

MARITIME
MINING RECORD
 AND
COAL AND METAL JOURNAL
 Dr. R. Bell
 Coal surveyor and dentist

*Cumberland. * Pictou. * Cape Breton. * Inverness*
 New Series Vol. 9 No. 22 May 22nd. 1907 STELLARTON, N. S.

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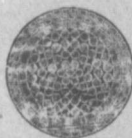
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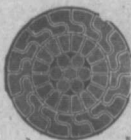
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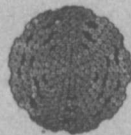
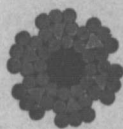
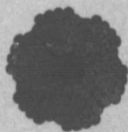
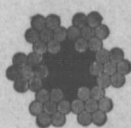
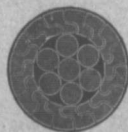
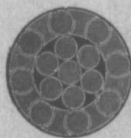
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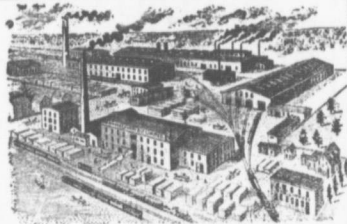
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21 Mixed for Pictou Landing	7 45
62 Mixed for Pictou	8 30
55 Mixed for Mulgrave	11 10
19 Express for Sydney	11 15
28 Mixed for Pictou	12 55
56 Mixed for Truro	13 40
129 Mixed for New Glasgow	13 45
20 Express for Halifax and Montreal	15 30
140 Mixed for Pictou	15 35
101 Mixed for Pictou Landing	16 50
22 Mixed for Hopewell	17 05
83 Express for the Sydneys	18 10
32 Mixed for New Glasgow	18 50
36 Express for Halifax and St. John	19 50
17 Express for New Glasgow	21 20
66 Express for Pictou	21 40

—TRAINS ARRIVE AT STELLARTON—

79 Mixed from Trenton	6 30
78 Mixed from Trenton	5 55
61 Express from Pictou	7 30
18 Express from New Glasgow	7 35
21 Mixed from Hopewell	8 00
55 Mixed from Truro	9 20
100 Mixed from Pictou Landing	10 55
28 Mixed from New Glasgow	10 55
27 Mixed from Pictou	11 00
56 Mixed from Mulgrave	12 50
19 Express from Halifax and St. John	13 30
20 Express from Sydney	15 30
82 Mixed from Pictou	15 35
30 Express from Halifax and St. John	17 00
83 Express from Halifax and St. John	18 10
77 Mixed from Hopewell	18 45
62 Mixed from Pictou	19 35
36 Express from the Sydneys	19 50
17 Express from New Glasgow	21 25
67 Express from St. John and Halifax	21 30

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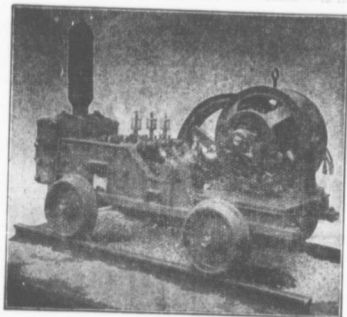
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Minerals other than Gold and Silver.

-LICENSES TO SEARCH-

over five square miles for eighteen months, cost \$30.00; leases for four renewable terms of twenty years each can be selected from them at a cost of \$50.00, and are subject to an annual rental of \$30.00

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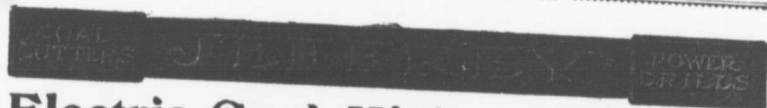
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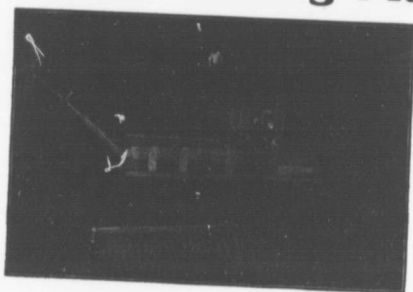
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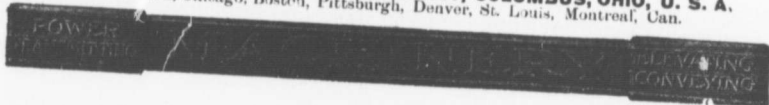
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Complete Mine Equipment.

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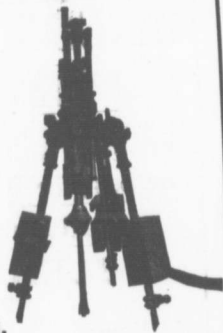
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has three cylinders of oxygen, sufficient to enable thirty men to breath three days. Respiratory apparatus is here at hand for parties leaving the chamber to reconnoitre or signal. In the safety chamber there are foods, medicines, and first aid appliances. The standard room as here built will accommodate 24 men for a reasonable time while awaiting rescue.

70 Ans....
MARITIME MINING RECORD

Vol. 9, No. 2. Stellarton, N. S., MAY 22nd, 1907. New Series

PROVINCIAL EXAMINATIONS, 1906:

SCHOLARSHIP,—MANAGERS.

A QUESTION ANSWERED.

Ques. 1.—If 252 men can dig a trench 210 yards long 3 wide and 2 deep, in 5 days of 11 hours each; in how many days, each 9 hours long, will 22 men dig a trench 420 yards long, 5 wide and 3 deep?

Ans. 1—
 The first trench contains $210 \times 3 \times 2 = 1260$ cubic yards.
 The second " " $420 \times 5 \times 3 = 6300$ " "
 $22 : 252 :: 55 : \text{Number of hours required}$
 $252 \times 6300 \div 55 \text{ eq. } 3150 = 9 \text{ hours a day}$
 $22 \times 1260 \div 3150 \div 9 = 350 \text{ days}$
 Ques. 2—Find the Cube Root of 12, 812, 904.
 Ans. 2— $12,812,904 \sqrt[3]{234}$
 23 eq. $\frac{8}{4812}$

1st. partial divisor $3 \times 202 \text{ eq. } 1200$
 2nd. " " $3 \times 203 \text{ eq. } 180$
 $3^2 \text{ eq. } 9$ $\frac{4167}{645904}$
 First complete divisor 1389
 2nd. partial divisor $3 \times 2302 \text{ eq. } 158700$
 $3 \times 2304 \text{ eq. } 2760$ $\frac{645904}{4 \text{ eq. } 16}$
 2nd complete divisor 161476 $\text{Ans} = 234$

Ques 3.—The radius being given how would you find (a) the circumference; (b) the area of a circle; (c) the inside diameter and length being given, how would you find the cubic contents of a cylinder?

Ans. 3—(a) Circumference eq. $\text{radius} \times 2 \times 3.1416$
 (b) Area eq. $\text{Diameter}^2 \times .7854$
 (c) Cubic contents eq. $\text{Diam.} \times \text{length} \times .7854$

Ques. 4—A tank is fed by a pipe that can fill it in 2 hours, how long would it take to fill it if the tank has a leak which would empty it in 10 hours?

Ans. 4—In 1 hour pipe fills $\frac{1}{2}$ of tank
 " " " leak empties $\frac{1}{10}$ of tank
 " " " part filled $\frac{1}{2} - \frac{1}{10} = 10 = 2.5$
 Tank will be filled in $5 - 2$ or $2\frac{1}{2}$ hours

Ques. 5—A ladder 91 feet long, the foot of which is 35 feet from a wall, just reaches the top of it. How high is the wall?

Ans. 5—Height of wall eq. $91^2 - 35^2 \text{ eq. } 8281 - 1225$
 eq $\sqrt{7056} \text{ eq. } 84 \text{ feet}$

Ques. 6—Find the capacity of a cube of which each edge is 1 foot 8 inches,

Ans. 6—1 foot 8 inches equal 20 inches
 $20^3 \text{ equal } 8000 \text{ equal } 4 \text{ cubic feet } 1088 \text{ cub. inches.}$

(Note—Questions 7 and 8 not published as they require diagrams.

As no answer has appeared in the Record to the following question, Mr. James Gray, of New Aberdeen, C. B. answers it as follows:

Ques.—A mine is ventilated by a Guibai Fan, 36 ft. diameter, which makes 68 revolutions per minute, and the quantity of air passing is 168,000 cubic ft. per minute, with a pneumat: pressure equal to 4.6 water gauge as shown in the fan drift. The downcast shaft is 12 ft. diameter and 1087 feet deep, and the upcast shaft is 12 ft. diameter and 1032 feet deep. The air passages are so arranged as to divide the current into eight equal splits, each passage square in section having an area of 50 square ft. The W. G. shown in the partition erected between the two shafts is 3.1065 inches,
 (1) What should be the theoretical pressure produced by the fan. (2) What is the manometric efficiency of the shafts. (3) What is the co-efficient of friction of the shafts. (4) What is the equivalent orifice of the upcast. (5) What is the equivalent orifice of the two shafts considered as one. (6) What is the equivalent orifice of the mine considered by itself (7) What is the equivalent orifice of the mine and shafts considered as a whole. (8) What is the equivalent orifice and length of each split of air in the mine reckoning the co-efficient of friction at .01 lbs. for each sq. ft. of rubbing surface for a velocity of 1000 ft. per minute. (10) What would be the indicated horse power in the air.

Answer.—This question resolves itself into various sections, therefore I will take them in the order given.

(1)—By using 'Fairley's' rules' the theoretical W. G. produced by the fan will be found thus: $V \text{ eq. top speed of fan per second. Rule } \frac{V^2}{32.3 \times 67.8} \text{ or } (V^2 \times .000458)$

this multiple is only used when the return air is 60° Fah. The fan is 36 ft. diam. = (113 0976 feet circumference) making 68 revolutions per minute would have a top speed of 128.17 ft. per sec. found thus: $3.1416 \times 36 \times 68 \div 60 = 128.17 \text{ feet per second. W. G.} = 128.17^2 \div 75 \text{ Theoretical W. G.}$

32.2×67.8
 P eq. $7.5 \times 5.2 \text{ eq. } 39 \text{ lbs. per sq. ft.}$

(2) Rule: $w \text{ W eq. } 7.5 \text{ in.}$ $w \text{ eq. } 4.6 \text{ in.}$
 $W \text{ eq. theoretical W. G.}$ $w \text{ eq. actual W. G. produced by the fan.}$ $Q \text{ eq. quantity of air per minute.}$ $M \text{ eq. manometrical efficiency of fan.}$ $\text{Manometrical efficiency of fan is the proportion which the effective press. bears to the theoretical press. In this case the fan produces } 4.6 \text{ in. W. G., and the theoretical W. G. is } 7.5 \text{ in. therefore the manometrical efficiency of the fan eq. } 4.6 \text{ eq. } .6$

(3) Rule K eq. $\frac{Pa}{SV^4}$ In this case we must find the (press. used in the shafts, or we may find the press. by portioning the sq. root of the depth

of the shaft and the press. of the upcast shaft. From the question I find the upcast absorbs a press. of 7.7662 lbs. per sq. ft. This is the difference of press. at bottom of shaft and surface.

$$\therefore \text{Press. of D. C. } \sqrt[3]{1032} : \sqrt[3]{1080} :: 7.7662 : X$$

$$X \text{ eq. } 32.8 \times 7.7662 \text{ eq. } 7.9451 \text{ lbs. press. D. C.}$$

Total press. of both shafts eq. $7.7662 + 7.9451 = 15.7113$
K eq. $\frac{15.7113 \times 113.09}{37.6992 \times 2112 \times 2.2}$ eq. .009 co-efficient of shafts,

(4) First find W. G. absorbed in the D. C. shaft thus:
W. G. eq. $\frac{K \sqrt{2} \text{ eq. } .01 \times 40715.136 \times 2.2}{A \times 5.2}$ eq. 1.5231

Equiv. Orifice eq. Rule $\frac{.388 \times Q \text{ eq. } .388 \times 168 \text{ eq. } 52.82}{\sqrt{W}}$ eq. 52.82

(5) $\frac{.388 \times 168 \text{ eq. } 53.34 \text{ equiv. orifice upcast shaft.}}{\sqrt{1.4935}}$

(6) W. G. for the two shafts eq. $\frac{15.7113 \text{ eq. } 3.02}{5.2}$
 $.388 \times 168 \text{ eq. } 37.77 \text{ equivalent orifice of shafts, or find}$
 $\frac{.388 \times 168 \text{ eq. } 37.77}{\sqrt{3.02}}$

W. G. thus eq. $\frac{.01 \times 1750.77562 \text{ eq. } 2.977}{113.09 \times 5.2}$ W. G.

I will use this W. G. for the following calculations.

(7) The shafts absorb 2.977 in. W. G. and the W. G. for mine and shafts is 4.6, therefore the W. G. for the mine eq. $4.6 - 2.977 \text{ eq. } 1.623$

$.388 \times 168 \text{ eq. } 51.32 \text{ equivalent orifice of mine itself.}$
 $\frac{.388 \times 168 \text{ eq. } 51.32}{\sqrt{1.623}}$

(8) The equivalent orifice of the shafts eq. 37.67 and that of the mine as a whole is found thus:

$$\sqrt{\left(\frac{1}{37.67}\right)^2 + \left(\frac{1}{51.32}\right)^2} \text{ eq. } 21.83$$

(9) We have 168000 cubic feet of air passing through the mine into 8 equal splits, therefore we shall have $168000 \div 8 \text{ eq. } 21,000 \text{ cub. ft. passing through each split.}$
 $.388 \times 168 \text{ eq. } 6.415 \text{ equivalent}$
 $\frac{.388 \times 168 \text{ eq. } 6.415}{\sqrt{1.623}}$

The length of each split will be found by the following rule thus: $L = \frac{PA}{KV^2O}$

L eq. Length of Airway in ft. O eq. Perimeter. P eq. 8.4396 . A eq. 50 K eq. $.01$. V eq. $.1764$

$\therefore \frac{8.4396 \times 50 \text{ eq. } 8439 \text{ ft., length of each airway.}}{.01 \times .1764 \times 28.28}$

(10) Rule H. P. eq. $\frac{QP}{33000} \text{ eq. } \frac{168000 \times 23.92 \text{ eq.}}{33000}$

121.77 H. P.

SUMMARY.

- (1)—Theoretical pressure (7.5 × 5.2) 39 lbs.
- (2)—Manometrical efficiency of fan .6
- (3)—Co-efficient friction of shaft .009
- (4)—Equivalent orifice of downcast shaft 52.82
- (5)—" " " upcast shaft 53.34
- (6)—" " " shafts combined 37.67
- (7)—" " " mine itself 51.32
- (8)—" " " mine and shafts as a whole 21.83
- (9)—Equivalent orifice of each split 6.415. Length of each split 8,459 feet.
- (10)—Indicated horse power in the air 121.77

Owing to the erection of an electric power line from the Mersey River to the Leipsigate Gold District, Lunenburg County, N. S., certain New York capitalists have obtained an option on the so-called Crowe & Brown property, which is a large property, with considerable development work done on it, upon the same lead as that of the Micmac Gold Mining Company. The property obtained by these New York capitalists has upon it several shafts, all in ore. The two principal shafts are called the Gilmore and Old German. The Old German is down about 125 feet, and has several drifts run both ways. These drifts show good ore. Mr. Forbes Ricard, a brother of T. A. Ricard, the engineer who came down to report on Nova Scotia mines for the Provincial Government, went down into this Old German shaft when making an examination of the Micmac Gold Mining Company's property, for the purpose of forming an opinion as to whether it was of equal value to the vein worked in the Micmac property. As far as he could tell from observation, his opinion was that this part of the vein was just as promising as that on the Micmac property. The vein in this shaft is several feet wide, and carries about 815 to the ton.

The Gilmore shaft is down about 200 feet. The vein is somewhat narrower than in the Old German, but carries better values.

These shafts are about one mile from the main shaft of the Micmac property, and conclusively prove the extent of the great fissure in the Leipsigate District. There is no mill on the Crowe & Brown property, although there are head frames, hoisting apparatus, and some boilers in each shaft house. There are several small shafts and shaft houses, and some one or two dwellings. The property was developed by the Scotia Mining and Development Company, for the purpose of opening up ore, and making a good saleable property of it. The prospective owners of this property, who have an option on it, intend to work it with electric power obtained from the new line. The prospect of making this mine pay from the start is very good.

It is the intention of the management of the Micmac Gold Mining Company to do some prospecting this summer, and open up and prove several other leads that are in the Leipsigate district near the Micmac main fissure.

Mr. James Ross, yesterday, (Monday) confirmed the report already published in the Gazette, that while he and Mr. James Reid Wilson were in London, they discussed the differences between the Coal and Steel Companies with Messrs Angus, Wood and Nichols, and that the last two named had stated that Mr. J. H. Plummer, president of the Dominion Iron & Steel Company, would sail for Canada last week and that he would meet the president of the Dominion Coal Company upon his arrival in this city. "I hope," continued Mr. Ross, "and in fact I have always hoped that we may reach a settlement of the difficulties satisfactory to both interests."—Montreal Gazette, 14Inst.

Grand Sec'y. Moffatt spent off and on three weeks in Springhill, presumably making preparations for the test of the Labor Disputes Bill. Anyway as a result of his visit there is a case for the Board. John is all right and the Gd. Council makes for peace when possible.

MARITIME MINING RECORD.

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R. DRUMMOD, PUBLISHER.

STELLARTON, N. S.

MAY 22 1907

- Rubs by Rambler.

A correspondent of the Herald lately—and this is not the first time I have seen the suggestion—said that there would be more harmony in the P. W. A., there would be no need of soliciting done if its doors were thrown wide open. For the admission of whom? Of the general public? The Lord forbid. There are spit fires enough, I do not use the word viciously—among the workmen, without letting loose upon them every glib tongued demagogue, and a host of political heelers. We are told that they have the "open shop" in their 'unions' in Britain. Perhaps so, of men going round the districts urging upon the workmen the necessity of rejoining the union and contributing like little men. The P. W. A. is not a society whose chief business is to discuss public affairs. Its business is to discuss matters chiefly affecting its members. True, some of the public, such as the question of wages, but that is not a sufficient reason for the lodge to open wide its doors. The meetings of the coal operators are not open to the public though they may at odd times discuss a subject that greatly concerns the public, namely, the price of coal. At the meetings of the Steel or the Coal Company, or indeed of any concern none but the shareholders are present. At Church meetings where business matters are to be discussed none but contributors are expected to be present or allowed to take part. If a stranger were to offer to give advice he would be called a meddler and impertinent. And why should others than the stock-holders of the P. W. A. be present at a lodge meeting. Why should the public desire to be present. Are not the workmen capable of transacting the business as a reason why the doors of lodges should be open that some members keep the bosses well posted. That is quite possible, but what of it. Would they know less if the door was open. But what, I ask again, if the bosses do know. There is nothing talked off in lodge that could not be proclaimed on the house top. If that be so it may be asked, what necessity for the closed door. This. Many workmen can talk freely and talk

sensibly among themselves who would be tongue tied in the presence of strangers. The doors are closed so that discussion can be free and informal. The P. W. A. is not a society founded for the general good of the community, but for the special benefits of its members. The questions discussed are primarily those affecting themselves, not in relation to the community, but to their employers. Communications in writing pass between the lodges, and the employers of their members. These communications, in a sense, are private. In fact the men have secrets, so to speak, of their employers in their possession, which they know they in honor should not make public. The thing that puzzles me is to know why while every other society is closed to all but its members the P. W. A. should be a free for all. The P. W. A. is not in the common acceptance of the word a secret society. The goat that a P. W. A. member rides in initiation is of the most harmless kind. There is a password, but only for the purpose of keeping strangers out, by strangers I mean those who will take all the benefits accruing from Union without assuming any of the responsibilities, that is without contributing towards expenses. But take the P. W. A. and compare it with unions without similar organization. Is not the success attending it proof that its foundations were well and truly laid. Has it not secured, in many ways, more for its members at a less cost, than any other trades union. In twenty-five years there has not been a strike of men in Cape Breton of two days duration, and in Pictou Co. no strike of a longer period in twenty-one years. If any trades union can blazon over its portals the words "Peace with Honor", surely that society is the P. W. A. Of course it cannot be denied there have been troubles at Springhill, but these cannot be set down to defects in the Constitution of the society. Gentlemen, in this instance, it might be wisdom to let well enough alone.

I spent a while, on a night lately, glancing over some Mines Reports of from thirty to forty years old. On looking at the table of accidents I was struck by the number of accidents due to explosions of powder, and then I soliloquized "And yet they say you cannot make men moral by act of parliament". Some may think that there is no connection whatever between morals and the use of gunpowder but there is. Is carelessness a breach of the moral law? Is the omission of due care and diligence in the prosecution of ones labors a breach of the moral law? I hold that either the one or the other is. Can the law make men less careless, and more careful? I hold that it can and that it is proven by the fact that as soon as governments put restriction on the too free use of gunpowder, accidents decreased. Within ones recollection workmen took a full keg of powder into a pit, and old miners will be able to recall cases where workmen attempted to fill their cans from their kegs with the lamp stuck in the front of their cap, the result being that a spark sent the keg to pieces, and battered the holder. As the law became stricter still—in reference to firing of shots, etc.—accidents grew fewer, until now they have almost wholly disappeared. There are now no accidents from powder in a majority of mines for the very good reason that powder is prohibited. And yet it is not so many years ago

since both operators and miners thought it would be impossible to profitably mine coal in Nova Scotia without the use of explosives. In some of the collieries at the present time the old Maul and wedge are the implements employed in taking down the coal after the fall has been holed. I wonder if those who hold men have ever considered where this sort of argument would lead them. Should a parent correct a wayward son? A majority may say, yes. But why should he? He cannot make the boy moral by his mandate. Why in any case establish a law or a code of discipline? If men won't do right of themselves can you make them do right by rules or laws? If we are to accept the assertion as a fact that men cannot be made outwardly, in seeming—and that all that is generally aimed at by restraints—moral by act of parliament, then one must conclude that all punishment is purely vindictive. You cannot get away from that. Does not law restrain a man. If so then it makes him moral in so far as it prevents him from doing evil. If there were no laws prohibiting certain actions, and compelling the performance of others, things would be in a pretty mess.

Talking with a legislator the other day I happened to remark that political methods were much cleaner on the other than on this side of the water. He dissented violently and in a fine burst of frenzy said Canadian politicians were every whit as pure as those of Britain and that comparatively—I suppose he meant in comparison with the United States—there was little corruption in Canada. Well all I have to say is that if that be so, the newspapers are worse than common liars. They are surely in the third in veracity class. Beaconsfield said those in the first class were liars, those in the second class 'blank' liars, and those in the third class—were statisticians. Did one ever hear of a British prime minister telegraphing, to a member of a corporation for 'another ten thousand'. The sin in that request lay in its being found out. If other members of other governments have not had the charge laid at their doors it is due, solely, to the fact that they were not found out. Any man, in anyway familiar with the trend of things political in Canada, knows that not only individual members of parliament, but heads of governments, have no aversion to receiving contributions from corporations towards political funds. I do not say the 'parties' in Britain receive no subscriptions, but there such come mainly from private individuals, while here I would not like to say that they do, nor say that they are the offerings of unselfish, generous hearts. The directors of big corporations have no right to take shareholders' money and give it for any political purpose. Sometime ago a bill for any political purpose, promoted by the London and North Western Ry. was before the British House of Commons. A zealous liberal drew attention to the fact that the company had donated £200 to the purse of the moderate party in the late London council borough elections. One of the directors of the company rose and acknowledged a mistake had been made and said the directors would refund the money out of their own pockets. The bill after this explanation would likely have passed, had

not an over zealous young lawyer justified the action of the directors. The bill was then held over, as the members would not pass it until there was ample proof of repentance. When it came up again the bill passed, after a strong debate, and at the solicitation of the ministers. The government explained that they would not, in future, tolerate such actions. After this all statutory companies must fully and publicly declare their contributions for political purposes. Mr. Lloyd George went further and said that the government would introduce a bill to make all these payments illegal. It is known that big sums were given by the Insurance companies to the United States politicians and I would not wonder a bit if certain corporations in Canada helped to swell some one or other of the parties campaign funds. Some may think there is no harm in this, but there is. It is true to day as of yore that a gift blinds the eye, and if a big company subscribes liberally to the party fund it does it for a purpose, and it is not hard to guess what that is. They tell us is not hard to guess what that is. They tell us that if we have dishonest, greedy, or grasping politicians, the people are to blame. Perhaps so, but if it is becoming the proper thing for ordinary electors to be grafters, or to long for a chance to become such, I think it is because they have been set a bad example by certain in authority and that they see no reason why they should not have a share in what is, said to be, going.

Some excellent—I may so style them—articles are appearing in the Halifax Herald these days, telling us what our conduct should be in matters private, public and political. We are being treated to good, if I may not say grand, moral sermons, more especially in public, life is rampant, though, of course, it doesn't go by that harsh name, but of such soft-sounding word as 'graft'. It is, in some times called 'rake off'. Now, in dead earnest, that there is a lot of graft, dishonesty, even swindling in public life, cannot be denied. There are men getting rich quick who never go near a broker's office. These men have influence in high quarters, and are given inside information which enables them to make 'deals'. Deals now a days are the reward of those who it is thought have done yeoman, political, service. Of course it would be libellous to say that all our public men are grafters and grabbers, yet it cannot be denied that in some form or other there never was so many breaches of the eighth commandment. The articles in the Herald, good as they may be, true as they may be, fail to accomplish the good that they should, all owing to their setting. They may be apples, pictures, of gold, but not being set in frames of silver the good effect they otherwise might have is lost. The setting spoils, or devalues, the articles. How so? Well it is this way. A great many people cannot forget that it is not so many years ago that the Herald condoned, if it did not strongly defend—in its friends—the very actions which it now so savagely denounces—in its opponents, The Herald, of course, has a perfect right to do that if it has undergone a transforming process, a change of heart. Before its articles will be acceptable to many liberal readers it must first give proof that it has repented as in dust and ashes of the evil of its former

ways. This will be a hard job for the Herald, for even though proof is furnished there will still be Thomases, those sort of people who cannot think that a man can ever be anything but what he mendsible. Just how the Herald will bring forth fruits meet for repentance I cannot say. The job will be no easy one, for it is a damnable fact that if a dog gets a bad name it will stick to him. And I am a little afraid the Herald's past conduct will put it out of court for many a day.

Two Russians, so the newspapers say, were caught in one of the C. B. collieries having a quiet and friendly smoke in the mine. On their persons were found all the requisites for charging and lighting their pipes. They committed the offence so calmly and so openly that it is believed that they were ignorant of any law prohibiting indulgence in the weed. That sounds bad, and the Record hopes that the plea of ignorance can be disproven, for if not then there are those to blame besides the actual breakers of the law. In Cape Breton, and, perhaps, to a lesser extent, on the mainland, where there are so many nationalities, French, Belgians, Austrians, Russians, Italians, etc. it may be necessary from this out to print the special rules in more languages than the English. Either that or interpreters must be employed to give special lectures to foreigners, on the Mines Regulation Act and on the Special Rules. In Pennsylvania at some of the collieries the Special Rules are printed in no fewer than thirty-two different tongues. It is to be hoped that there will not be in C. B. any such conglomeration of languages for many a day, but in case there may be it might be as well that the operators make a departure from the established rule of printing the rules in English only, and print them in Russian also. This might be wisdom on the part of the operators for it is possible that if foreigners break the law through being unable to read the rules in a tongue foreign to them the native workmen may apply for a law making it compulsory that no man go into a mine who cannot read English. There are, as is known, certain the lookout for some fresh subject on which to disclaim. "Dangers to natives through ignorance of foreigners" might prove a taking and attractive theme. However they do it the operators descend a mine in ignorance of the Mines Act, or the Special Rules. This recommendation applies not to miners but to loaders and days men only, for if the 'Men's Examining Boards' do their duty, no miner can possibly work at the face in ignorance of the law.

Complaints are made that the Boards for granting certificates to miners, are, some of them, remiss in the performance of their duties. They are too zealous altogether—to secure the fee payable on a certificate being granted. This may not be true but such is the report. It is said for instance that men who have not served in the mine the specified time if refused a certificate at one colliery will apply to the examiners at some other,

and secure the necessary paper. This is not the first time the Record has been informed of such proceedings. The Deputy Inspector must investigate and have the offenders removed whether the members have no right to wink at flagrant, or they better look out. The mere fact that a man presents a certificate won't free them if it is known that such certificate could only have been obtained by fraud on the part of the holder, or by "compounding" on the part of the granters.

DOCTORS AND ALCOHOL.

As the "Temperance" question is as much in evidence in mining localities as elsewhere, the following from an influential London paper may be of interest and of use:—"Sir Frederick Treves, Sir James Barr, Professor Sims Woodhead, Dr. William Ewart, Dr. T. B. Hyslop, Dr. T. N. Kelynaek (hon. secretary of the Society for the Study of Inebriety), Dr. David Walsh (editor of the Medical Press and Circular), and other leading physicians have not been content to let the recent manifesto on alcohol remain without a formal protest. The insufficient grounds on which the opinions expressed in the manifesto were based have already been fully shown. The counter-statement now published points out that certain misconceptions may arise both from the wording of the manifesto and from the use to which it has been put. Sir Frederick Treves and his cosignatories say that they gravely dissent much of the teaching of the manifesto, and cannot accept it as an authoritative statement of recognised medical opinion on the matter. They believe the medical use of alcohol is 'occasional rather than regular, and limited rather than wide.' They regard the word 'life-preserving' in connection with alcohol as misleading, and consider the expression that alcohol has 'the power to sustain cardiac and nervous energy' rests on no certain evidence. On the other hand, they strongly believe that alcohol is unnecessary as an article of consumption in the case of healthy men and women, and that its general use could be discontinued without detriment to the world's welfare. Further, believing that alcohol is one of the most fruitful sources of poverty, disease and crime, they are pleased to add that it is now sparingly employed as a remedy by the majority of medical men. It is interesting to note that seven of the twelve signatories of this statement are not tee-totallers; so it is in no sense a partisan pronouncement. In contrast, no tee-totaller signed—or could have signed—the first manifesto."

It should gladden the hearts of those who murmur because they think they pay more proportionately for coal than the people in Montreal to learn that the price to dwellers in the St. Lawrence district has been increased. All of the operators, however, will not be able to take full advantage of the rise, as some of them are running on three years contracts. The Nova Scotia Steel and Coal Co is the one, perhaps, most favorably situated, as it has no long contracts. It is well, however, that this company will be a gainer in the St. Lawrence, as it gets no share of the I.C.R. contract.

AROUND THE COLLIERIES.

The slants in No. 4 Slope of the Drummond Colliery, have been driven about 3000 feet.

Mr. D. McNeil succeeds Mr. Hayman as underground manager of No. 4 slope, Drummond Colliery.

Mr. Thos. A. Grant, who has been in Nanaimo for several years expects to pay a visit to Pictou Co. in July.

The Inverness mine worked steadily during last winter except for a few days in March when everything was tied up by the snow storms.

The Inverness Ry. and Coal Co. put about 5000 tons of coal in bank during the winter. This will be handy to draw from when the summer's rush is on.

Things are running along famously at Inverness, with an output of from 800 to 900 tons on single shift. As soon as navigation opens actively to the St. Lawrence the mine will be put on double shift.

Owing to the fact that the Inverness Ry. & Coal Co. were able to keep their men employed during the winter months, the colliery is fairly well supplied with men and ready for a brisk summer's work.

The electric bell to be installed in No. 4 Slope of the Drummond colliery, will be a great benefit. The tugging at heavy wrapper wire will be dispensed with. The telephone is being extended to the furthest down lift.

A bad accident caused by a box going off the road in the Inverness mine, resulted in the death of one man and the injury of two others. The one fatally injured was a Scotsman. He leaves a family of seven children exclusive of his wife.

It may interest prospectors to know that the Sullivan Machinery Coy., of Chicago, have made a speciality of prospecting coal and ore lands for over 30 years and are prepared to undertake work on a contract basis at a given price per foot.

A bore hole was recently sunk in No. 4 Slope of the Drummond Colliery down to the Scott pit seam. About 220 ft. of strata were gone through. The object of the boring was to test the Scott seam coal at a point much further south than had yet been tried. It is believed the core proved satisfactory to the management.

The level in No. 6 lift of No. 4 slope of the Drummond Colliery was driven in 1200 feet from the slope through broken pillars, and places broken off at right angles to the old pillars. This level has been working for about 4 years and is now about finished. From this at one time abandoned section a large quantity of coal has been extracted successfully.

Mr. Robt. Gray, formerly of Inverness has been appointed manager, under Mr. Harry Coll, of the Vale Colliery. Before leaving Inverness Mr. and Mrs. Gray received flattering addresses and tangible appreciations from the employees of the colliery. Mr. Gray is a capable man and the Record expects he will do good work at Thorburn.

A new lift of 760 ft. in the Inverness colliery was finished in April. The sinking of this lift began on the 17th of Decr. and was finished on the 16th of April. The sinking averaged about 7 feet a day, which is good work. This sinking, or lift develops an area of about three quarters of a million tons of coal. The total length of the slope now is 3900 feet, the last 700 feet of which dips at the steep angle of forty degrees. The thickness of the strata between the face of the slope and the bottom of the ocean is 1000 feet.

It is gravely stated in at least a couple of newspapers, that the unwatering of the Hub will take a longer time than expected. The information is given that two electric pumps are employed, and that these discharge 500 gallons per hour. At this rate of unwatering it certainly will take a long time, indeed it will be an everlasting job, to dry the Hub. Given the ghost of a chance, two Pictou, or Cumberland boys, and two buckets, will throw out as much water as the two electric pumps. Possibly the word 'hour' is a misprint for 'minute'.

In the editor's absence omission was made in the Record of the retirement in April of Mr. D. Hayman from his position in the Drummond Colliery. Mr. Hayman had been in the employ for over forty years, and surely earned a rest. He will btake himself from this out to light pastoral pursuits. The company, the officials and the workmen signified their appreciation of Mr. Hayman's services and worth by making him the recipient of a handsome testimonial accompanied by words of appreciation. The Record wishes Mr. Hayman many years of happy retirement from the arduous duties of the mine.

The 6½ lift at the Drummond Colliery is so called because it was split on the main seam. The distance between the two lifts 6 and 6½ is 450 feet. In this distance a number of crushed places were gone through. The levels in being driven overtook a level that had been driven in Main seam No. 2 Slope. The length of the level was 2000 ft. From this lift a large quantity of coal was recovered which at one time was thought to be irretrievably lost. Part of the coal was taken out by No. 4 and part by No. 2 main seam. Five jigs were driven off the 6½ lift levels, and two have recently been started. Nos. 3, 4, and 5 jigs are about finished, and the level pillar is being taken out. Chucks are put in the high side of level to maintain an airway through to main seam.

AROUND THE COLLIERIES.

Springhill is enjoying a season of peace and prosperity. It may be the calm before the storm, but Springhill people are thankful for even the smallest mercy.

The output of the Drummond Colliery for May could have been almost doubled had cars been supplied regularly and had there not been so many absentee workmen.

The output from the collieries is having a decidedly upward tendency and with steady effort and attendance to business on the part of the men a good showing for the year may yet result although there is an extra big lot of leeway to be made up.

Work is steady at the Springhill collieries and good fat pays are the result. Were it not for a restlessness among the workmen which is almost unaccountable, Springhill would be a most desirable place to live in. As the matter stands, however, there is a feeling much similar to that which must exist among people living in the vicinity of a volcano.

The number of absentees from the collieries in Picton Co. during May has been greatly disheartening to the operators. It almost appears as if a halves in Spring house cleaning. At the Drummond colliery on one day recently a hundred and like proportion. This neglect to work steadily on the part of the men is causing the companies serious loss.

During the greater part of the month the mainland collieries have had their outputs and shipments curtailed owing to great scarcity of cars. It seems that a large number of coal cars were given to lumber shippers. The steamers which were to carry away the lumber were detained for many days by ice on the coast and consequently the cars remained on sidings. A large number of cars are out west too. It is a surprise to business men that the I. C. R. is so scarce of rolling stock.

Mr. James Ross, Pres. of the Dominion Coal Co. is back from his holiday. He must be a puzzle to interviewers. One newspaper man who interviewed him came away with the impression that Mr. Ross was of opinion that the Coal-Steel differences would be amicably settled soon. Another retired with the belief that in Mr. Ross' opinion there was no help for it but to fight it out. The Record thinks that there will be a settlement, but it won't undertake to hint that it will be of an amicable nature. One side or other, or both, will feel that the settlement when it comes was not just on the lines they had bargained for.

It will likely be the middle of Sep't. before the big steel bankhead at the Allan Shafts is completed.

Tamping with clay when firing shots is being enforced in Dom. 1 to prevent shots from flaming.

It is expected that the connection between the No. 1 and No. 2 Allan Shafts will be completed in about six weeks. There will then be two means of ingress or egress as required by the Act.

The first installed of the Stirling boilers at the Allan Shafts was moved bodily, brick walls and all, from its old position to a site alongside the last boiler installed. The work was done speedily and successfully, without the least sagging of any of the walls; This is the first brick building to be moved in Stellarton. Another boiler is to be moved just as it stands. The officials are to be congratulated.

Mr. John Moffatt, Gd. Sec'y P. W. W., went to Springhill Monday night. The Conciliation or Disputes Bill Board meets on Thursday. At this writing it is not known how many points will be placed before the Board for adjudication. Both sides better have a full docket, and let the settlement cover all the points likely to arise, for some time. That, perhaps, will be a hard job, as Springhill is a great dispute producing locality.

It is within the bounds of possibility that one of the collieries in Picton County may shut down for the summer season unless the miners attend more punctually to work. Unless a certain output can be obtained each month the colliery referred to cannot be worked without loss. It may become a question soon whether it would not be as well to close down the mine until regularity of work can be assured, as the loss from keeping the mine pumped out and in repair would be no greater than the loss sustained from short out-put, while the operator would still have the coal to the good. It might be well that the workmen at this colliery take this view of the case into consideration.

The No. 7 lift levels in No. 4, of the Drummond have been driven 900 feet north. One jig has been driven up and bords broken north and south. These bords are nearly in their distance, and therefore pillar work will soon be in order. The levels in No. 8 lift have recently been turned off south. The coal is extra good. The north levels may be turned off at any time. Sinking is still being continued. The No. 9 lift levels have been broken off. This lift at present is double shifted. It is expected to get a large quantity of coal in this section. The roof is tender and lipy and it is therefore unsafe to open out a large area at a time. Mr. Blue, manager underground, is certainly to be congratulated on the successful manner in which he has recovered so large a quantity of coal, which it was thought would be too expensive to get out. Mr. Blue tackled a proposition which was passed over for years as hazardous and unprofitable. It is said there has been no such work, at least not on so large a scale, attempted in Nova Scotia previously.

Max Passamino brought a number of Italian loaders recently with him direct from Italy.

Mr. Hutchinson, longwall expert, has left Dominion No. 6, and Mr. Wm. McDonald has taken his place.

Matters at Dom. No. 3 are running smoothly and all is going well. The output is good.

The rope at Dom. No. 3 was extended another lift, and against predictions is doing remarkably well, by having haulage road kept in good order.

The rope formerly used on the north deep haulage, Dom. No. 1, has been put on the single deep haulage, as the rope is still a good one.

The rope haulage in Dom. No. 2 is now working on all the headways, where motors were formerly in use. The motors are now only used on the levels.

The new electrical plant at Dom. No. 2 is now working up to its present capacity, but if more boilers be added it can nearly double what it is now doing.

Mr. McVey is busy prospecting the Mullins' seam on the Lingan side. He has got it, he says, and he does not intend to let it go for any other body to re-discover.

The centrifugal pump has been taken out of Dom. No. 1 and put down in the Hub, as it would do better work on account of having less head to pump against.

Mr. McDonald, U. G. M., of Dom. No. 6, is now in the pit again and although he still has to use a stick, he gets over the ground. It is hoped he will soon gain his usual energy.

The new lodgement and new pump in Dom. No. 9, (Harbor) are now ready and pillar drawing will commence at once, as it is expected this pump will handle the extra water.

On account of delay in getting the water shaft ready at International mine, an electric pump was put down to keep the water from rising into the present workings; hence no delay has been caused to output.

Connection has been made between the present workings of Dom. No. 10, (Emery) and the new shaft, and everything is being rushed to get ready for a good output as soon as the bankhead is ready.

The new pits on the Lingan side, when they will be opened, will be called No. 11 and 12. These numbers are a regular nuisance as it takes one all his time to connect the No. and the old name of the colliery.

Large quantities of water were encountered at Dom. No. 4 during spring freshets and it was found necessary to stop some of the machine work in order to obtain sufficient pressure to work the necessary number of pumps, this means heavy cost and loss of output.

A great hustle is noticeable at Dom. No. 5, Reserve. The new bankhead with screens, belts and all modern coal handling appliances, is being rushed to a finish. A large number of loaders have been imported and it is said more are needed yet.

The water is not being pumped out of Dom. No. 7, (Hub) as fast as expected on account of the pumps not being able to stand acid water. The pit bottom is clear and will be cleaned and secured by the end of the month. The new bankhead is being erected so that when the water is out everything will be ready for hoisting coal.

The Herald and Chronicle of May 17 conveyed to their readers the information that the North Atlantic Collieries Company had been floated. Mining Record readers had full information on this point in issue of 24th. April. Some of the newspapers are not fair to the Record. They appropriate its items without credit, or garble them so as to make it appear they are original to the paper publishing them. The monthly coal shipments for instance are appropriated without credit. These shipments are not, as was stated, easily obtainable from the Mines Office, for the reason that the Mines Office cannot furnish them monthly. We have hitherto refrained from lodging any complaint, and might not do so had not some of our patrons called attention to the purloining.

One of the officials of a mine in Pictou Co. asked a party what he was to do to induce the men at his colliery to work more steadily. He was asked in return how many off-days he would be willing to allow his men. He said if they would work on an average twenty two days a month he would be satisfied. As, the year round, there is an average of twenty six working days each month this would give a man 49 holidays a year, exclusive of course of Sabbaths, or four off days each month. Surely this is sufficient for the average workman who wishes to keep himself and his family in a respectable and independent position. Any merchant or merchant's clerk, foreman mechanic, or mine foreman, any colliery cashier or clerk, any lawyer or doctor in active practice, and needing to keep himself in practice for a living, any editor or printer under sixty years of age, would think himself mighty well off if he could get off an average of four days a month or forty nine days in the year. It is said that the time made by the men of the Acadia Colliery is much less than twenty days a month. The Record is ashamed to give the figures spoken of as representing the number of days worked on an average—but taking it at twenty days gives 240 working days, leaving 125 days for holidays and Sundays. Assuming that a working day of a miner is nine hours and that he works only twenty days a month, he works one hour for every three he rests. He cannot therefore plead that he is very hard wrought. No doubt when a miner is at work he slashes into it, but yet his hard work is not a sufficient excuse for working only twenty days a month. Far better that he wades into it now, when he is able, so that when old age creeps on he may lay back and live on that which he has earned, all by his his own industry and exertion. In making these remarks the Record is speaking as much in the interests of the men as of the operators. The trade cannot prosper as it should, if its progress is seriously hampered, as indeed it is, by too many off days.

INTERCOLONIAL RAILWAY.

Tender.

Sealed tenders addressed to the undersigned and marked on the outside "Tender for Amherst Station", will be received up to and including WEDNESDAY, JUNE 5th, 1907, for the construction of a Brick and Stone Passenger Station at Amherst, N. S.

Plans and specification may be seen at the Office of the Station Agent at Amherst, N. S., and at the Chief Engineer's Office, Moncton N. B., at which places forms of tender may be obtained.

All the conditions of the specification must be complied with.

D. FOTTINGER,
General Manager.
Railway Office, Moncton N. B., May 13, '07.

INTERCOLONIAL RAILWAY.

ORDERS FOR ROBB ENGINES, Etc.

—AND—
Prince Edward Island Railway.

TENDER.

Sealed tenders addressed to the undersigned and marked on the outside "Tender for Waterworks" will be received up to and including **TUESDAY, JUNE 4th, 1907**, for extensions to the Waterworks at Pirate Harbour, N.S., Antigonish, N.S., Springhill Junction, N.S., Charlie, N.B., Durham Bridge, N.B., Daoktown, N.B., Trois Piatots, P.Q., St. Charles Junction, P.Q., and Charlottetown, P.E.I.

Parties may tender for one or more of the above named works; a separate tender to be made for each work tendered on.

Plans and specification may be seen at the Agent's office at each of the above mentioned places, 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.
D. POTTINGER,
Railway Office, Moncton N.B., May 15, '07. General Manager.

The Robb Engineering Co. Ltd., have received the following orders:

Sydney and Glace Bay Co., Sydney, C. B. One 18 inch and 26 inch x 12 inch Robb-Armstrong vertical enclosed engine for D. C. to 250 K. W. Generator, speed 350; Two 250 H. P. 72 inch x 18 ft. Return Tubular Boilers; One 500 H. P. Robb Feed Water Heater Steam Safer.

Brockville Light and Power Co. Brockville, Ont: One 72 inch x 18 ft. Return Tubular Boiler.

Alberta Portland Cement Co., Calgary, Alta: One 21 inch and 40 inch x 24 inch Robb-Armstrong cross compound Corliss Engine D. C. to 500 K. W. at 150 R. P. M.

Vanderbeek & Sons, Jersey, N. J. for Millerton, N. B. One 14 inch x 14 inch Robb-Armstrong Engine on skids; One 72 in. x 16 ft. Return Tubular Boiler with castings for Dutch Over; One Smoke Stack 50 ft. x 34 in. x 10 gauge; One Duplex Steam Pump 7 in. x 4½ in. x 7 in. for fire purposes; One complete Rotary Mill; One complete Lath Mill.

Intercolonial Railway, Moncton, N. B. Three 100 H. P. Robb Mumford Boilers, McKenzie, Mann & Co., Toronto, Ont. One 17 in. x 20 in. Robb Armstrong Engine D. C. to 200 K. W. Generator; One 10 in. x 10 in. Vertical Engine, belted; Two 67 in. x 18 ft. Return Tubular Boilers; One 250 H. P. Robb Feed Water Heater; One 6 in. x 4 in. x 6 in. Duplex Feed Pump; One 10 in. x 7 in. x 12 in. Duplex Feed Pump for fire purposes.

Intercolonial Railway.

Return Tickets will be sold at

First Class, One Way Fare,

Good going MAY 23 and 24.

Good to return MAY 27 1907.

To all stations on the Railway and to Detroit, Fort Arthur, Port Huron and points east thereof on the G. T. R. and C. P. Ry., and to all points on the Dominion Atlantic, Halifax and S. W. Ry., Prince Edward Island Ry., etc.

Victoria DAY

May 24 1907.

Intercolonial Railway.

Tender.

Sealed Tenders, addressed to the undersigned, and marked on the outside "Tender for buildings, Halifax" will be received up to and including **THURSDAY, MAY 30, 1907**, for the construction of a site of the new engine house at Halifax, N. S.

Plans and specifications may be seen at the Terminal Agent's Office at Halifax, N. S., 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.
D. POTTINGER,
Railway Office, Moncton, N. B., May 18th, 1907. General Manager.

Intercolonial Railway.

TENDER.

Sealed tenders addressed to the undersigned and marked on the outside "Tender for Cribwork Wharf, Mulgrave" will be received up to and including **THURSDAY, MAY 30th, 1907**, for the construction of a Cribwork Wharf extension to the shore side of the existing dock at Mulgrave, N. S.

Plans and specification may be seen at the Station Master's Office, Mulgrave, N. S., 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.
D. POTTINGER,
Railway Office, Moncton, N. B., May 18th, 1907. General Manager.

WIRE ROPES.

R. S. NEWALL & SON, LIMITED,

LINACRE, LIVERPOOL,

and at 19 Royal Exchange Square,

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MANUFACTURERS OF ALL DESCRIPTIONS OF

WIRE ROPES FOR MINING

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CHAINS. CHAINS.

(All Sizes in Stock.)

"EDGES" BEST SPECIAL CRANE CHAINS.

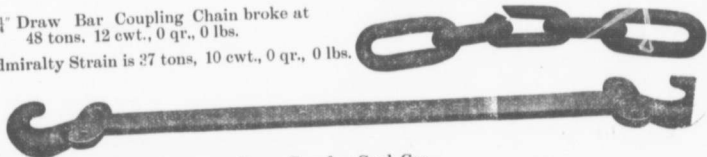
Cannot be Excelled for **HIGH CLASS QUALITY** and **WORKMANSHIP.**
They are made of the very best brands of English Bar Iron and by Selected Workmen.

Makers of every Description of Chains
for Mining and all Engineering Purposes,

Coupling Chains and Solid Forged Draw Bars
For Mine Cars, A SPECIALTY.

This 14" Draw Bar Coupling Chain broke at
48 tons, 12 cwt., 0 qr., 0 lbs.

The Admiralty Strain is 27 tons, 10 cwt., 0 qr., 0 lbs.



Edge & Sons, Limited,
SHIFNAL, England.

Draw Bar for Coal Car.

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"Codes" A. B. C. and Bedford McNeills"

CHAIN. We carry a Complete Stock of Detachable Link Belting and other ELEVATOR CHAIN.

Mine Elevating and Conveying Machinery,
Such as

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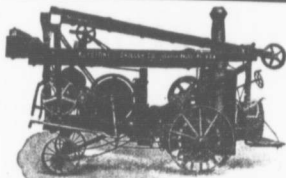
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**Percussion Core Drill Attachment
is an economical appliance for
TESTING COAL LANDS.**

It can be used in connection with any good "churn" 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 Coring 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**

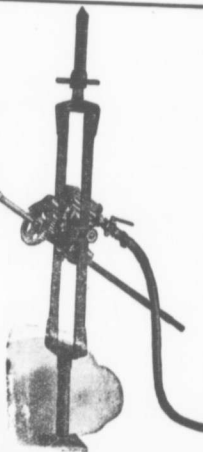
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We make Water, Oil & Test Well Drillers
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The TORNADO AIR POWER COAL DRILL

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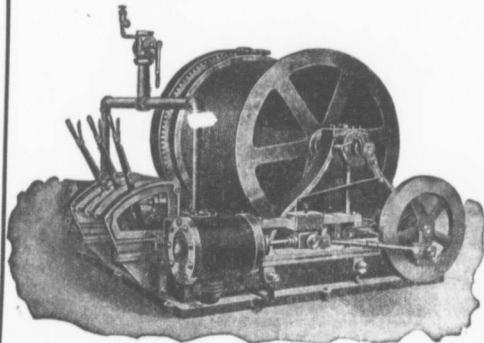
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Manufacturers of

H. & H. Coal Cutters & Tornado Coal Drills.

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This is a view of our combined friction driven and brake and reversible link motion hoisting engine. The most economical for mining purposes ever built.

We are the exclusive builders in Canada of the "Lidgerwood" Hoisting Engines, the standard of the world for mining and general contracting.

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BEST QUALITY ONLY.

Blasting Powder and Compressed Pellets, Dynamite,

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PERMITTED EXPLOSIVES.

For use in Gaseous mines. Suitable for all kinds of Work.

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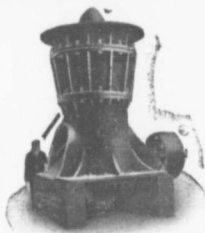
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HADFIELD'S STEEL Foundry Co., Limited. SHEFFIELD



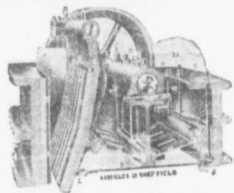
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STONE CRUSHER.



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and Gold Mining Requisites.



HADFIELD'S PATENT

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(Solid Steel Construction.)

The Parts that are subject to Excessive Wear are made of
Hadfield's Patent 'Era' Manganese Steel and other Patented
STEELS.

Sole Representatives of the Hadfield Steel Foundry Company, Limited, Sheffield, for Canada,

PEACOCK BROTHERS, Canada Life Building, MONTREAL.



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

ANY even numbered section of Dominion Lands in Manitoba or the North-West Provinces, excepting 8 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 16 acres, or 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-agent's office may be wired 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 papers to complete the transaction are received by mail.

In case of "persuasion" the entry will be automatically 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 a 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.

DUTIES.—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 other or others.

(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 \$21 for anthracite. Not more than 32 acres can be acquired by one individual or limited 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 \$10 to \$100 per annum for a company according to capital.

A free-miner, having discovered mineral in place, may locate a claim 15.0 x 15.0 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 \$50 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.

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

The lessee shall have a dredge in operation within one season from the date of the lease for each five miles. Rental \$10 per annum for each mile of river beyond \$100,000.

W. W. COLE,
Deputy of the Minister of the Interior.

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Head Office
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Advantages over Individual Trustees—
Permanent. Absolutely Confidential
Trust not impeded by failure or disability. It does not resign.
Equipment for safeguarding securities.

Apply to Bank of N. S. F. folders.

**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.
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—W. B. Reynolds, Halifax Representative—

Brick! Brick!

The Westellar Terra Cotta Company

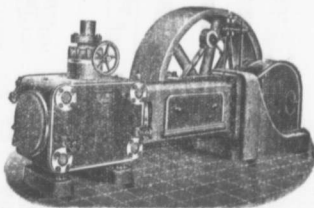
having taken over the business of the Stellarton Brick and Tile Co'y, and having installed more powerful and modern machinery. WILL BE PLEASED TO HAVE ENQUIRIES AS TO PRICE AND QUALITY.

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For Breakfast Dinner, Supper, anytime
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CRISP, APPETIZING, and WHOLESOME, they are making
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Wire Ropes

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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.

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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 Hasting, C. B.

INVERNESS RY. & COAL CO'Y

Time Table No. 21, Taking effect at 1 a.m. Oct. 22nd. 1906.

EASTBOUND			STATIONS.	WESTBOUND		
Read Down	No. 52 a. m.	No. 54 p. m.		Read Up	No. 56 a. m.	No. 58 p. m.
L 11 10	L 3 55		P TUPPER JUNCTION	A 11 00	A 3 25	
S 11 16	S 4 00		P PORT HAWKESBURY	L 10 45	S 3 27	
A 11 20	L 3 55		P PORT HASTINGS	A 10 27	L 3 10	
	F 4 30		TROY	F 10 27		
	S 4 40		CHRENSH	S 10 15		
	F 4 55		J. DUQUE	P 10 04		
	F 5 10		CHALGORE	S 9 43		
	F 5 25		CATHERINES FOND	P 9 29		
	A 5 30			L 9 15		
	L 5 45		P PORT HOOD	A 9 10		
	S 5 55		GLENCOE	S 8 55		
	S 6 21		MABOU	S 8 25		
	S 6 25		GLENDVRE	S 8 15		
	S 6 53		BLACK RIVER	P 8 00		
	S 7 07		STRATHLODNE	S 7 47		
	A 7 20		INVERNESS	L 7 30		
	p. m.			a. m.		

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

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MABOU DIAMOND COAL.

Burns and Works like Bituminous;

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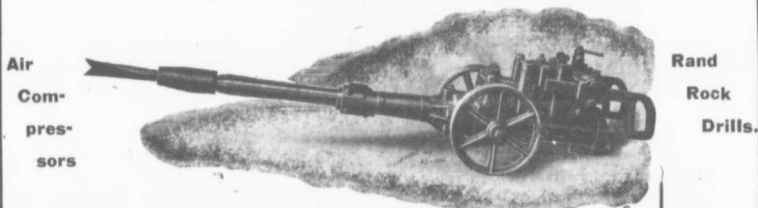
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*Best all round flour on the market.
Uniform in quality. Every barrel
can be depended upon. This flour can
only be had in Cape Breton at the stores
of the Dominion Coal Company.*

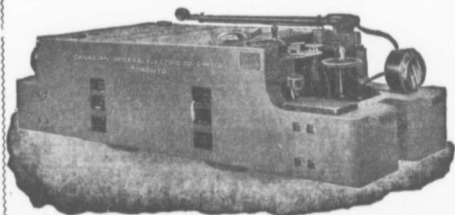
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**Electric Locomotives
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Motor operated Air Compressors,
Complete Electric Installations,
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For highest pressures with Steam, Hot or Cold Water and Air.
The most durable and satisfactory Packing on the Market.

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Unexcelled for Steam, Domestic and General Purposes.

DELIVERED BY RAIL OR WATER.

SHIPPING PORT: PICTOU LANDING.

Quotations Furnished Promptly on Application.

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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.

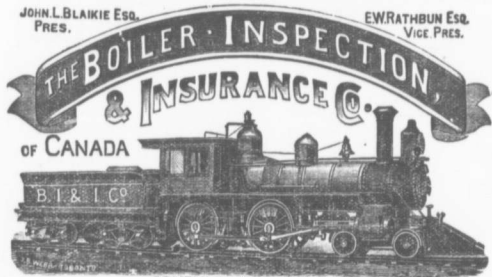
Screening plants are now in operation at Sydney, Springhill, Broad Cove Port Hood and "Westville" Mines

Estimates cheerfully given

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G. C. ROBB CHIEF ENGINEER HEAD OFFICE TORONTO

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'... LAST INSPECTED I....

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And for All Public Buildings.
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HAMILTON, ONT. MONTREAL, QUE

DRUMMOND COAL.

INTERCOLONIAL COAL MINING CO., Limited,
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MANUFACTURERS AND MERCHANTS SHOULD ADVERTISE IN THE
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GOWRIE AND BLOCKHOUSE COLLIERIES, LIMITED.

OF NEWCASTLE ON TYNE.

MINE AND LOADING PIERS, PORT MORIEN, COW BAY.

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Miners and Shippers of GOWRIE COAL.

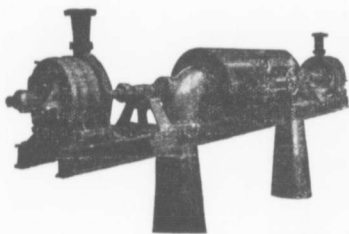
The Reputation of this Coal has Steadily Advanced during the past 40 years and the Output of the new Mine is fully up to the old Standard of Excellence.

Especially designed Piers for the rapid delivery of coal into Vessels by Roe and Bedlington's Patents.

OFFICES:—Canada, Port Morien, Cape Breton, Nova Scotia. England, Newcastle on Tyne.

The JOHN McDOUGALL Caledonian Iron Works Co., Ltd. Montreal Que.

BOILERS: All Sizes and all Pressures.



Two Worthington 3 stage Turbines and McCormick Water Wheels, built for Port Arthur, Ontario, Water Works. Combined capacity 1440 gallons per minute against 350 head.

PUMPS

Worthington Pumps for
Water Works and Mines.

Water Wheels

Doble Water Wheels for high heads.

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Etc. Etc.

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TORONTO, 810 Traders Bank Building
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NEW GLASGOW, N. S., TELEPHONE B'LD.

Dominion Coal Company, Ltd.

Miners of

Bituminous Coals, the celebrated "Reserve" coal for household use, "International" Gas coal, and the best Steam coal from its collieries on the Phalen seam.

—Yearly output 3,500,000 tons.—

ANALYSES.

ANALYSES OF GAS AND STEAM COAL MADE BY J. & H. S. PATTINSON, CHEMISTS,
—NEWCASTLE, ENGLAND.—

	STEAM COAL.	GAS COAL
CARBON.....	80 18 per. cent.	77 31 per. cent]
HYDROGEN.....	5 11 " "	5 22 " "
OXYGEN.....	7 34 " "	6 72 " "
NITROGEN.....	1 16 " "	1 27 " "
SULPHUR.....	0 56 " "	3 07 " "
ASH.....	2 30 " "	4 10 " "
WATER.....	3 35 " "	2 11 " "
	100 00	100 00

Calorific Power of Steam Coal :—Pounds of Water evaporated from 212 per cent Fah, by one pound of the coal as determined in Thompson's Calorimeter,—14.8 lbs.

Shipping facilities at Sydney, and Louisburg, G. B., of most modern type. Steamers carrying
—6000 tons loaded in 24 hours.—

Special attention given to quick loading of sailing vessels. Small vessels loaded with
quickest despatch.

:: BUNKER COAL ::

The Dominion Coal Co. has provided unsurpassed facilities for Bunkering Ocean going Steamers with Dispatch. Special attention given to Prompt loading. Steamers of any Size are bunkered without detention.

By Improved screening appliances lump coal for Domestic trade is supplied of superior quality.

Prices. Terms, etc. may be obtained at the Offices of the Company.

ALEXANDER DICK Genl. Sales Agent, Glace Bay, N. S., Can.

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DOMINION COAL COMPANY, LIMITED,
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112 St. James St. Montreal, Que.
171 Lower Water St., Halifax, N. S.
Quebec, Que.

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R. P. and W. F. Starr, St. John, N. B.
Harvey & Co., St. Johns, Newfoundland.
Hull Blyth & Co., 4 Fenchurch Avenue, London, E. C.

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CUMBERLAND

RAILWAY AND

COAL COMPANY.

OPERATING THREE
THICK SEAMS
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 %

BEST COAL FOR
LOCOMOTIVE USE.

Delivered By Rail or Water

BEST COAL FOR
GENERAL STEAM PURPOSES.

The year Round

BEST COAL FOR
DOMESTIC CONSUMPTION.

IN Lots To Suit Purchasers.

BEST GAS COAL

Mines
SPRINGHILL

Mined in the Province.

N. S.

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