

R. Bell



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New Series Vol. 8 No. 19

April 11th, 1906

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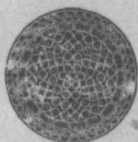
Works: **HAYMILLS, BIRMINGHAM, ENGLAND.**

AGENT: **H. M. WYLDE,** P O Box, 529 **HALIFAX N. S.**

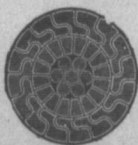
Patentees and Manufacturers of

Locked Coil and Flattened Strand **WIRE ROPES.**

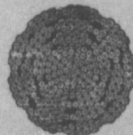
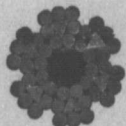
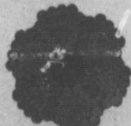
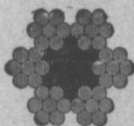
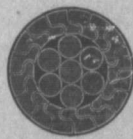
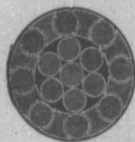
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**Mines, Tramways, Aerial Ropeways, Suspension
Bridges, Cranes, Elevators, Transmission of
Power, Steam Ploughing and General
Engineering Purposes.**



Locked Coil Winding Cable.



Locked Coil Aerial Cable or Colliery Guide.



Lang's Lay or Ordinary, Patent Flattened Strand Winding or Hauling. Patent Flattened Strand, (non spinning)

DRAWERS OF all Sections of **HIGH CLASS STEEL-WIRE.**

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Binding Armatures and all other Purposes.

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Blasting and Sporting Powder, Pellet and Grained Powder for Coal Mining.

FLAMELESS EXPLOSIVES for GASEOUS MINES, DYNAMITE, for SUBMARINE BLASTING, SUBMARINE FUSES.

—MANUFACTURERS AGENTS EOR—

Electric Blasting Apparatus, Electric Batteries, Electric Fuses, Insulated Wires, Safety Fuse Detonators, Etc.

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The 'LITTLE HARDY' SHEARING MACHINE



The "Little Hardy"

This machine shears or undercuts with equal facility.

For Mining in Thin or Inclined Seams it has no Superior.

Has sheared 12 rooms 8ft. x 5ft. in 8 hours and 25 minutes, including all time lost in moving. Total square feet cut 496. This was done at Dominion No. 1 Pit,

More than 50 Machines in C. Breton.

The Hardy Patent Pick Co., Ltd.
SHEFFIELD, ENGLAND.

Miners Wanted

TO CHEW

PAY ROLL

Plug Tobacco

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At the several collieries of the Dominion coal co. Limited, skilled coal miners and mine laborers.

Apply on the works Or by letter

Dominion Coal Company, Ltd

THE GARLOCK PACKING CO.

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Manufacturers.



GARLOCK'S STEAM, WATER and AMMONIA
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Used by Collieries in Lancashire, Staffordshire & Yorkshire

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COLLIERY LAMP OIL

For Marmal, Mussels Deflector or Closed lamps

PURE WHITE FLAME

LOW PRICE

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RAILWAY
STREET and
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CAR WHEELS
FORGINGS &
CASTINGS

Church Pews,
Fittings for Stores, Schools, &
A SPECIALTY.

Large Stocks of Foreign and Domestic Lumber on Sale.

Rhodes, BUILDING MATERIALS
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Branch ROBBIE STREET, HALIFAX, N. S. AMHERST, N. S.

INTERCOLONIAL RAILWAY

On and after Sunday, JAN. 14th 1906 trains run daily, (Sunday excepted,) as follows:—

—TRAINS LEAVE STELLARTON—

No 144 Mixed for Hopewell	5.55
No 79 Mixed for Trenton	6.30
78 Mixed for Hopewell	6.55
18 Express for Halifax, and St. John	7.40
21 Mixed for Pictou Landing	7.45
62 Mixed for Pictou	7.45
55 Mixed for Mulgrave	8.15
19 Express for Sydney	11.15
58 Mixed for Pictou	11.50
56 Mixed for Truro	11.50
120 Mixed for New Glasgow	15.50
30 Express for Halifax and Montreal	15.55
140 Mixed for Pictou	16.00
101 Mixed for Pictou Landing	16.50
25 Mixed for Hopewell	18.10
65 Mixed for New Glasgow	18.50
17 Express for New Glasgow	21.35
60 Express for Pictou	21.45

—TRAINS ARRIVE AT STELLARTON

79 Mixed from Trenton	5.55
61 Express from Pictou	7.20
18 Express from New Glasgow	7.35
21 Mixed from Hopewell	7.35
65 Mixed from Truro	8.20
100 Mixed from Pictou Landing	9.20
28 Mixed from New Glasgow	10.55
27 Mixed from Pictou	10.55
56 Mixed from Mulgrave	11.30
19 Express from Halifax and St. John	11.50
120 Mixed from Pictou	15.40
30 Express from Sydney	15.45
22 Mixed from Pictou Landing	18.16
17 Mixed from Hopewell	18.45
65 Express from Pictou	18.55
66 Express from New Glasgow	21.25
17 Express from St. John and Halifax	21.30

All trains are run by Atlantic Standard time Twenty four
o'clock is mid-night Moncton, N. B., JAN 9th, 1906

VULCAN IRON WORKS, Wilkes-Barre
FOUNDED Pennsylvania.

Hoisting Engines in all Sizes from 12 inch. x 16 inch. Cylinders,
 to 42 inch. x 72 inch. Cylinders.

Haulage Engines, all sizes, Endless Rope and Tail
 Rope System.

REFERENCE, BY PERMISSION, CUMBERLAND RAILWAY AND COAL COMPANY.

WIRE ROPE **HIGH GRADE WIRE ROPES FOR**
 Hoisting, Haulage, and Colliery Purposes.

Manufactured by **Dominion Wire Rope Co., Ltd., MONTREAL.**
 AUSTEN BROS.—HALIFAX AGENTS.

THE CAPELL IS THE FAN
 —For the **COAL TRADE**
BECAUSE

(1)—It allows of one operation, working a larger area than any other fan.
 (2)—It will clean out dangerous and injurious dust from a mine, by reason of its superior force and positive action.
 (3)—Because it costs less money to install, for every foot pound of actual work done on the mine; and is maintained and run cheaper than any other fan.
 (4)—It is incombustible and cannot burn.
 (5)—It gives adequate ventilation right to the end of the life of the mine. No replacing or diminution of air, like common fans. It will last the life of any mine.

The best reason for its use is the coal trade buys it; a Company having bought one, buy it always.
 Berwind-White Coal Mining Co., 7 Fans; W. L. Scott Companies, 7 Fans; Francis L. Robbins Companies, 3 Fans; Ellsworth-Morris Companies, 4 Fans; Moon Run Company, Washington Coal & Coke Co., Imperial Coal Co., Essen Coal Co., H. K. Wick Co. H. C. Frick Coke Co., Cambria Steel Co., Simpson & Watkins, Scranton, Alberta, N. W. T., and Cumberland Railway & Coal Co., N. S. Can. may be taken as fairly representative of the coal trade besides outsiders, as Erie R. R. Co. and Hoosac Tunnel.

W CLIFFORD CAPELL FAN CO., JEANETTE, PA.

Head-quarters in Nova Scotia for

‘White’s’ London Portland Cement.
 ‘Gartcraig’ Scotch Fire Brick,
 Allan-Whyte and Company’s Wire Ropes.
 ‘Firths’ and ‘Black Diamond’ cast Steel,
 ‘Bennett’s’ Safety Fuse and Detonators.

—**STEAM PIPE AND FITTINGS.**—

WM. STAIRS, SON & MORROW, LIMITED,

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**NOVA SCOTIA STEEL & COAL COMPANY,
LIMITED,**

MANUFACTURERS OF

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MERCHANT BARS,

SHEETS AND PLATES—From 12 gauge up to 1 inch thick. Any Widths up to 50 inches.

HEAVY FORGINGS,

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... NOTHING REQUIRED IN CANADA TO LOAN FOR U.S. ...

Steam and Electric Car Axles

Fish Plates and other Railway Materials.

Tee Rails - 12, 18, and 28 lbs per yard

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COLLIERIES :
SYDNEY MINES

COAL

SHIPPING PORT
NORTH SYDNEY.

An Unsurpassed Evaporating Coal.

Highest in Carbon, Lowest in Ash,

Unrivalled Facilities for Eunkering at North Sydney.

The Best House Coal.

The Best Steam Coal.

QUICK DISPATCH LOADING—BEST RESULTS STEAMING.

Two points that always appeal to Shipowners.

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PURE SPIRIT VINEGARS, WHITE WINE and
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 PURE LARD.
 PURE GOLD JAMS.
 KINGS FOOD.
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 LYLES GOLDEN SYRUP.
 CALIFORNIA SEEDED RAISINS.
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 HOMANS CLAMS.
 BRITISH COLUMBIA SALMON.
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 BOUETERS CANNED VEGETABLES,
 BOWLBY'S CANNED PEACHES.
 BRANTFORD STARCH.

A. & W. Smith & Co.,
 Halifax, N. S.



**Double Strength
 Culvert Pipe a
 Specialty.**

**Canadian
 Sewer
 Pipe
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HAMILTON, and TORONTO,
 —ST. JOHN, QUE.—

Mining & Mill Supplies.

**Valves,
 Fittings,
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**Boiler
 Tubes,
 Steel
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 Angles,
 Tees, etc.
 SOLID DIE
 RIVETS.**

Steam Goods
 —of every—
 Description.

**Iron Pipe for
 Mining Purposes.**

—Catalogues and Prices on Application.—

THOMAS ROBERTSON & CO,
 —LIMITED—
MONTREAL, QUE.

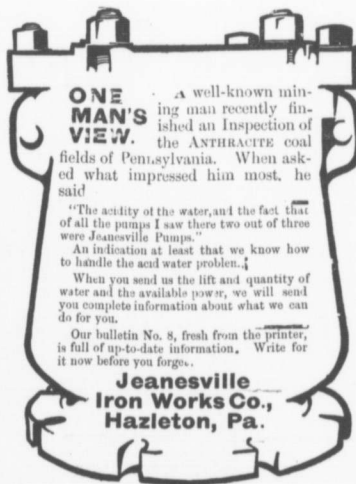
—Established 1852—

Miners Wanted Immediately

50 men can find steady Employment
 at the Coal Mines at Minto, N. B.
 Apply to **W. C. HUNTER.**
 Norton, N. B. Manager N. B. Coal & Railway Co.

More Miners Wanted.

WANTED by the Maritime Coal & Railway Co.
 Limited at Chignecto, Nova Scotia, 50 Miners
 and Helpers. Apply to,
JAMES BAIRD
 Mine Manager.
 Chignecto, Aug. 18-05



**ONE
 MAN'S
 VIEW.** A well-known min-
 ing man recently fin-
 ished an inspection of
 the ANTHRACITE coal
 fields of Pennsylvania. When asked
 what impressed him most, he
 said
 "The acidity of the water, and the fact that
 of all the pumps I saw there two out of three
 were Jeanesville Pumps."
 An indication at least that we know how
 to handle the acid water problem.
 When you send us the lift and quantity of
 water and the available power, we will send
 you complete information about what we can
 do for you.
 Our bulletin No. 8, fresh from the printer,
 is full of up-to-date information. Write for
 it now before you forgoes.

**Jeanesville
 Iron Works Co.,
 Hazleton, Pa.**

The Archibald Company, Limited

Hats, Caps, Straw Goods, all kinds of
 Fur Goods and Men's Furnishings.
 Wholesale only,
TRURO, Nova Scotia.



NOVA SCOTIA.
Mines of Gold, Silver, Coal,
- Iron, Copper, Lead, Etc.

Titles direct from the Crown
 At Moderate Royalties.

GOLD AND SILVER.

Licenses are issued for prospecting for Gold and Silver for a term of twelve months. They comprise areas 150 by 250 feet, and any number can be obtained, at a cost of 50 cents per area. Leases of any number of areas can be obtained, at a cost of \$2.00 per area, for a term of 40 years; subject to an annual rental of 50 cents per area.

Licenses are issued to quartz mills, which make returns and pay royalty on the gold at the rate of two per cent, on milled Gold, valued at \$19.00 per cz.

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 \$40.00

All titles, transfers, etc., are recorded free of charge by the Department. The royalty on coal is 10 cents per long ton, and on other minerals in proportion.

The Gold District covers over three thousand square miles, and the deposits of coal iron ore, etc., are practically unlimited.

FOR INFORMATION APPLY TO—

HON. W. T. PIPES,

Commissioner of Public Works and Mines, HALIFAX, N. S.

MINUDIE COAL COMPANY, L't'd.

Operating the **MINUDIE MINES** in the Celebrated **CUMBERLAND COAL FIELD**

Producers of High Class **SCREENED COAL, ROUND, RUN-MINE, SLACK.**

The best for Foundry or Furnace, Locomotive or

Stationary Engines, for Domestic or General use

* **CLEAN AND CLINKERLESS.** *

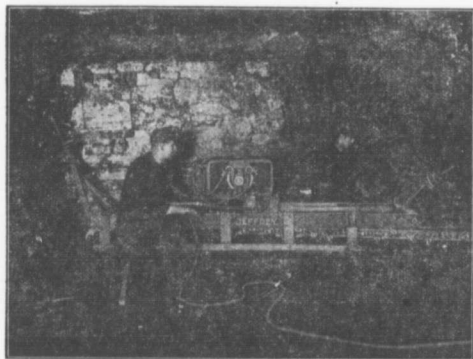
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Colliery

RIVER HEBERT, N. S.

Mine Manager—HY. McCARTHER. Business Manager R. S. HIBBARD, River Hebert, N. S.
G. A. FORBES, Sec'y Treas. Head Office 66 Guardian Building, Montreal.

.. The "JEFFREY" CUTS THE WORLD'S COAL. ..

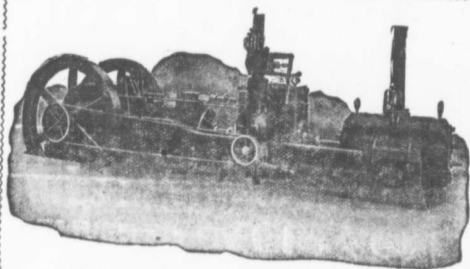


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—Mining Bulletins Mailed Free.—

THE JEFFREY MFG. CO., Columbus, Ohio, U. S. A.

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Self
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Self
Oiling

Steam, Belt or Power Drive.

Straight Line or Duplex.

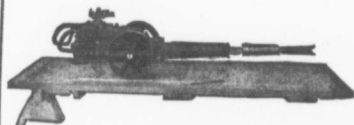
—For all Duties,—

ANY PRESSURE ANY CAPACITY.

Canada Foundry Company, Limited.

Head Office:—Toronto Ont.

District Offices:—Montreal Halifax Ottawa, Winnipeg, Calgary, Vancouver, Victoria, Rossland.



Air and Electric Coal Undercutters.
Air Compressors.
Rock Drills.
Diamond Drills.

COAL MINING MACHINES,

Reduce the cost of production.
Increase the output per miner.
Produce more lump and less slack than
mining. Diminish danger to employees,
since less powder is needed. Require less
area to support, drain and ventilate than
with hand Mining.

—Correspondence Solicited.—

Sullivan Machinery Company,

CLAREMONT, N. H.

I. MATHESON & CO., AGENTS, New Glasgow, N. S.

A. & W. MACKINLAY

LIMITED

Rule and Print Special Blank Forms.

for Mining and other Industrial

—Corporations.—

BLANK BOOKS ruled to any pattern
and Bound in any Style of
—BINDING—

135 to 139 GRANVILLE STREET.

HALIFAX, N. S.

Intercolonial Railway.

Easter Holidays, 1906.

Intercolonial Railway will sell Round Trip Tickets

at

FIRST CLASS ONE WAY FARE.

Going April 12, 13, 14, 15, 16. Good for return until April 17, '06

Between all Intercolonial Railway Stations

and to

Detroit, Mich.; Port Huron, Mich.; Sault Ste. Marie, Mich.; Port
Arthur, Ont., and points in Canada east thereof. Also to Stations on
the Dominion Atlantic Ry.; Sydney and Louisburg Ry.; Inverness Ry.
and Coal Coy.; Cumberland Ry. and Coal Coy. and Cape Breton Ry.
Coy. All fares made to end in 0 or 5.

To the...

MARITIME MINING RECORD

Vol. 8, No. 19. Stellarton, N. S., April 11th, 1906 New Series

Examination for Fire Bosses in the Bituminous Regions of Pennsylvania.

FEBRUARY 9, 1906.

PRELIMINARY QUESTIONS.

Continued from last issue.

SECTION 2—Second Grade Questions.

5. What legal precautions should be taken in driving rooms or entries towards abandoned workings containing dangerous gasses or accumulations of water?

6. If the temperature of 100,000 cubic ft. of air was raised from 48 degrees to 60 degrees Fahr., what would the volume become at the increased temperature?

7. What practical methods would you adopt and enforce in and about the mines to reduce the liability of accidents from the use of electricity.

8. If in a mine properly layed out and well managed, with 100,000 cubic ft. of air per minute being produced by the fan, what should be the total volume of air in all the splits when measured at or near the face of the workings?

9. Assuming that the greatest percentage of accidents are the result of falls of coal, slate and roof, and the next highest from mine cars and mining machines, as a mine foreman what precautions would you take to diminish them?

10. A mine employing 350 persons inside is ventilated by a force fan placed on the top of a circular shaft 200 ft. in depth, the total rubbing surface of it is 9,283.2 square ft., the velocity of the air per minute in the said shaft is 2,000 feet, how much air per minute is being produced for each person employed therein?

SECTION 3—Second Grade Questions.

11. If the diameter of the water cylinder of a pump is 10 inches and the discharge column is equal to 150 feet in height, what would be the total pressure in pounds on the piston, disregarding friction?

12. What precautions should be taken to prevent mine fires, and what are the legal requirements in regard to providing and maintaining shelter holes on haulage roads?

13. Two mines in the same coal field, working under similar conditions, with the same number of persons employed in each, one of them being a new operation and the other having been in operation for a number of years, would the same

quantity of air suffice for each mine? Give your reasons fully.

14. What general conditions would guide you in determining your method of extracting a range of pillars with 200 feet cover, the coal seam being 6 feet thick?

15. If 20,000 cubic feet of air per minute is passing through an airway of 20 square feet area and a total rubbing surface of 24,000 square feet, how much must the ventilating pressure and power be increased to maintain the same quantity of air if the rubbing surface be increased to 40,000 square feet, the area remaining the same?

16. Which would pass the most air—one airway 10 x 10 feet or four airways 5 x 5 feet of equal length, with the same pressure and power being applied? Give reasons.

SECTION 4—Second Grade Questions.

17. What are the legal requirements relative to the use and handling of explosives in and about mines?

18. A syphon pipe 4 inches in diameter and 1,000 feet in length, with a rise of 15 feet and a fall of 40 feet—how many gallons of water will be discharged from the mine in 24 hours?

19. In developing a mine of large capacity, describe what method of ventilation you would adopt. What conditions and considerations would guide you in conducting and in making a proper distribution of the total volume of air?

20. Describe how you would lay out a new mine with a view to ventilation, drainage and a large production, economy of operation and the recovery of the greatest possible percentage of the coal. Also state what percentage of the coal should be recovered under good management.

21. If the coal seam is pitching at the rate of one foot in three, and an entry is driven at right angles to the pitch, the roadway being level and the roof undisturbed, the entry being six feet in height on the high side and six feet wide, what will be the area of the entry?

22. Describe the principles of the fan and furnace as used or mine ventilation. State which is most efficient, economical and convenient, and why. Answer fully.

QUESTIONS FOR FIRST GRADE.

SECTION 5.—First Grade Questions.

23. State what experience you have had in gaseous mines in this State, giving the name and location of each mine, the length of time employ-

ed in each and the different capacities in which you obtained such experience.

24. Name and describe the four gases commonly found in the bituminous mines of this State, giving the specific gravity and symbols of each; how are they produced, where found, and state what effect they have on life and combustion.

25. State the dangers to life and property likely to be encountered from accumulations of explosive gas in mines and when said mines continue to generate gas. What are the causes leading up to such dangers and what methods would you employ to prevent them?

26.—What dangers to life and property are encountered in a dry and dusty mine generating explosive gas, and what precautions would you adapt to prevent them?

SECTION 7.—First Grade Questions.

27. In a mine working 250 rooms and 30 entries, assuming that one cubic foot of explosive gas is being generated in each room and twelve cubic ft. in each entry per minute, what quantity of air per minute would be necessary, how conducted, and what should be the velocity of air per minute at or near the face of the entries so as to keep the mine in a safe and healthy condition?

28. In mines generating gas freely and where the roof is tender and falls freely in rooms and entries, how would you remove the said gas accumulating on such falls or roof cavities?

29. If you had charge of a gaseous mine and an explosion should occur during working hours, describe in detail how you would proceed to re-

establish temporary ventilation and rescue the men.

30. What is the lowest percentage of explosive gas in which you would deem it safe to carry on blasting, the workings being very dry and the coal highly inflammable?

31. If the fire boss reported a large body of explosive gas in a portion of the mine, what would be your method of procedure for the present and future safe operation of the mine?

Prince Edward Island Railway.

TENDER.

Scaled Tenders, addressed to the Secretary of the Department of Railway and Canals, Ottawa, Ont., and marked on the outside "Tender for Cribwork Rest Piers, Hillsborough Bridge, P. E. I." will be received up to and including

TUESDAY, APRIL 17th, 1906.

for the supplying of materials and the construction of two Rest Piers for the Hillsborough Bridge P. E. I.

Drawings and specifications may be seen at the Resident Engineer's office, Charlottetown, P. E. I. 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,
Moncton, N. B.
20th. March 1906.

D. POTTINGER,
General Manager.

The Robb Engineering Company has received an order through Mr. E. A. Wallberg, of Montreal, for two 200 horse power Robb-Mumford boilers for the new I. C. R. Round House at Truro.

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,
FRIGS,
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—

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., APRIL 11TH, 1906.

NEW ZEALAND'S LABOR LAWS.

So much has been said in favor of the Compulsory Arbitration Acts of New Zealand that many have come to look upon that land as the working-men's paradise. The country has been referred to as "The Land without strikes". Until recently trade was very active, and labour in great demand in New Zealand. Now that labor is becoming more abundant there seems to be a doubt, in the minds of many, as to the wisdom of the many labor laws passed in that colony. How these will work when a depression in trade occurs seems to be in doubt. The following from the "New Zealand Mining Journal" points to a possibility that the enactments in favor of labor may not continue to be for the advantage of the best interests of the colony:—

In New Zealand we have made laws which were designed to do away with all conflicts between Capital and Labor. The State was to act as arbitrator in any disputes, and, at the same time, it was provided that a few men in any trade could form themselves into a union, and any demand formulated by them against their employers for shorter hours and higher pay constituted a dispute, to settle which a Conciliation Board was set up, and if they could not settle it, then it was referred to a special tribunal, called an Arbitration Court.

We have followed the history of the New Zealand attempt to deal with this matter, so that we may better analyse the remedy and its efficacy. Ever since this legislation came in employees have been gringing one dispute after another before the Court, each dispute being a claim for shorter hours of work and higher wages, without any regard or preliminary inquiry as to whether the employer could meet the claim. Fortunately for the success of the experiment, the colony was prosperous, due to the high prices for our staple exports in Great Britain. Unions have been formed in every trade, dispute after dispute has engaged the attention of the court, and the whole of the manufacturing and trade business of the country is carried on under a series of awards of the Court, about four volumes of which are in existence, which fix the reward for labour for periods of about two years without taking into account what may be the conditions of trade and the alteration from abroad in the interval.

The question is, Can this continue? For the

State has departed from the position of an intermediary only, to be called in when there was a bona fide difference between Capital and Labour. It has invited each side to formulate any demany they choose, and embodied the finding in an award that leaves no room for freedom of contract between the parties. The employee cannot sell his labour, nor the employer buy it, except at the rate set in the award, or unless by previous consent of the secretaries of the union and the inspectors to be approved by the Court. Half the time of the Courts is expended in finding employers and employees for working at the rate of wages they agree is mutually satisfactory. Supply and demand do not govern. The State puts a fixed value upon labour, and while the value of the goods may vary the value of the labour must not. Does this conduce to the object aimed at? and will the machinery that has been set up to do away with disputes not in the end become so expensive and so cumbersome that the objects aimed at will be defeated? Were the State only to be called in to settle disputes that had arisen after the ordinary laws of supply and demand could not achieve the object, then we could understand their position, but to have all contracts between employers and employees fastened down by cast-iron awards, which leave no play for agreement between the parties, except after much trouble, delay and annoyance, must surely end in defeat. Take for instance the cases that are now constantly coming before the Court at the present time. Undoubtedly it is more difficult to secure employment now than for some time past. The demand for labour is not so great; wages are beginning to fall, and very soon it is evident that most of the employees will be working under agreements with the employer at rates which are not allowed by the award. It may be said that when that time arrives, it will be necessary to have the award revised and altered to suit the altered circumstances; but in the meantime both employers and employed find the law to be oppressive and to hamper very seriously the freedom of contract that should prevail between the unions of employers and the unions of the employed.

The rise in wages that has been secured by the awards of the Arbitration Court have of course, increased the cost of production of all articles. Where that award raised wages beyond what would be secured by the ordinary laws of supply and demand, employers have had to pass on the increased cost of production to the consumer, and so it has come about, that the cost of living to the employees themselves has been raised, and their wages, if nominally higher, are not really any more effective in purchasing the comforts of life than they were before the rise.

Another factor in the case is the effect of these awards upon Labour and Capital in New Zealand as compared with Labour and Capital abroad. If Labour is better remunerated in New Zealand than it is in Australia, then the reward coming to Labour is greater and the reward to Capital must neces-

sarily be less. In consequence of this, Labour must tend to flow in to this colony from Australia, and Capital finding itself better remunerated in Australia, would certainly flow from this colony. There seems to have been some movement of this sort during recent years, as very many labourers have come here from Australia. We cannot tell what amount of capital has gone from here to Australia, but there is evidence that capital has been leaving this colony for Australia. Assuming that this movement were to go on for some time, the equilibrium between Labour and Capital would be upset, and the colony would have more labour and less capital with which to employ it.

Taking these facts into consideration, we cannot see how it is possible for this colony to deviate from the ordinary rules of supply and demand with regard to the remuneration for Labour, without causing disasters greater than what we now have. More pliability requires to be imported into the Conciliation and Arbitration Act, so as to meet the ever varying conditions of demand for Labour before it can effectively carry out the objects for which it was intended. That these amendments will be made so as to secure this we have no doubt. Meantime, the colony is going through an experiment, which, while it has been successful so far as Labour Unions are concerned, during a period of rising prices, has still to run the gauntlet of a period of depressed times, before we can see whether it will be a success or not.

The policy of State intervention in such matters is on its trial, but until we have passed through this period of depression we cannot decide whether success will attend the efforts of our legislature to grapple with this great question.

Rubs by Rambler.

THERE has been so much written, within the past six months, about the high price of coal in Halifax, and, presumably, in other parts of the province, that one is all but forced to the conclusion that, in the minds of some people, the only active, real robbers in the country are the 'Coal barons'. They may be bad, but it seems they are really good when compared with some other robbers. To decry the cost of commodities seems to be the prime diversion of an active, if a trifle warped, Halifax brain. Consistently he kept at the price of coal for some months, but lately he made a bad break and tacitly acknowledges he has been trying to flay the lesser sinners, while the big sinners were allowed to go scathless. Here is what he said recently:

"The people of Halifax are paying twice too much for their coal; three times too much for their gas, and four times too much for their electric light." Is it not strange that so fierce an onslaught should

have been made on those who are held responsible for doubling the cost of a commodity while those who quadrupled the price of another commodity, entering more largely into public consumption than coal, have only received, and that incidentally, an open handed, gentle slap or two. The consciences of the Coal barons must be relieved, to a considerable extent, by the knowledge that after all they are a mild class of sinners compared with some others dwelling in the land.

* * * *

A noted advocate of technical education is not at all times happy in his illustrations. His arguments, indeed, are of the kind that are said to cut both ways. We are told, for instance, that the first failure of the Dominion Iron and Steel Co. was due to the fact that there were not on the staff properly trained technical men. Well, the first man at the Sydney plant was a forty thousand dollar a year man, and if he had not technical education, combined with practical experience, the wonder is that he commanded so high a figure. The fact is that the failure of the Sydney plant, at first, was not due to any lack of technical knowledge among the heads of the various departments. The very opposite was the case; technics, minus horse sense, were the cause of the undoing. There were far too many philosophers at the inception of the scheme, too many technical men at the carrying out of the plans, and the laying out of the yards and buildings, and a sad lack of ordinary common sense. The technical man thought all he had to do was to produce steel from pig, but any fool could do that if the matter of cost was not to enter into any calculation. We are told, as an argument in favor of technical education, that the Sydney steel works were not drawn out of the quagmire until Graham Fraser and his technically trained son came to the rescue. God bless me, how stupid we all have been in not recognizing, in decent Jos. Dix, a technically trained and educated steel expert. I am inclined to think that Graham Fraser's son, who has no desire to fly under false colors, would be the last to class himself among those claiming a high technical education. If Graham Fraser saved the situation, and let it be granted he did, then it is excellent proof of how much superior a man is who has had solid practical experience, than the one who has had a technical training, however grand. If the Steel Co. suffered from want of knowledge, it was the want of the knowledge that if steel was sold at eighteen dollars, which cost twenty-one, there was nothing in it for the shareholders. Extravagance was the real cause of failure, and so far as we have seen in N. S. many technically trained men are inclined that way.

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THAT the U. S. is able to produce coal cheaper than Nova Scotia is, we are told, a great loss to the

province. But ignorance costs more than that. Listen to this:—

"But who that thinks will argue this is the important loss. Only last summer the director of one of our large coal companies claimed that the manager was nearing the coal crop which was under the sea. The manager denied that he was, and claimed he was far from the crop. This dispute led to an expert being called in, and he decided that the manager was not only nearing the crop, but a little further and the sea would have come in, thereby losing the mine, if not all who were in it. Most accidents in our mines are caused by ignorance."

I do not believe that the above incident occurred at any of our large coal mines. What is stated is no proof of ignorance, but of downright carelessness. The manager, if there be one such, ought to get his back—ah broken. He could easily have ascertained where he was by a little surveying and a little sounding. The expert being called in sounds a little fishy. No expert, by merely looking at the coal face, or viewing the plan of the workings, could give an opinion worth a snuff. Unless he took surveys he could not tell any more than a careless manager where the level was leading to. The allegation that most of the accidents in our mines are due to ignorance, is about the most foolish I have heard in many a day. A majority of the accidents in mines in Britain, in France, in highly vaunted Germany, in Belgium, in the United States, and in progressive Nova Scotia, are due not to ignorance but to that contempt born of familiarity, which I may call rashness, or to indifference and carelessness. A man will walk in the slope, or ride on a rake, or neglect to timber his place; the two former he knows he ought not to do, yet he does them; the latter he knows he ought to do, and does it not. Accidents in mines, as a rule, are not due to ignorance, but to carelessness on the part of the bosses or on the part of the men.

For the fiscal year ending 30th September last, I find that the number of fatal accidents at the coal mines was twenty. Of these ten were occasioned by falls of roof, seven by being caught by trip or rake, two from explosions of powder, and one by a run away boom. The probability is that a majority of the accidents, from falls, was due, not to lack of knowledge on the part of the workmen, but to their strange indifference to the use of precautions. One fatal accident from a fall was certainly due to lack of energy, or to carelessness on the part of a boss. Of the accidents by rake, some were certainly due to breaches of discipline on the part of the workmen. One or two coming under other heads were purely accidental. Negligence, it is true, may have been contributory, but not ignorance. No amount of technical education could have prevented a majority of these accidents. They were due to indifference and not to ignorance. Men know they ballots for Bell, I am inclined to the belief that they

in taking them, and so, I fear, will some bosses. For the past couple of years accidents from the trips, or rakes, have become frequent, far too frequent in my opinion. The law, with regard to riding on trips, and to using travelling roads, should be more rigidly enforced.

* * * *

SOME months ago, a chap called Stephen, I think, in the "Morning Chronicle," if I remember rightly, took me to task for inexpressible ignorance in not knowing that there were millions and millions of tons of ore, of commercial value, at Arisaig. He talked so loud, and with such seeming authority, that I almost began to wonder if it were possible that my knowledge of that district was at fault. I said nothing, but bided my time, and now it almost appears, from the Mines Report, that what I said of the ore not being of present commercial value is borne out. An official of the Mines Department had a number of samples analysed, and the results can scarcely be said to be satisfactory. And let me say, I am sorry that the ore is of so low a grade. The best analysis of the lot gives 45 per cent. of iron, with 24 per cent. of insoluble matter. A bounty of a dollar, or even of two dollars, a ton to the ore miner would be of no great service in promoting production. It is doubtful if the steel works would take forty to forty-five per cent. ore as a free gift, so long as they can get fifty-five per cent. ore at say two dollars a ton. Before the steel maker could be induced to use this low grade ore, he would require to have an additional bonus on the pig made from it. The time may not be far distant when a cheap process may be found for making pig from 40 per cent. ore, but that time is scarcely with us yet.

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I see it announced that the Federal Government has, at long length, made an appointment of director of the Geological Survey. Mr. A. P. Low, one of the staff, is given the position. Many thought that Dr. Bell's long connection with the staff, and his faithful work, entitled him to preference, but the powers that be, thought otherwise. It was urged, in some quarters, that Dr. Bell's brusqueness, and a want of sympathy between him and the staff, rendered his appointment impolitic. That Dr. Bell did not get on well with the staff is scarcely borne out by the facts. We have seen a letter in which the entire staff expressed the utmost confidence in, and cordiality towards, Dr. Bell. However, it is preferable that one of the staff should have the appointment, instead of some scheming outsider. Dr. Bell is to have the position of Chief Geologist. It is to be hoped the position is no sinecure, and that it forms no part of a shelving process. Mr. Low's appointment should be satisfactory to the staff; he is one of themselves, strong and experienced in the work of the department; a just man, easily approached and affable. Since a majority of the staff had not the power to cast their ballots for Bell, I am inclined to the belief that they

are better satisfied with the appointment of Mr. Low, than they would have been had it gone to the one who, it was said, had aspired to the position.

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IN that savage burlesque on the Scots, "The Unspeakable Scot," the picture of a Scotsman's love for liquids is hideously overdrawn. It is sought to be shown that the Englishman is tame in his love for stimulants, in comparison with the Scot. The Englishman is held up as a model to the other inhabitants of the British Isles in this respect. The belief of the writer of the book, is shared in by many in all countries, and yet, recently published authoritative figures show that the Englishman can get away with a considerably larger quantity of malt foods than he of the North. Perhaps he can swallow more, without perceptible effects, than the Scot. He must, therefore, be the more seasoned cask. Dr. Dawson, in his annual exposition of the drink bill of Britain points out, in the "Times," that while the Scotsman's annual drink bill is £3.1.9., the Englishman's falls only two pence short of £4.0.0 per annum. Birmingham, an English city, with a very much smaller population than Glasgow, spends very nearly as much in liquids. It is gratifying to know that since 1899, Britain's beer bill has been steadily decreasing. The decrease since 1899 is about \$170,000,000 a year, a bill big enough in all conscience to stand a yet greater decrease. The Irishman spends much less on liquids than either the Englishman or Scotsman. As regards beer, the Englishman drank 31 gallons, the Scotsman 9, the Irishman 2. The quantity of neat alcohol contained in all the liquors sold last year reached nearly 85,000,000 gallons, representing roughly two gallons for every Englishman, and about one-and-a-half gallons for every Irishman and Scotsman.

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THE old age Pension Bill which has been introduced into the British House of Commons, provides for a pension of five shillings a week—a dollar and a quarter—to every British subject over sixty-five years of age, who has resided in the country for twenty years. The fact that every British subject is to have a claim on the fund bears out the idea expressed in these columns a few weeks ago, viz., that unless peer as well as peasant participated, the stigma of charity would attach to any pension scheme. The amount to be doled out further strengthens the position I took. No Nova Scotian will go into raptures over any scheme which will not give weekly at least three times the amount provided by the British scheme. Mr. Lever, of Port Sunlight, who has a scheme of his own, gives as a reason for supporting the British pensions bill, the lack of thrift among work people. He holds that thrift is largely a matter of heredity, and very seldom an acquired virtue. Most emphatically I disagree with this opinion. Economy can be taught, and so can thrift. Undoubtedly, just as in ordinary education, some pupils are much more apt than others, so with thrift:

Some will learn much quicker than others, but only the weak-minded will fail to learn wholly. Is there not truth in the saying, "Easily got and readily parted with." This refers to money. Who was it gotten from? Generally from those who toiled and spun hard, who were frugal and saving. If thrift is chiefly a matter of heredity, how comes it that we hear of so many profligate sons of persistently plodding fathers. Thrift, I hold, can be inculcated, and with as good results as the inculcation of any other virtue or quality. Mr. Lever holds that it is an impossibility for some housewives to be thrifty. I am not so sure of that. It may be impossible to induce some to be as thrifty as they should be, but not impossible to make them thrifter than they are. Some are thriftless because they have not realized the necessity, and the benefit, of being frugal. As a rule, the housewives are not chiefly to blame, but the heads of the house. If the breadwinner spends large sums selfishly, how can the breadmaker make ends meet? Not first the workmen's wives, but the workmen have to be taught the benefits of thrift, and let it be added, the necessity of it. If thrift were rarely an acquired quality, I would have little hope for the uplifting of the workmen. Because I believe, otherwise do I hope, for the gradual emancipation of the workmen from a state of poverty and dependence, to one of sufficiency: if not of plenty, and independence. Thrift will accomplish this.

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"ONE sows and another reaps." A trite saying, but quite apropos on this occasion. The papers in announcing the other day that children attending British schools were to be fed, when necessary, put the carrying of the resolution down as a triumph of democracy. Well it was scarcely that. To the labor members does not belong the credit of originating the idea. It is no new idea, but was preached a quarter of a century ago. Its adoption by the Government must gladden the heart of Sir John Gorst, who has preached this doctrine in season and out of season for many years past. It was one of the social reforms he advocated in the eighties and pressed just before the 1895 election. A clause empowering education authorities to feed impoverished children was, through his efforts, included in the 1897 Education Bill, which the Salisbury Government dropped so hurriedly. Sir John has this week been advocating this policy on labour platforms, and it was one of the grievances which the tariff reformers urged against his re-election for Cambridge University in January. The last of the Tory Democrats may yet live to see his pet project carried out, though its reference to a Select Committee on Friday may delay its consummation.

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THE reference in last issue of the "Record" to rumored amalgamations of coal companies, and of holders of coal areas, has, evidently, put the "Herald" on the qui vive. A week or so ago, it had a

couple of articles on what it calls a "big coal merger." There is some foundation for part of what it says. The other part, is built on fancy. That there is something, and a big something, in the wind, is not to be doubted. The main question is,—will the proposed big scheme, or schemes, materialize? Last issue I admitted that what I was saying might not be facts all; that part were rumors, and that my opinion was not an enlightened one. I do not see the whole scheme clearly yet, but I have had some more light. The North Atlantic Coal Scheme is not a thing of yesterday. It is several years old. But it has been developing at a more rapid rate lately. There might not have been any talk of this big merger had it not been for Mr. J. R. Cowan's action in bonding his fine areas, near Port Morien, to C. J. Coll. Last issue I gave it as my opinion that the areas were bonded either for the Allans or for the Grand Trunk. I think now I was in error. Mr. Hays, of the G. T. R., has lately declared that his railway will not go into coal mining, but will continue to buy coal in the open market. The reports circulated, as to the bonding of the areas to Mr. Coll, seems to have had effect in other quarters. Whitney and Pearson, of the North Atlantic Collieries, of the one part, and Sir Montagu Allan, of the

other part, seem to have foregathered and talked of an amalgamation of all the Pictou Collieries, the North Atlantic areas, the Block House Co., and the New Campbellton Mine, and Burchell areas, in C. B., and the Pearson and Johnson areas in Cumberland Co. The principals, that is Pearson and Sir Montagu, could not agree as to the value of their respective properties; therefore, as a way out of the deadlock, the Whitney-Pearson contingent offered their properties to Sir Montagu at what they consider a low cash value. Sir Montagu had till yesterday to make up his mind, or rather, to give him a chance to see if he could finance so big a scheme. Of course, this is written before the option expires, so I am unable to say what may happen. In the event of Sir Montagu failing to raise the wind, the North Atlantic Companies will at once commence work on their properties. Mr. Whitney is willing to be responsible for \$500,000, so the rumor goes, and Mr. Patterson and other U. S. parties an almost equal amount. It can be said truly, that at this moment there is considerable smoke, whether there is any real fire a few days, or weeks, at the most, should determine. Somehow or other, many have it on their minds, that there are wonders in store for the coal trade of Nova Scotia.

AROUND THE COLLIERIES

NOT a few iron smoke-stacks, of large dimensions, have been raised, at various times, at the Springhill Collieries, but it is doubtful if ever so large and heavy one was erected there as the one recently placed in position at Reserve Mines, C. B. The smoke-stack, which is in one piece, 90 feet long by six feet in diameter, weighs 11 tons. Considerable ingenuity was displayed by the mechanical department in putting this big tunnel in position. The spars used in lifting were 62 feet long, of hard pine. Two sets of tackle were used of $\frac{1}{2}$ inch line each, and 3 and 4 shear block each. The stays are of $\frac{1}{2}$ inch wire rope, each spar having 3 stays. These were so arranged that they did not interfere with the stack as it was raised. Naturally, the mechanical staff is a little proud of the speed with which the work was accomplished, and that there was no accident.

FURTHER work on the Emery seam at Dom. No. 6 has been discontinued until more prospecting has been done. The sinking of the air shaft was a disappointment.

DOMINION No. 6 is to have the most modern of bank-heads. Every known device for the quick landing of boxes from the slope, and the handling of the coal, will be employed. The work is progressing favorably.

THE large Walker compressor for the Reserve has arrived, and will soon be in position.

EXPERIMENTS are the price of experience. The fan at Dominion No. 3 will in future be run by steam power.

AN electrical pump is to be operated at International Mine with the dynamo taken from Dominion No. 1. This will be the first pumping experiment with electricity in the Dominion Coal Co.'s works.

THE endless haulage at Dominion No. 1 has been overhauled lately, and with the addition of a new piece to the driving shaft, this machinery will be in good repair.

A SMALL dynamo is to be installed at Dominion No. 1 to run the lights. The electric motor underground has been discontinued.

THE large Norwalk compressor at the Hub Colliery lately went to pieces, owing to defective material in one of the crank bearings. When the bearing broke, there was a general smash up of the other parts.

A LARGE Northey pump, 20x8x24" is to be installed at the International Mine, C. B.

CALEDONIA is to have a new boiler of 160 H. P. A ninety-foot smoke stack is also to be erected. The

AROUND THE COLLIERIES

present stack does not afford sufficient draught for the boiler now in use. The new stack will remedy this defect, and greatly increase the steam power.

MANAGER SIMPSON of Strathcona Mine, is stripping the West Lower Coal in order to make height to work horses, which will facilitate the getting of coal out of this section. Formerly, the work was done by putters. The present output of Strathcona is 130 tons per day, which may be increased when the West side is put in working order. As the Strathcona Co. do not advertise in the "Mining Record," the mine is still in the small mines class.

JUBILEE Mine, Cumberland Co., is still keeping a hold on the market, and is being kept in order. Mr. McCarthy takes pride in the orderly appearance of his little mine.

THERE was talk, ten days ago, of another amalgamation of coal companies in which the Acadia would play an important part.

It is reported that the Cowans areas in Cape Breton were bonded not for speculative purposes, but with the object of their bona fide working.

It is rumored that the Cumberland Railway and Coal Co., impatient of the shilly shallying of the Council, and doubtful of the Town's ability to supply them with the necessary quantity of water, have resolved to further augment their own supply from Maccan, and install water services of their own for the works and for the dwelling-houses. If there is anything in this, it will be a serious thing for the ratepayers of Springhill, while it will be a good thing for the Company's tenants.

SPRINGHILL is booming along in its usual earnest way. If a day is lost occasionally for the want of cars, it but affords a breathing spell for the steadier men, and furnishes a legitimate excuse for the chronic loafers, who are rapidly getting into disrepute with the men and management.

Two miners were heavily fined last week at Glace Bay for interfering with their safety lamps, and thus committing a breach of the Mines' Regulation Act. There is no use of putting safety lamps in a mine unless the rules in reference to the relighting, in case of the light being extinguished, are strictly complied with. The men can plead no ignorance, in reference to the law and the regulations on the subject, for each workman is supplied with the Mines' Regulation Act, and a copy of the special rules, having the force of law, of the colliery. We may censure a man who takes risks whereby his own safety is endangered, but the man must be severely dealt with who endangers the lives of others, not to speak of injury to property.

THE output of the Dominion Coal Company for March was 310,000, which is large for a winter

month. On some days the output reaches 16,000 tons. This looks as if there will be no difficulty in securing an output of 400,000 tons in June and each succeeding month till September.

CONSIDERABLE coal is finding its way to the banking station at Glace Bay. Close on seven thousand tons were banked in a day recently. There may be 200,000 tons banked before the shipping season commences.

It is reported that all the companies shipping coal to the St. Lawrence have oversold. This is a somewhat novel state of affairs. In order to help them out the Dominion Coal Co. were forced to purchase some 20,000 tons of coal from another company.

THE average wages of the Springhill miners for January and February last was the highest on record, being in Jan., \$3.15, and in Feb. \$3.25 a day. This is a generous increase over the wage earned previous to 1891, when the average was \$1.90. Notwithstanding the high average there are some who would make a demand for higher rates. A case has been cited where a second rate man making \$4.00 a day had the gall to ask for an increase in rates. He was sat upon by his fellows, and properly so.

A MINE manager has told the editor of the Suburban that by the employment of modern methods coal can be produced in Nova Scotia at \$1 per ton of 2,000 lbs. The editor of the Suburban may tell that manager, as coming from the editor of the Record, that his statement is wholly misleading. Not all the modern methods if applied to Sydney No. 3, or the Drummond, or the Albion, or Inverness mines could reduce the cost of production to within a furlong of a dollar a ton.

SINCE 1904 no fewer than 724 engineers' and 113 firemen's certificates have been issued. In 1904 there were 38 service and 13 competency certificates of the 1st class; 119 service 31 competency of the second class; 115 service and 40 competency of the third class, and 87 firemen's certificates issued. In 1905 the number was 4 service, 6 competency 1st class; 39 service, 12 competency 2nd class; 27 service, 20 competency 3rd class, and 26 firemen's. There were issued previously to 1904, 20 first, 79 second, and 161 third class; a total of 81 first, 280 second, and 363 third class. Total certificates issued under the Act 837. This is a surprising number. One would scarcely believe that there was room at the collieries for so great a number of engineers and firemen.

A CUMBERLAND COUNTY correspondent thinks the strike germ is on the rampage in that county, and that those afflicted with it think the gold cure is the only remedy.

AROUND THE COLLIERIES

MR. WM. WILSON of the Kimberly mine, Cumberland County, is in residence in Springhill, where he owns some property. The genial William is not in the best of health. He has recently returned from Philadelphia, where he went to consult a specialist in regard to his ailment. It is rumored that operations at the mine will be resumed with vigor in the near future, and that Mr. Wilson will again shape its destiny. If so we wish him health and success to his efforts.

A VISIT to Chignecto Mines proves very interesting. There was some little trouble lately, owing to an accumulation of gas in one section, which was speedily got rid of under the directions of Manager Baird. Ventilation through the section of mine travelled was very good indeed. Good roads and airways are the rule. Mr. Baird, like the practical mine manager that he is, believes firmly in these as necessary to the efficiency of the mine in the way of output, safety and comfort. The mine is busy.

STRATHCONA MINE is making some progress. Mr. Robert Simpson is evidently the right man in the right place. A visit recently to the mine revealed many improvements. The slope has been made higher by some fifteen inches, and this was done without interfering with the daily regular work of the mine. Airways have been cleared and timbered; bottoms replaced and put in working shape, and in constructing a lodgement a great deal of discomfort to the men has been removed. Mr. Simpson's aim seems to be the comfort of the men and the more economical working of the mine, a rather difficult proposition in this instance, and yet he is meeting with the opposition usually accorded all reforms, which are innovations, by the unthinking workmen. Mr. Simpson has the work of the mine well in hand, and appears to be on good terms with the body of the men, who can assist him in his efforts to make this a model coal mine. The visit to the mine was a most pleasant one. Work has been steady of late.

THE quantity of coal on which the Dominion Iron and Steel Co. secured a rebate for the year ending 30th Sept., '05, was 534,864 tons; while the N. S. S. & C. Co. got a rebate on 193,315 tons. This gives a total of 728,179 tons. The quantity, on which a rebate will be given, will be much greater this year.

THE sales of coal for the fiscal year ending Sept., '05, were some 60,000 tons short of those of the previous twelve months. For the calendar year 1905 the sales were 100,000 tons greater than in 1904. The fact that the fiscal year ending Sept., '05 shows a decrease, will make the increase fully expected—for the fiscal year ending next Sept., much larger than that for the calendar year '06.

THERE were 73,000 tons of iron ore produced in Nova Scotia in the year ending 31st Sept., '05. Of this quantity 59,062 tons were produced at or near Londonderry, and nearly 15,000 at Torbrook. The Londonderry Company drew their ore from six different mines, exclusive of Torbrook. This shows the difficulty of securing a large body of ore at any particular spot. The Mines Report says: "Great activity has been shown by the operations in the iron fields of the province during the year". What's that! is there treason in the mines department? The activity was confined to Torbrook and Londonderry. Are these the only known iron fields?

THE Glace Bay Co-operative Society—seeking incorporation of the present local parliament—has for its objects: "To improve the material and pecuniary means of its members, by carrying on the business of general dealers, both wholesale and retail, on a mutual co-operative basis, encouraging habits of thrift and economy. To enable and encourage members and others to become house holders in their own right. To promote the intellectual and moral advancement of its members and others, by providing means for social intercourse and literary culture. To afford a field for practically working out various questions of social reforms, fostering the habits of prudence and business among working men, open and fair trading, early closing, etc." It asks power to operate means of transportation, to do gardening, farming, fishing and dairying. These are all very well, but when it proposes to print newspapers and magazines and do job printing with an eye to profit, it proves that its promoters have a good deal yet to learn.

A MAN was fined severely last week at the court in Glace Bay for lighting a match in the mine. The workmen should esteem it a duty to assist the manager in carrying out the provisions of the Mines Act, especially those having reference to lights.

THE Halifax Herald, in a late issue, contained a lengthy and very fair criticism, on the whole, of the Dominion Coal Co.'s scheme for assisting workmen to become owners of houses. The Herald can only find two objections in the proposal. One is that the purchaser cannot sell to other than a workman; the other the clause freeing the company from responsibility in the event of a house being damaged by subsidence of the ground due to mining operations. Unless the Record is mistaken there is nothing to the first objection, as a house, in case of default of any kind, may be sold at public auction, and there is nothing in the proposal to restrict bidding to those in the employ of the company. Indeed this point was taken up when the proposals were being formed, and the unfairness of confining the bidding to workmen admitted and excluded from the agreement. There is, however,

AROUND THE COLLIERIES

something in the second objection. In places where the coal has been already excavated, and where it is known to the purchaser that there is a possibility of some further subsidence, the company should be free from responsibility. But if they sell a man a house on land where coal has not yet been excavated, they should be held responsible if by taking away the coal from under that particular spot damage by subsidence of the ground is caused to the property. Houses must not be built on ground likely to subside when the coal underground is taken away. The company, if it takes away the coal should in some way make good damage which their operations cause to property on the surface.

The Drummond colliery, under the new mode of management, is doing some marvellous work these days. The output in March reached 30,000 tons. This, the Record believes, is the highest on record. And if what is said be true the limit of output has not been reached. This large output is certainly creditable to all concerned when it is considered that the coal face is further from the surface than in any mine in Nova Scotia, with perhaps one exception.

It is stated that a strong syndicate has been formed to operate the Port Hood coal mine. The syndicate, it is understood, is composed of the bondholders of the company. It is hinted that the capital has been reduced, first by taking 100,000 from the balance of the bonds, putting the preferred stock through a somewhat similar process, and by wiping off the common stock. There should be a bright future for this company if, as has been stated, coal can be produced from the mine at a little over \$1.00 per ton. There should be a handsome profit in selling the coal in provincial towns at \$2.50 per ton, or, say fifty cents less than is being charged by the other companies. After all that has been said as to the sin of the big coal companies, in charging extortionate rates, it will naturally be expected that the Port Hood company will lead in the reduction of prices, even though the present demand might warrant a continuance of the present high price.

The Dominion Coal Co. are asking the local legislature to sanction their retaining from the wages of the workmen the instalments which the latter agree to pay monthly when they enter into an agreement to purchase a house, or build one with the assistance of the company under the proposals lately formulated.

A DELEGATION composed of mine managers and workers, the former including Grand Sec. Moffatt, had a long and very pleasant interview with the government in reference to some proposed changes in the Mines Regulation Act. Mr. Moffatt presented the case for the men. The managers did not object to a number of the proposed changes, but

thought two or three should not be acceded to. The Enginemen's bill was not gone into, nor the proposal for a shorter day for enginemen. A consideration of these may be deferred for some time. A number of interested M. P. P.'s were present, and a majority of the government. Among the mine managers were John Johnston, Mal. Blue and Hiram Donkin, C.E., etc. Tom. Piggitt, Stephen B. McNeil, W. B. Scott, J. B. Petrie were other prominent members of the delegation. Premier Murray was very happy in his remarks at the close of the interview.

By the premature explosion of a shot at Sydney Mines on the 27th March, an old country miner named Roddick was killed, and his son severely injured.

SOME time was lost, a while ago, at Sydney No. 1 in getting the shaft ready for the double deck cages. These are now in operation, and are working nicely. No doubt in a short time they will help largely to an increased output from this old mine.

SOME of the old country miners who came to Sydney Mines about three years ago, are being refunded by the Nova Scotia Steel & Coal Co. the price of their passage. This was agreed upon when the men were asked to enter their employ.

WHEN a coal company places an advertisement in the pages of the Record it is proof that it has put off its swaddling clothes, and is prepared to do business on business lines. The latest addition to our list of patrons is the Mabou & Gulf Coal Co. The advertisement which appears elsewhere is an instance of *Multum in parvu*. There is not a great deal said but each word tells. The coal is called 'diamond'. It burns like bituminous, and looks and lasts like Anthracite. The coal looks splendid, and is, so far as the Record has been able to test it, even better than it looks. The company this year will have its hands full in meeting the demands for fuel upon it.

It is asserted that from Barrasois to Baddeck, and from Boularderie to Bosdale there is not another man to be picked up by the coal mine operators for love or money. On the farms there are no young men left. Where there is a man on a farm he is an old man, and where there is no man, two women are left to work the farms. The demand for labor will not be met this year if dependence is put in a supply of native labor. No more miners can be made from natives, as there are no natives to fall back upon. What then is to be done? If the mines are to be worked to advantage then labor must be brought from places outside the province. Let it be hoped that there will be no necessity to fall upon such undesirable workers as Poles, Slavs, Huns, or men from the south of Italy. Irish, Scotch, Welsh and English should be sought for instead.

For Mining Use

there are no other
Valves manufactured
to-day to Compare with

FAIRBANKS Renewal Disc VALVES.



Because FAIRBANKS VALVES are "full weight" and strongly built. They are heavy with nothing cheap or skimpy about them.

The Valve Seat is round, which does away with the possibility of any grit or dirt lodging thereon and destroying the Disc as well as the Seat itself.

The Renewable Disc

construction is a special feature. It enables you to

change the disc in a moment's time by a slot, cut in top of same, and requires no nuts, bolts, washers or springs to secure it. To change a disc in a Fairbanks Valve slip the old disk from end of a spindle, slip on a new one, and then don't worry.

Send for Valve Catalogue.

The Canadian Fairbanks Company, Limited.

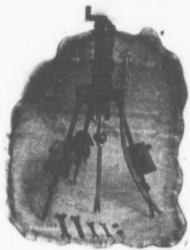
Montreal.

Toronto.

Winnipeg.

Vancouver.

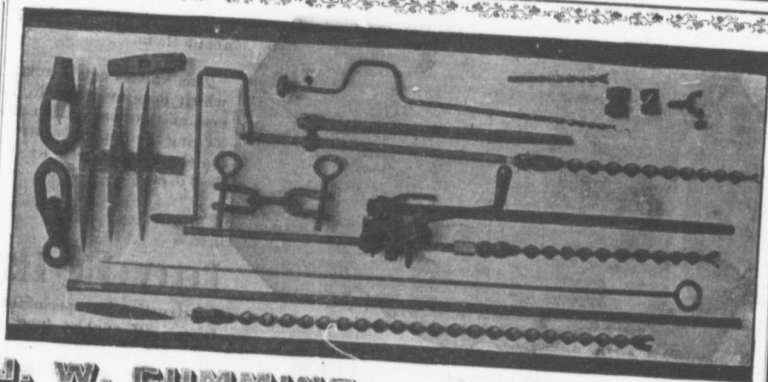
Shaft Sinking Records



Allan Shaft No. 1, Aecadia Coal Company, was sunk 128 ft. and timbered up 100 feet in August, and sunk 132 ft. and timbered 137 ft. in November.

Our Air Compressor and Rock Drills were used. Works, Montreal, Branch, New Glasgow.

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



J. W. CUMMING,

New Glasgow, N. S.

—DESIGNER AND MANUFACTURER OF—

Miners High Grade Tools.

Cumming Coal Boring Machines,
The Popular Cumming Picks,
Augers, Mauls, Wedges, Copper Needles, Tamping Bars, Cones and
Swivels for Wire Ropes, Drawbars, Mountings, all-kinds of forgings
for Pit Machines **Boring Machine Parts always on hand.**

Any Kind of Pick to Order.

ESTIMATES PROMPTLY FURNISHED.



Synopsis of Regulations for disposal of Minerals on Dominion Lands in Manitoba, the Northwest Territories and the Yukon Territory.

Coal—Coal lands may be purchased at \$10 per acre for soft coal and \$20 for anthracite. Not more than 320 acres can be acquired by one individual or company. Royalty at the rate of ten cents per ton of 2000 pounds shall be collected on the gross output.

Quartz—Persons of eighteen years and over and joint stock companies holding free miner's certificates may obtain entry for a mining location. A free miner's certificate is granted for one or more years, not exceeding five, upon payment in advance of \$7.50 per annum for an individual, and from \$36 to \$100 per annum for a company, according to capital.

A free miner, having discovered mineral in a place, may locate a claim 1500 x 1500 feet by marking out the same by two legal posts, bearing location notices, one at each end on the line of the lode or vein. The claim shall be recorded within fifteen days if located within ten miles of a mining recorder's office, one additional day allowed for every additional ten miles or fraction. The fee for recording a claim is \$5.

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

Permission may be granted by the Minister of the Interior to locate claims containing iron and mica, also copper in the Yukon Territory, of an area not exceeding 100 acres.

The patent for a mining location shall provide for the payment of Royalty of 2 1/2 per cent of the sales of the products of the location. **Placer Mining**—Manitoba and the N. W. T., excepting the Yukon Territory.—Placer mining claims generally are 100 feet square; entry fee, \$5, renewable yearly. On the North Saskatchewan River claims are either bar or bench, the former being 100 feet long and extending between high and low water mark. The latter includes bar, diggings, but extends back to the base of the hill or bank, but not exceeding 1000 feet. Where steam power is used, claims 200 feet wide may be obtained.

Dredging in the rivers of Manitoba and the N. W. T., excepting the Yukon Territory.—A free miner may obtain only two or five leases of five miles each for a term of twenty years, renewable in 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, but where a person or company has obtained more than one lease one dredge for each fifteen miles or fraction is sufficient. Rental, \$10 per annum for each mile of river leased. Royalty at the rate of two and a half per cent collected on the output after it exceeds \$10,000.

Dredging in the Yukon Territory—Six leases of five miles each may be granted to a free miner for a term of twenty years, also renewable. The lessee's right is confined to the submerged bed or bars in the river below low water mark, that boundary to be fixed by its position on the 1st day of August in the year of the date of the lease.

The lessee shall have one dredge in operation within two years from the date of the lease, and one dredge for each five miles within six years from date. Rental \$100 per mile for first year and \$10 per mile for each subsequent year. Royalty same as placer mining.

Placer Mining in the Yukon—Creek, gulch, river and hill claims should not exceed 250 feet in length, measured on the base line or general direction of the creek or gulch, the width being from 1000 to 2000 feet. All other placer claims shall be 250 square feet.

Claims are marked by two legal posts, one at each end, bearing notices. Entries must be obtained within ten days, if the claim is within ten miles of mining Recorder's office. One extra day allowed for each additional ten miles or fraction. The person or company staking a claim must hold a free miner's certificate.

The discoverer of a new mine is entitled to a claim of 1000 feet in length, and if the party consist of two, 1500 altogether, on the output of which no royalty shall be charged, the rest of the party ordinary claims only. Entry fee \$10. Royalty at the rate of two and one half per cent on the value of the gold shipped from the Yukon Territory to be paid to the Comptroller.

No free miner shall receive a grant of more than one mining claim on each separate river, creek or gulch, but the same miner may hold any number of claims by purchase, and free miners may work their claims in partnership by filing notice and paying fee of \$2. A claim may be abandoned and another obtained on the same creek, gulch or river, by giving notice and paying a fee.

Work must be done on a claim each year to the value of at least \$200. A certificate that work has been done must be obtained each year, if not the claim shall be deemed to be abandoned, and open to occupation and entry as a free mine.

The boundaries of a claim may be defined absolutely by having a survey made and publishing notices in the Yukon Office of Gazette.

Petroleum.—All unappropriated Dominion Lands in Manitoba, the North West Territories, and within the Yukon Territory, are open to prospecting for petroleum and the minister may reserve for an individual or company having machinery on the land to be prospected an area of 1920 acres for such period as he may decide, the length of which shall not exceed three times the breadth. Should the prospector find oil in paying quantities and satisfactorily establish such discovery, an area not exceeding 640 acres, including the oil well will be sold to the prospector at the rate of \$1 an acre, and the remainder of the tract reserved, namely 1,280 acres, will be sold at the rate of \$3 an acre, subject to royalty at such rate as may be specified by Order in Council.

Dept. Interior.

Deputy of the Minister of the Interior

Miners Wanted To Chew BULL DOG TOBACCO,

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

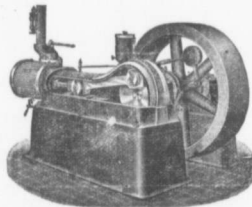
TRY IT!

The St. Lawrence Tobacco Co., Ltd.

—Montreal—

—W. B. Reynolds, Halifax Representative—

A FINE STEAM PLANT.



"I will say without qualification that it is as fine a boiler and engine plant as I have ever had the pleasure of seeing for its size. The engine was working without heating and absolutely without any noise. I wish to congratulate you on your success in building this class of engine and hope that we may have pleasure in dealing with you again."

The above refers to a 350 horse power Robb-Armstrong Corliss engine and two 175 horse power Robb-Mumford boilers installed by us.

Robb Engineering Co., Ltd.
Amherst, N. S.

GOOD BISCUITS

Are not the result of Chance. Good materials and Experience must be put into them to obtain the best Results.

Our course for half a century has been to use only the best materials, and let the cost take care of itself. The result has been, satisfaction to our customers, a continuous increase in our sales.

If it should happen that your grocer does not handle them, drop us a line. Perhaps we can persuade him to stock some of our nice biscuits and confectionery.

G. J. HAMILTON, & SONS.
Pictou, Halifax, St. John.

Contractors to H. M. Government.

ALLAN. WHYTE & CO.

Clyde Patent Wire Rope Works,
Rutherglen, Glasgow Scotland.

CABLEGRAM

Ropery, Rutherglen

SCOTLAND



A 1

A B C

and Liberts

Codes Used

Section of worn Haulage Rope supplied by us to Messrs Outtrim, Howitt and British Consolidated Coal Company, Outtrim, Victoria, Australia, showing condition when taken off and substituted by another Rope of our manufacture. Length 7,260 feet by 4 1-2 inch Circ. made of Special Improved Plough Steel Wire. Working on gradient of 1 in 3 to 1 in 6.

Manufacturers of All Descriptions of WIRE ROPES for COLLIERIES, MINES, CABLE TRAMWAYS
AERIAL ROPEWAYS, TRANSMISSION of POWER, SUSPENSION BRIDGES, ETC ETC.
Wire specially selected for our Requirements.

Also Makers of all Classes of Specially Flexible Wire Ropes, for Cranes, Winches
Capstans, Hoists, Etc.

Agents in Nova Scotia:—Wm. Stairs, Son and Morrow, Limited
Agents in New Brunswick, W. H. Thorne & Co. St. John.

Different sizes and quantities
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 Hasting, C. B.

INVERNESS RY. & COAL CO'Y

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

EASTBOUND			WESTBOUND		
Read Down	STATIONS.		Read Up		
No. 22 a. m.	No. 54 p. m.		No. 53 p. m.		
L 11 10	L 2 25	P. TUPPER JUNCTION	A 10 58	A	3 35
S 11 10	S 4 00	PORT HAWKESBURY	S 10 53	S	3 27
A 11 30	A 4 15	PORT HASTINGS	A 10 30	A	3 10
L 4 18	L 4 30	TROY	P 10 26	P	
S 4 45	S 4 45	CHEIGNISH	S 10 08	S	
P 4 55	P 4 55		P 9 53	P	
F 5 10	F 5 10	CATHERINES FOND	P 9 35	P	
F 5 20	F 5 20	PORT HOOD	F 9 22	F	
A 5 38	A 5 38	GLENCOR	L 9 06	L	
L 5 45	L 5 45	MABO	A 8 51	A	
F 5 58	F 5 58	GLENDYRE	F 8 45	F	
S 6 21	S 6 21	BLACK RIVER	S 8 35	S	
F 6 25	F 6 25	STRATHLOHNE	F 8 15	F	
F 6 40	F 6 40	INVERNESS	P 7 59	P	
S 7 05	S 7 05		S 7 37	S	
A 7 20	A 7 20		L 7 20	L	
P 10	P 10		a. 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

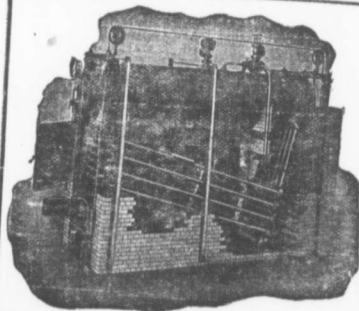
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DOMINION BRIDGE CO., LTD., MONTREAL, P. Q.

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.

BABCOCK & WILCOX LTD.

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.

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11 Place d'Armes, : MONTREAL

BRANCH:—114 KING ST. WEST, TORONTO.

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.

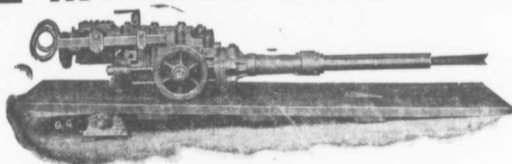
George Patterson,
BARRISTER, SOLICITOR, ETC.
NEW GLASGOW, N. S.

Successor to Sinclair and Patterson—

JERSEY - L.L.Y. - 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—

MANUFACTURED BY

LITTLE GIANT STEAM OR AIR DRILLS
Canadian Rand Drill Coy Works, Sherbrooke Que.

G. L. Burritt, Agent.

Halifax Office, 116 Hollis St.

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 CO., Limited,

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.

JAMES BAIRD, Mine Manager.

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.

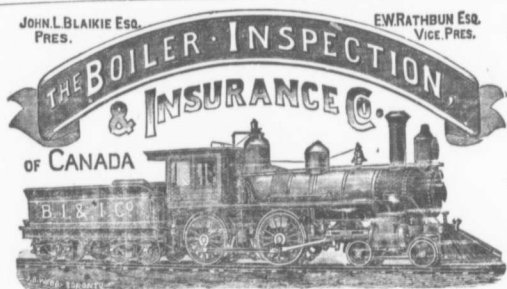
Screening plants are now in operation at Sydney, Springhill, Broad Cove, Port Hood and Westville Mines

Estimates Cheerfully given.

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PRES.

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G. C. ROBB CHIEF ENGINEER

CONSULTING ENGINEERS

HEAD OFFICE TORONTO

WHEN WERE YOUR
.. BOILERS ..
... LAST INSPECTED I ...

WRITE TO

G. W. JONES, Agent,

Halifax, N. S

-OR TO-

A. BONNYAN, INSPECTOR

Amherst, N. S



B. GREENING WIRE CO.
LIMITED
WIRE MANUFACTURERS
& METAL PERFORATORS
HAMILTON
& MONTREAL.

Steel wire, Perforated Steel. For miners and every other use
Write for Special Catalogue.

THE B. GREENING WIRE COMPANY, LIMITED.
HAMILTON, ONT. MONTREAL, QUE

MADE IN CANADA.

FRESH GROUND
FIRE CLAY.

Equal in quality to Scotch Clay. Sold in bulk or in bags
Our prices are considerably lower than the imported
Article.

Write for prices and full particulars.

INTERCOLONIAL COAL MINING CO., Limited,

WESTVILLE. NOVA SCOTIA.

MANUFACTURERS AND MERCHANTS SHOULD ADVERTISE IN THE
MARITIME MINING RECORD Rates Moderate.

GOWRIE AND BLOCKHOUSE COLLIERIES,

LIMITED.

OF NEWCASTLE ON TYNE.

MINE AND LOADING PIERS, PORT MORIEN, COW BAY.

CAPE BRETON, N. S.

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.

BUILDERS FOR CANADA OF

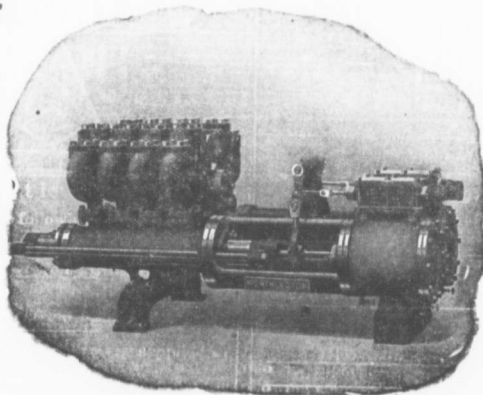
Worthington' Pumps

for Water Works
Services.

ALSO

Worthington' Turbine Pumps

suitable for heads up
to 2,000 feet.



'Doble' Tangential Water Wheels

for High Heads.

—Worthington Pressure Pump, specially built for Mining Purposes requiring the delivery—
of liquids under heavy pressure.

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
IN Lots To Suit Purchasers.

BEST COAL FOR
DOMESTIC CONSUMPTION.

BEST GAS COAL

Mined in the Province.

Mines

SPRINGHILL

N. S.

Head Office

MONTREAL

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, 1
—NEWCASTLE, ENGLAND.—

	STEAM COAL.	GAS COAL
CARBON.....	80 18 per. cent.	77 51 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

fic 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,
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Special attention given to quick loading of
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