of tender may be obtained.

All conditions of the specification must be complied with.  
Railway Office, D. POTTINGER,  
Moncton, N. B. General Manager.  
19th, August 1906.

**MINE MANAGER WANTED.**

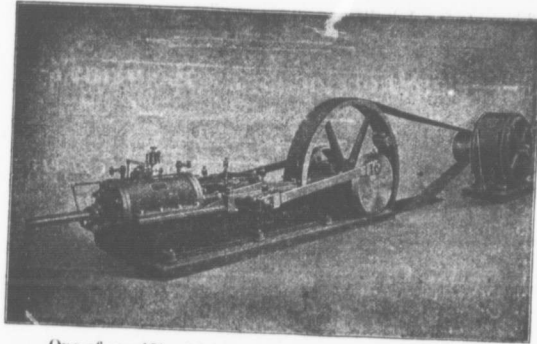
The undersigned are asked to receive applications for the position of Mine Manager for an important colliery in Nova Scotia.

**The Applicant will please state Age Experience and Salary required.**

—All communications will be considered Private.—

**DRYSDALE & McINNES,  
HALIFAX, N. S.**

# Allis-Chalmers-Bullock, L't'd.



One of our 12½ x 18 Air Compressors driven by a 50 h. p. Induction Motor, and supplying power for a Manitoba quarry. For different uses of compressed air see Catalogue 75 F.

**Works, MONTREAL.**

**Branch Office New Glasgow.**

**WIRE  
ROPE**

**HIGH GRADE WIRE ROPES FOR  
Hoisting, Haulage, and Colliery Purposes.**  
Manufactured by **Dominion Wire Rope Co., Ltd., MONTREAL.**  
AUSTEN BROS.—HALIFAX AGENTS.

**500. - WANTED. - 500.**

**Wanted immediately, at Inverness, C. B.**

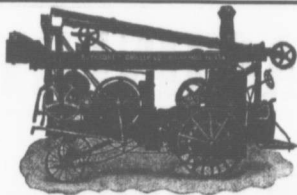
**Five Hundred Hand Pick Miners,**

**Underground and Surface Laborers.**

**Miners earn Two to Five Dollars per Day.**

**Inverness Railway & Coal Co.**

**J. MCGILLIVRAY,**  
SUPERINTENDENT



## The KEYSTONE

**Percussion Core Drill Attachment**  
**is an economical appliance for**  
**TESTING COAL LANDS.**

It can be used in connection with any good "burn" drill, but operates best on the long stroke KEYSTONE, thus making the cheapest and quickest method of boring to be found.

In operation a hole is sunk to the coal with the ordinary Rock Bit. The bit and stem are then removed and the Coing Attachment put on in their place. It takes a 4 ft. core out of the Softest as well as the Hardest part of the vein. Avoids all delay and expense of "rods" water wash, diamonds, shot, and heavy operating mechanism.

Price of Complete Attachment  
**\$200.00**

Catalog No. 2 B. is a book on the subject.  
 We make Water, Oil & Test Well Drillers  
 for all depths and purposes.

**Keystone Driller Co. Beaver Falls, Pa.**



## The TORNADO AIR POWER COAL DRILL

is used extensively  
 by the

Dominion Coal Co.

Nova Scotia Steel  
 and Coal Co.,

Inverness Ry.  
 and Coal Co.

and others.

Herzler & Henninger Mach. Works,

**Manufacturers of the**

**H. & H. Coal Cutters & Tornado Coal Drills,**  
**Belleville, ILL., U. S. A.**

# MABOU & GULF COAL COMPANY, L'T'D.

Miners of the

## MABOU DIAMOND COAL.

Burns and Works like Bituminous;

Looks and Lasts Like Anthracite;

IT HAS NO EQUAL.

Mines, Piers  
 and General Offices

**MABOU, CAPE BRETON.**

## MONTREAL STEEL WORKS Limited.

STEEL CASTINGS  
 FORGINGS,  
 SPRINGS,  
 FROGS,  
 CROSSINGS,

We make a Speciality of cast Steel WHEELS

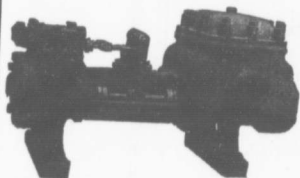
and other  
 Steel Castings for

**MINING PURPOSES.**

INTERLOCKING SWITCH AND SIGNAL Plants.

(Under the patents of Saxby & Farmer, Limited, of London Eng)  
 CANAL BANK, POINT ST. CHARLES MONTREAL—

# PUMPING MACHINERY.



Fairbanks Morse Duplex,  
Piston Pattern,  
Boiler Feed Pump.

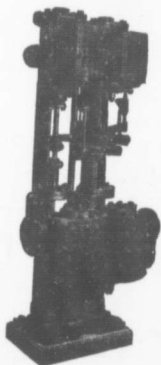
Steam Pumps,  
Power Pumps,  
Fire Pumps.

We make pumps for all purposes,  
and have a VERY Extensive Line of  
Patterns.

Our aim is to Build a High Grade  
Line of Pumpin Machinery.

The Material and Workmanship en-  
tering into the Construction of Our  
Pumps is kept up to the highest Stand-  
ard at all times.

All the Wearing Parts are made to Gauge and are therefore  
interchangeable.



Fairbanks Morse,  
Vertical Duplex Boiler  
Feed Pump, Marine Type.

**EVERY PUMP IS THOROUGHLY TESTED  
BEFORE IT LEAVES THE FACTORY.**

Send for our Catalog 48c, or have our representative  
in your vicinity call on you.

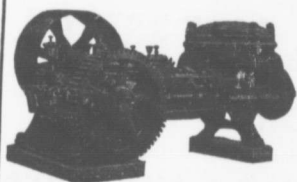
REPRESENTED BY

A. F. LYTLE, New Glasgow, N. S.

K. N. FORBES, Halifax, N. S.

G. E. Choinier, St. John, N. B.

Fairbanks Morse Horizontal Duple Power Pump



**The Canadian Fairbanks Company, Limited.**  
Montreal, Toronto, Winnipeg, Vancouver.



**Synopsis of Canadian North-West.  
Homestead Regulations.**

**ANY** even numbered section of Dominion Lands in Manitoba or the North-West Provinces, excepting s and 26, 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 homestead entry or inspection must be made in person by the applicant at the office of the local Agent or Sub-Agent.

An application for entry or inspection made personally at any Sub-agents office may be filed to the local Agent by the Sub-Agent, at the expense of the applicant, and if the land applied for is vacant on receipt of the telegram such application is to have priority and the land will be held until the necessary papers to complete the transaction are received by mail.

In case of "personation" the entry will be summarily cancelled and the applicant will forfeit all priority of claim.

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

A homesteader whose entry is in good standing and not liable to cancellation, may, subject to approval of Department, relinquish it in favor of father, mother, son, daughter, brother or sister, if eligible, but to no one else, on filing declaration of abandonment.

Where an entry is summarily cancelled, or voluntarily abandoned, subsequent to institution of cancellation proceedings, the applicant for inspection will be entitled to prior right of entry.

Applicants for inspection must state in what particulars the homesteader is in default, and if subsequently the statement is found to be incorrect, in material particulars, the applicant will lose any prior right of re-entry, should the land become vacant, or if entry has been granted it may be summarily cancelled.

**DEEDS.**—A settler is required to perform the conditions 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) If the father or mother, if the father is deceased, of a homesteader resides upon a farm in the vicinity of the land entered for by such homesteader the requirement as to residence may be satisfied by such person residing with the father or mother.

(3) If the settler has his permanent residence upon farming land owned by him in the vicinity of his homestead, the requirement may be satisfied by residence upon such land.

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.

**SYNOPSIS OF CANADIAN NORTH-WEST MINING REGULATIONS.**

**COAL.** Coal lands may be purchased at \$10 per acre for soft coal and \$25 for anthracite. Not more than 250 acres can be acquired by one individual or company. Royalty at the rate of ten cents per ton of 2,000 pounds shall be collected on the gross output.

**QUARTZ.** A free miner's certificate is granted upon payment in advance of \$5 per annum for an lode lode, and from \$50 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 \$5 per acre.

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

Fluoré 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 for a term of twenty years, renewable at the discretion of the Minister of the Interior.

The leasee shall have a dredge in operation within one season from the date of the lease for each five miles. Rentals \$100 per annum for each mile of river 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.

**EMPIRE TRUST CO.**

Head Office  
187 Hollis St., HALIFAX

Parties appointing this Company to act for them will have the benefit of the wide business experience of the Directors, who are equally recognized as gentlemen of integrity and ability.

Folders obtained from  
Branches Bank of Nova Scotia.

**Miners Wanted  
To Chew  
BULL DOG TOBACCO,**

Because it is the only Tobacco which does not excite Thirst for Water after using.

**TRY IT!**

The St. Lawrence Tobacco Co., Ltd.

—Montreal.—

—W. B. Reynolds, Halifax Representative—

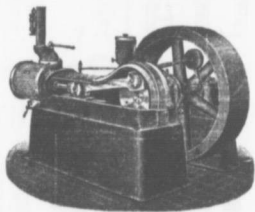
**The Archibald Company, Limited**

Hats, Caps, Straw Goods, all kinds of Fur Goods and Men's Furnishings.

Wholesale only,

**TRURO, Nova Scotia.**

**NOT ONE CENT FOR REPAIRS**



An experienced Engineer has written us as follows:—

"After eighteen months of hard service, the Robb engines are in excellent shape, running very smooth and without a bit of vibration. Up to this time they have not cost one cent for repairs, the only expense being steam, oil and packing, and this below the average. Perfect alignment, parts well machined, and good design make the Robb the most economical and labor saving engine that has ever come under my notice.

**Robb Engineering Co., Ltd.**

Amherst, N. S.

# HAMILTON'S ZEPHYR

....PILOT,....

CALLED

“The Prince of Pilots.”

Beyond Comparison. The Finest Pilot Biscuit Made.

ASK YOUR GROCER FOR IT.

G. J. HAMILTON, & SONS.

Pictou, Halifax, St. John.

Contractors to Admiralty and War Office, also Colonial Governments.

## ALLAN, WHYTE & C'O'Y.

### Clyde Patent Wire Rope Works,

Cablegrams: "Ropery Rutherglen," Rutherglen, Glasgow, Scotland. Cables, A. B. C. (4th & 5th Eds)  
A. L. Liebersand Private.

# Wire Ropes

for Winding & Haulage  
in Collieries and Mines.

Aerial Ropeways, Suspension Bridges, etc. Specially  
flexible for Ore & Coal Discharging Cranes, Winches, etc.

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 1,750,000 tons in that time and is still good for further considerable service.

Agents in Nova Scotia:—**Wm. Stairs, Son & Morrow, Ltd., Halifax.**  
Agents in New Brunswick:—**W. H. Thorne & Co., Ltd., Saint John.**

—Different Sizes and Qualities kept in Stock—



# CAPE BRETON COLLIERY.

NEW CAMPBELTON CAPE BRETON N. S.

SUPERIOR

## STEAM AND DOMESTIC COAL

SAFE AND CONVENIENT SHIPPING PORT

The Nearest Coal Port to Newfoundland

Just Inside Entrance Great Bras d'Or.

Vessels from P. E. I. and Western Ports, via St. Peter's Canal, will save time by loading at New Campbellton. Smooth Inland Navigation. Quick Despatch.

**- - J. T. Burchell Manager.**

## INVERNESS IMPERIAL COAL

INVERNESS RAILWAY and COAL COY.  
Inverness, Cape Breton.

Miners and Shippers of INVERNESS (BROAD COVE)

**Screened, Run-of-Mine Slack.**

—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.

Apply to Inverness Railway and Coal Company, Inverness, Cape Breton; Wm. Petrie, Agent, Port Hastings, C. B.

### INVERNESS RY. & COAL CO'Y

Time Table No. 18, Taking effect at 1 a.m. June 5th, 1905.

EASTBOUND		STATIONS.	WESTBOUND	
Read Down	No. 54		Read Up	No. 55
a. m.	p. m.		a. m.	p. m.
L 11 10	L 8 55	P. TIPPER JUNCTION	A 10 58	A 7 05
S 11 16	S 4 00	PORT HAWKESBURY	S 10 52	S 7 27
A 11 25	L 4 12	PORT HASTINGS	A 10 50	A 7 19
	P 4 30	TROY	P 10 46	
	S 4 45	CREIGNISH	S 10 05	
	P 4 55		P 9 53	
	S 5 10		P 9 55	
	P 5 25	CATHERINES POND	P 9 52	
	A 5 28		L 9 59	
	L 5 45	PORT HOOD	A 9 03	
	P 5 58	GLENCOE	P 8 43	
	S 6 21	MARBO	S 8 15	
	P 6 35	GLENOYRE	P 7 50	
	S 6 55	BLACK RIVER	S 7 27	
	P 7 07	STRATHLOUNE	L 7 30	
	A 7 20	INVERNESS	A 6 16	
	p. m.			

Trains make close connections at Pt. Tupper Jet. with I. C. R. passenger trains, excepting the Maritime Express.

# THE PORT HOOD COAL COMPANY LIMITED

Miners of

SCREENED  
STEAM  
STOVE  
SLACK

## COAL,

Mines and Shipping Pier, Port Hood; C. B.

Especial care is taken in preparing our coal for Domestic Uses. For Stoves, Grates and Ranges, it has no superior in Cape Breton or Nova Scotia.

For prices f. o. b. at Port Hood and delivered at any point including all stations in the Intercolonial or Dominion Atlantic Railways apply to

THE PORT HOOD COAL COMPANY, LIMITED

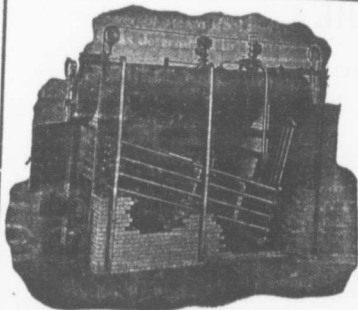
# ADVERTISE IN THE MINING RECORD.

**DOMINION BRIDGE CO., LTD., MONTREAL, P. Q.**

## BRIDGES

TURNABLES, ROOF TRUSSES  
STEEL BUILDINGS  
ELECTRIC & HAND POWER CRANES  
Structural METAL WORK of all kinds

BEAMS, CHANNELS, ANGLES, PLATES, ETC., IN STOCK



BABCOCK AND WILCOX PATENT WATER TUBE  
BOILER WITH SUPERHEATER.

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PATENT  
**SUPERHEATERS**

**Over 1,250,000 H. P. now in use.**

Can be adapted to existing plants and to all types of  
boilers, effecting great economy in fuel consumption.

*Write for our Circular giving detailed description.*

HEAD OFFICE FOR CANADA.

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## We Have in Stock

and offer at lowest price

—the following—

Asbestos Cement, Blacksmith Bellows,  
Carriage Bolts, Crow Bars,  
Coke Forks, Rail Benders,  
Jack Screws, etc. etc

These are only a few of the many supplies we  
have on hand. Write for quotations

## AUSTEN BROTHERS,

Halifax, N. S.

## George Patterson,

BARRISTER, SOLICITOR, ETC.

NEW GLASGOW, N. S.

Successor to Sinclair and Patterson—

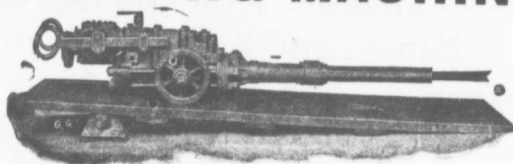
## JERSEY - LILY - FLOUR. .



*Best all round flour on the market.  
Uniform in quality. Every barrel*

*can be depended upon. This flour can  
only be had in Cape Breton at the stores  
of the Dominion Coal Company.*

# COAL MINING MACHINERY



"G" HARRISON IMPROVED COAL CUTTER.

## HARRISON IMPROVED COAL CUTTERS.

AIR COMPRESSORS  
—of all Descriptions—

LITTLE GIANT STEAM OR AIR DRILLS

MANUFACTURED BY **Canadian Rand Drill Coy Works, Sherbrooke Que.**

Halifax Office, 116 Hollis St.

G. L. Burritt, Agent.

## The Stirling Consolidated Boiler Company,

Successors to the plants and Water Tube Boiler business of The Stirling Company, Barberton, Ohio, and The Aultman & Taylor Machinery Coy., Mansfield, Ohio.

Manufacturers of

**Stirling A. & T. Horizontal and Cahall Vertical Water Tube Boilers, Chain Grate Stokers and Superheaters.**

WORKS: Barberton, Ohio; Mansfield, Ohio.

GENERAL OFFICES:.....Trinity Building, 111 Broadway, New York.

## RUBBER BELTING.

Unequaled for DURABILITY and POWER TRANSMITTING Qualities.

"Monarch," "Red-Strip" and "Lion" Brands, for Transmitting, Conveying and Elevating.

## "REDSTONE SHEET PACKING"

For Highest Pressures with Steam, Hot or Cold Water and Air

The most durable and satisfactory Packing on the Market.

Suction Hose, Steam Hose, Air Drill and Pneumatic Tool Hose.

—MANUFACTURED BY—

**The Gutta Percha & Rubber Mfg. Co., of Toronto, Limited.**

Branches at Montreal, Winnipeg and Vancouver.

Head offices, 47 Yonge Street, Toronto

# Acadia Coal Company, Limited.

STELLARTON, NOVA SCOTIA.

Miners and Shippers of the

CELEBRATED

## ACADIA COAL.

*Unexcelled for Steam, Domestic and General Purposes.*

**DELIVERED BY RAIL OR WATER.**

**SHIPPING PORT: PICTOU LANDING.**

Quotations Furnished Promptly on Application.

### MARITIME COAL, RAILWAY & POWER CO., Ltd.

Miners and Shippers of

## CHIGNECTO HIGH GRADE COAL.

Steam AND Domestic

**Unexcelled for General Use.**

Shipments to all points reached by the  
Intercolonial Railway.

Offices and Colliery - - - Chignecto, N. S.

DAVID MITCHELL, General Manager.

# The BROWN MACHINE COY.,

New Glasgow, Nova Scotia.

**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

Estimates Cheerfully given.

**CORRESPONDENCE SOLICITED**

JOHN L. BLAIKIE Esq.  
PRES.

EW RATHBUN Esq.  
VICE PRES.

**THE BOILER INSPECTION  
& INSURANCE CO.**

OF CANADA



B. I. & I. CO.

CONSULTING ENGINEERS

G. C. ROBB CHIEF ENGINEER

HEAD OFFICE TORONTO

WHEN WERE YOUR  
.. BOILERS ..  
... LAST INSPECTED I....  
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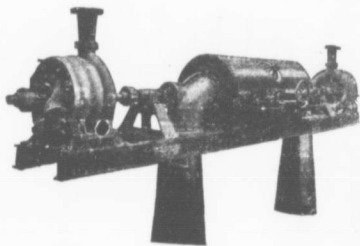
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Volatile combustible matter	18.94 %	27.93 %	28.41 %
Fixed Carbon.....	75.29 %	67.47 %	64.69 %
Ash.....	3.75 %	3.19 %	4.19 %
	100.00	100.00	100.00
Sulphur.....	1.15 %	58 %	.79 %

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NITROGEN .....	1 16 " "	1 27 " "
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ASH.....	2 30 " "	4 10 " "
WATER.....	3 35 " "	2 11 " "
	100 00	100 00

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