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Geol. survey dept.

# Maritime Mining Record

AUG 23 1911

## DOMINION COAL COMPANY, LIMITED.

Miners and Shippers of the Celebrated

### "DOMINION STEAM COAL,"

Gas Coal and Coal for Household Use  
from the well known seams

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

**14** Collieries  
in Operation.

**OUTPUT:**  
4,000,000 tons Yearly

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

**Shipping Piers** equipped with modern machinery,  
ensuring Quickest despatch

-AT-

SYDNEY, LOUISBURG, and GLACE BAY. Cape Breton Island, Nova Scotia, Canada.

**7000 ton Steamers Loaded in 7 hours.**

Special facilities for loading and prompt despatch given to sailing vessels and small craft. Box Car Loaders for shipments to inland points. Discharging Plants at Montreal, P. Q., Three Rivers, P. Q., Quebec, St. John, N. B. and Halifax, N. S., Capacity up to 1000 tons per Hour.



**BUNKER COAL.** The Dominion Coal Co. has unsurpassed facilities for Bunkering Ocean going steamers the year round. Steamers of any size promptly loaded and bunkered.

**IMPROVED SCREENING FACILITIES** at the Collieries for the production of Lump Coal of superior quality for Domestic trade and Household Use.

FOR TERMS, PRICES, ETC., APPLY TO

**Dominion Coal Co., Limited,**

" " " "  
" " " "  
" " " "

112 St. James St., Montreal, P. Q.

Glace Bay, Nova Scotia.

171 Lower Water Street, Halifax, N. S.

Quebec, P. Q.

AND FROM THE FOLLOWING AGENTS:

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Buntain, Bell & Co., Charlottetown, P. E. I.

Harvey & Company, St. John's Nfld.

Hull, Blyth & Co., 1 Lloyd Ave., London, E.C.

**M. J. Butler, C. M. G.**

2nd Vice-President and Gen'l Manager.

SYDNEY, N. S.

**Alexander Dick,**

General Sales Agent.

MONTREAL, P. Q.

A. B. C. & A. 1 Codes Used]

Telegraphic Address, Latch, Haymills

# LATCH & BATCHELOR, L't'd.

Wire Drawers, Manufacturers of all classes of Wire Ropes,

Patentees and Manufacturers of

**Locked Coil and Flattened Strand Wire Ropes,**

**HAY MILLS, near BIRMINGHAM.**

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

Fig 2. HAULING



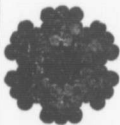
## Lang's Lay Ropes.



Fig 26 WINDING



Fig 1. HAULING



## Patent Flattened Strand Ropes.



Fig 4. WINDING

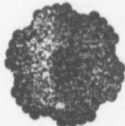
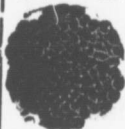


Fig 13. SINKING



### Advantages of Patent Flattened Strand Ropes.

- 1 Greater wearing surface, therefore longer life of rope and less wear upon pulleys.
- 2 Greater strength, thereby admitting of smaller ropes being used for existing loads, or of increased loads without increase in size of rope
- 3 Spliced easily and more effectively.
- 4 Less tendency to twist and stretch in working.

Fig. 13 for Sinking and Fig. 11 for Cranes, &c. are non-twisting.

Fig 11. CRANE, &c.



Fig 15 a



WINDING.

## Locked Coil Ropes.

Indispensable for deep shafts.

Stronger than any other rope of same size.

Entirely free from twist.

Smooth surface reduces wear to a minimum.

Duration far ahead of any other construction.

Fig 20



GUIDE

**DRAWERS OF all Sections HIGH CLASS STEEL-WIRE.**  
**for Ropes, Springs. Planos, Needles, Fish-Hooks**  
**Binding Armatures and all other Purposes.**

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## DYNAMITE.

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

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

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OFFICE: —76 and 78—

Telephone 251. P. O. Box, 520

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STELLARTON, NOVA SCOTIA.

Miners and Shippers of the

**Celebrated ACADIA COAL.**

*Unexcelled for Domestic, Steam, and General Purposes.*

— An Excellent Coking Coal. —

Collieries

Acadia

Albion

Allan

Vale.

**DELIVERED BY RAIL OR WATER, SHIPPING PORT, PICTOU LANDING.**

Quotations Furnished Promptly on Application.

## MINING SHOVELS

our 'FENERTY' Brand

COOK'S PAN SHOVELS,  
COAL TRIMMERS SHOVELS,  
SCRAPER SHOVELS, ETC.

ARE USED BY

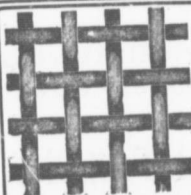
*The Largest Mines in Canada*

MANUFACTURED BY

**The HALIFAX SHOVEL Co.**

HALIFAX, N. S.

ALL GOODS GUARANTEED



Manufacturers  
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**Wire Cloth**  
and  
**COAL SCREENS**  
in all Strengths.  
Double Crimped  
Process.

WE SPECIALIZE IN  
ORNAMENTAL IRON AND WIRE WORK.  
**Jail and Prison Construction.**  
"Have you an Up-to-Date Lock-Up in your District."  
**CANADA WIRE GOODS MFG. CO.**  
HAMILTON.

**THE GARLOCK PACKING CO.**  
Hamilton, Ontario

—Manufacturers of—

**GARLOCK PACKINGS**

"Be sure you get the Genuine."

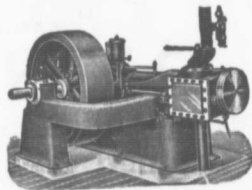
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and ENGINEERS SUPPLIES.**

Used by Collieries in Lancashire, Staffordshire & Yorkshire

**'XTERRA'** COLLIERY LAMP OIL  
For Marseaut, Muscelle Deflector or Closed Lamp

PURE WHITE FLAME. LOW PRICE.  
**E. WOLASTON,** Dutton St. **MANGHESTER**  
Sole Representatives for Canada. **AUSTEN BROS.,**  
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In sizes up to 135 horse power, the on-board bearing of our side crank engines is connected to the frame by a wing, keeping the bearings perfectly in line.

These engines are built on the interchangeable system and duplicate parts are kept in stock, ready for shipment on receipt of order.

They have our latest improved governor and oiling system and are strictly high class in every respect.

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RAILWAY

**Special Round Trip Excursion  
Fares to the Northwest.**

Good Going April 5, 19; May 3, 17, 31; June 14,  
28; July 12, 26; August 9, 23; Sept. 6, 20.

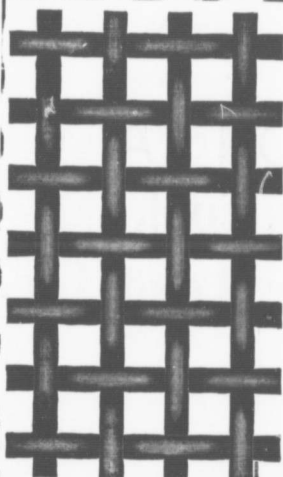
GOOD FOR RETURN TWO MONTHS FROM  
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EDMONTON, "	.....\$50.20
MACLEOD, "	.....\$50.20
MEDICINE HAT, ALTA.	.....\$54.20
LEATHERIDGE, ALTA.	.....\$58.20
MOOSE JAW, SASK.	.....\$50.20
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Correspondingly Low Fares to Other Points in  
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**Free Colonist Cars on Maritime Express  
to Montreal.**

For further Particulars apply to Ticket Agent.



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in buying mining equipment is one of the many reasons why we sell so much Screening, Wire Rope, etc., in the various mining regions of Canada. Quality considered, you cannot secure prices any lower than are quoted by us on all

### GREENING'S MINING SCREENS

We are operating the oldest wire drawing, wire weaving, wire rope walking and metal perforating plant in Canada. Our equipment is so complete, our facilities so well organized, our output so large that we can quote prices on quality goods that mean a real saving both on the purchase price and on the length of service our goods give to their buyers. Let us quote you.

**Write us for Catalog.**

**The B. Greening Wire Company, Limited**

Hamilton, Ont.

Montreal, Que.

## Canadian Steel Foundries, Limited.

Successors To

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**ONTARIO IRON and STEEL CO., of Welland, Ont.**

**We make a Specialty of Manganese Steel Castings for Mining Purposes,**

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Brass and Iron Valves, Steam, Water and Suction Hose,  
Metals of all kinds. Boiler Plates and Tubes.  
Fire Brick. Portland Cement. Fuse and Detonators.**

Nova Scotia Agents for

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**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 an area. Leases of any number of areas can be obtained, at a cost of \$2.00 an area, for a term of 40 years; subject to an annual rental of 50 cents an 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 \$10.00 an oz.

**Minerals other than**  
**Gold and Silver.**

—LICENSES TO SEARCH—

over five square miles for eighteen months, cost \$30.00; leases for three 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

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

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

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Commissioner of Public Works and Mines Halifax N. S.

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COPPER VALVE DISCS  
WITH ASBESTOS CORE**



For Valves of Jenkins' or similar types. Made with two flat sides, inside or round hole

"Victor 200" Discs outlast Plumbago or Asbestos Discs six to one and are the best Discs on the market. Send for sample and try it in your worst place. Price List on request.

**T. McAVITY & SONS, LTD.**  
ST. JOHN, N. B.

**Mining & Mill Supplies.**

Valves,  
Fittings,  
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Boiler  
Tubes,  
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SOLID DIE  
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Steam Goods  
—of every—  
Description.

**Iron Pipe for  
Mining Purposes.**

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**PRIESTLEYS' *Mohairs and Lustres***  
Have Excellent Wearing Qualities.

Will not Cockle with Rain. Best for

Spring and Summer Shirt Waist Suits.

All Ladies who wish to look well  
wear **Priestleys Dress Goods**

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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

# J. W. CUMMING, & SON,

Coal Drill and Mine Car Manufacturers.

OUR MOTTO:

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S. A. WILLIAMS, AGENT.

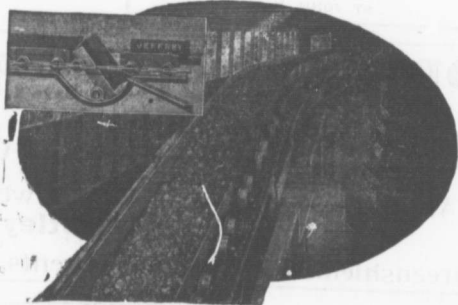
VANCOUVER, B. C.

R. P. WILLIAMS, 43 ALEXANDER ST.

## JEFFREY CONVEYORS

for handling Coal,  
Ore, Stone, Etc.

Cut shows steel Drop Pan Conveyor, capacity 80 cubic yards per hour, travelling 70 feet per minute discharging automatically into bins.



JEFFREY CONVEYORS are economical and dependable for the particular work they are intended to do. They save time and labor, with small expense of maintenance.

Catalog 81 contains valuable data. Copy mailed upon request.

Also manufacturers of Electric Locomotives, Coal Cutters, Drills, Washeries, Car Hauls, Triples, Screens, Crushers, Mine Fans, Elevators, Cages, Etc.

The Jeffrey Mfg. Co'y., Montreal, Can.

Toronto Office, 174 King St. East.

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The...

# MARITIME MINING RECORD

Vol. 14, No. 4. Stellarton N. S., August 23rd. 1911. New Series

## THE AUSTRALIAN PREMIER'S ROMANTIC CAREER.

'No wonder,' someone remarked the other day, 'that Mr. Andrew Fisher has achieved such a reputation and seems to have won the first place in the favour of the people of this country.' Both Mr. and Mrs. Fisher are handsome people, natures geetly in fact, who have that undefinable atmosphere which characterises the Colonials. The dark eyes and silver grey hairs of Mr. Fisher give an impression of strength, of concentration of energy, expressing a strong manful, but winning personality. Mr. Fisher hails from Ayrshire and now he returns to the land of his birth to receive the freedom of Kilmarnock.

The son of a miner at Crosshouse, a mining village, near Kilmarnock, Mr. Fisher had the good fortune of godly parentage of the staunch Presbyterian type. Andrew went to work in the pit at the age of ten, supplementing his meagre education at night school. Subsequently he had an elder brother, John, associated themselves with a branch of the Good Templars, and held every office possible remaining loyal in later years to their abstinence pledge. In all the endeavours for the social betterment of the village these brothers bore an active part. The first essay of Andrew on the ladder of a public career was the acceptance of the secretaryship of the local branch of the

Miners' Union, but he met with a rebuff from the employers in the neighborhood, and about a quarter of a century ago, in his twenty-third year, accompanied by a younger brother, James, and two fellow Scotchmen he sailed for Queensland.

The story of his career as a miner, labour leader, and politician is too familiar to need recapitulation here. The supreme moment in his life came when the lad who, five and thirty years earlier, had drawn tubs of coal along the levels of a Scottish mine, was requested by the Governor-General, Earl Dudley, to form a Ministry. A compact of the Liberal and Conservative Members into what was called the Fusion party, unfortunately brought about Mr. Fisher's downfall a few months later. Fortune again favoured him at the next General Election, when he and his party won all along the line, carrying every seat in the Senate, converting a minority in the house of representatives into a working majority, and Fisher became Premier a second time. During his term of office several important measures have been passed, an Old Age Pension Act, Bills for National Defence, Referendum Act, nationalisation of Monopolies, and a Progressive Land Tax. The Premier's knowledge of affairs, soundness of touch, and staunchness to principle, not to say a spirit of democratic boldness, are making his tenure one of invaluable service to the Commonwealth.

## WE OFFER

\$100,000 5 per cent 30 year First Mortgage Bonds of the Sherbrooke Railway and Power Co.,

Price 95 and Interest, with a Common Stock Bonus of 40 p. c.

The earning power of this Company has been increased by the acquisition of Three Established Light and Power Co's.

### OUR NEW GLASGOW OFFICE

is connected by direct private wires with our other offices and the leading stock exchanges.

Write us for complete Investment Offerings.

## J. C. Mackintosh & Co.

Established 1873

LOUIS N. FULLER,

Manager

Members Montreal Stock Exchange.

Direct Private Wires.

TELEPHONES 340 AND 341, NEW GLASGOW

OFFICES:

New Glasgow,

Halifax

Fredericton

St. John

Montreal

Y. M. C. A. BUILDING, (OPPOSITE POST OFFICE,) NEW GLASGOW N. S.

## CONDITIONS AT CONTINENTAL COAL MINES

A great many subjects were discussed at the late International Coal Mines Conference, among these the following.

## HOURS OF LABOR

Herr Schmidt (Germany) said that although Germany might be advanced in some things, in the mining industry very bad conditions still obtained. The hours of labor in German mines were practically unrestricted, the employer simply determining the hours the worker should work. More than 676,000 German miners worked between eight and twelve hours a day, and only 37,000 worked less than eight hours.

The resolutions were adopted unanimously.

## OLD AGE PENSIONS.

On the question of pensions for miners, resolutions were put down on behalf of the delegates of Austria, Belgium, and France. Austria demanded a pension sufficient to live upon for miners incapacitated through general causes or accidents and a pension to the dependents of miners killed in accident. Belgium advocated a pension of at least 600f. a year for miners up on reaching the age of 50 and after 25 years of work underground; while France asked for an old-age allowance of at least 2f. per day to the mineworkers on their attaining 50 years of age and after 25 years of service, and in the case of premature incapacity a pension proportionate to the number of years worked.

The president pointed out that the resolutions were not such as the British Section would have put forward, but having regard to the international character of the Congress and that the resolutions represented the views of Austria, Belgium, and France, the British delegates would support the proposals.

The resolutions were then adopted.

## MINERS DWELLINGS.

Mr D. Gilmour (Scotland) moved the following resolution on behalf of Great Britain:—"That we desire to express our indignation with the conditions under which the miners in many colliery districts are at present living because of the miserable housing accommodation which is provided for them, and we would call upon the various Governments to promote housing legislation which would make the present state of matters impossible; and, further, we ask for legislation to prevent the eviction of workers from their homes during an industrial dispute." He said that for many years nothing in this country had shocked the people more than the action of employers in the time of trade disputes than turning out the miners and their wives and children into the streets. They demanded suitable wages, decent houses to live in, and prevention against eviction in time of dispute.

In seconding the resolution a Belgian delegate said there were thousands of houses inhabited by the coal miners and owned by the proprietors in Belgium. In some cases a clause was inserted in the lease whereby the tenant undertook to leave the dwelling within 24 hours after ceasing work.

Herr Kartenberg (Germany), in supporting the resolution, said the one-third of all the miners' families in Lower Silesia lived in one room dwellings. He produced photographs illustrating the deplorable condition of some of the dwellings, which he characterized as "real plague spots." In one of the one roomed dwellings a miner and his wife and eight children

lived. He cited cases of families who had no beds and slept on boxes, and of four children who slept in one bed. These serious conditions should be taken up by the International Committee and representations on the subject made to the various Governments.

The resolution was unanimously adopted.

## LIMITATION OF COAL OUTPUT.

The following resolutions were set down on behalf of Belgium and France respectively:

(1) This Congress is of the opinion that the regulation of production is desirable, and that in order to achieve it it is expedient to employ every means at the command of the miners' unions, and especially the international strike in case of necessity. (2) It is our opinion that when a general strike takes place in any country the miners' federations of the neighbouring lands should limit their production by a fixed abstention from work.

M. Caeluwaert (Belgium), in moving the adoption of the first resolution, said this was the seventeenth time the question of limitation of output has been placed on the agenda at the International Congress, and the matter had never once been properly and thoroughly discussed. Again, on the present occasion it would not be possible to adequately discuss the question in the time at their disposal. On previous occasions he had given figures showing the enormous increase in the output of coal, and how this was, in some cases at any rate, organized internationally by the coal owners. They had to consider the fact that when a strike occurred in one country the owners of other countries increased their output in order to send coal to the strike affected country. Another aspect was the question of war. He asked how far it would be possible for the miners to organize so as to regulate the output of coal and thus render war impossible. He would like to believe that it was possible to realize their programme by means of friendly negotiations with the employers, but he did not think this practicable. Class war existed, and it was no use attempting to deny its existence. Ultimately he felt they must strike; it was no use preaching peace where there was no peace. He suggested that this important question should be discussed by the International Committee and some practical suggestion on the question of limitation brought at the next Congress.

M. Cadot (France), in moving the second resolution, said that when the miners' representatives in the North of France recently approached the mine owners in order to renew the existing contracts they were met with the objections that the owners could not promise any regular rate of wages or increase because the North of France was being flooded with German coal, and a syndicate of German coal owners had organized to throw all their surplus stock on the French markets. That he considered a very practical illustration of the necessity of their being able to establish some sort of rule to regulate the output of coal in the different mines of Europe.

German, English, and Austrian delegates supported the resolutions, and it was eventually decided to regulate the matter to the International Committee for consideration, with instructions to place the subject at the head of the agenda at the next congress.

ANNUAL HOLIDAYS. The following resolutions were adopted:—This Congress expresses the opinion that it is expedient to organize each year holidays of a fortnight's duration in order to prevent the formation

(Continued on page 17.)

## MARITIME MINING RECORD.

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

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

Advertising rates, which are moderate may be had on application. Subscription \$1.00 a year. Single Copies 5 cents.

## R. DRUMMOND, PUBLISHER.

STELLARTON, N. S.

August 23 1911

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## THE UNITED STATES COAL TRADE WITH CANADA

Canada imports almost as much coal from this country as is produced by Canadian operators during a year and when there is trouble between miners and operators in the Dominion the American producer gains. This is indicated by the orders placed for coal in the United States as a result of the shortage in western Canada, caused by the strike of the miners in that territory, and it must be remembered how the Nova Scotia strike helped the American producers to some extent while that was in force.

Of the remaining tonnage shipped to countries aside from Canada, 945,339 tons, an increase of 559,872 tons went to Cuba; 619,447 tons, a decrease of 22,079 tons, went to Mexico; 513,368 tons an increase of 61,342 tons, went to "Other West Indies," and the balance, 1,132,927 tons, a decrease of 132,680 tons, went to other countries so in reality, considering the coal shipped to far-away countries as the actual exports, there is a decrease instead of a growing export trade.

The total exports of coal, both anthracite and bituminous, from the United States amounted to 14,984,487 tons, compared with 13,367,072 tons last year, an increase of 1,617,415 tons, or 12.1 per cent. Of the total tonnage going to Canada amounted to 11,716,387 tons, against 10,177,843 tons during the year previous, an increase of 1,538,544 tons; or 72.2 per cent. of the 1911 exports went into the Dominion and 68.7 per cent. of the 1910 tonnage, an increase of 3.5 per cent.

## NOVA SCOTIA'S COAL TRADE WITH UNITED STATES.

Nova Scotia sent to the United States last year some 290,000 long tons of coal, slack coal at that, under a fifteen cent duty.

United States total shipments of coal to Canada 11,716,387.

Canada's total shipments to U. S. 1,432,147.  
Nova Scotia's little contribution to Canadian exports 290,688.

Let it be assumed, say some coal operators, that the unnecessary reduction of eight cents a ton will not greatly effect the provincial coal trade, what guarantee is there that the coal duty will not, as in the past, be the football of Federal economists. Several times the duty has been attacked, and the bargain as between it and the flour duty been broken. Speaking at Simeco Sir Wilfred Laurier—this from the

Montreal Witness—stated that the present agreement would not be the end of the reciprocity negotiations. "I have visions of a more far-reaching agreement which will bring even more closely together the great civilized nations of the continent." Has Sir Wilfred a vision of free trade; in coal among other things. Free trade in coal would cripple our coal trade. Let the finance minister declare, putting his hand on his heart, and saying 'sures' 'death' there will never, so long as he is at Ottawa, be further interference with the coal duty, and by so doing take a weight off the heart of the coal miners and coal operators.

The export of Nova Scotia coal—slack coal only, for round coal cannot find entrance—to the United States or strictly speaking to the gas works at Everett—is a diminishing quantity. For the seven months ending July 145,000 odd tons were sent to Boston against 275,000 odd tons in the corresponding period of 1910. Only 12,751 tons were received at Boston from N. S. in July, or half the quantity of July 1910.

Says the Glace Bay Gazette:—

"In the Fielding tariff of 1897 the coal duty was reduced from 60 to 53 cents a ton. Have the miners suffered because of that reduction. Let any miner ask himself the question. Can you say that cutting 7 cents off the duty 14 years ago in anyway affected you adversely?"

It is an axiom that what affects the employers affects the employees, sooner or later, or in some way or other. Did the reduction of 7 cents in 1897 injuriously affect the coal trade of Nova Scotia. Who knows? Either that reduction or something else did. Within the past years the United States operators have been steadily encroaching on Nova Scotias best market—Montreal. So great has been this encroachment that two or three years ago, before this reciprocity agreement was heard of, an alarm was sent out from Halifax, and the operators and the government met and seriously considered the situation. Seven cents is not much looked at in one way, but it may mean to some Nova Scotia operators all the difference between profit and loss. The Shipments of the Pictou collieries to Quebec in 1906 were 113,000, and in 1909 42,000. In 1910 they rose to 69,000 due largely to the strikes in other countries. The reduction of 7 cents has greatly benefited the American operators, and this further reduction of 8 cents will further benefit them. It looks as if the government had more interest in the welfare of the foreign coal operators than of the operators of Nova Scotia. Is not, we are asked, the reduction of 8 cents a paltry affair. Possibly, but when is this sort of thing to end. First a 75 cent duty, next a 60 cent, then a 53 cent, and now a 45 cent duty, and this in face of the solemn though unwritten pact that the duty of 25 cents a barrel on flour should stand against the 75 cent duty on coal. The duty on flour has been increased 100 per cent. the duty on coal has been lowered forty per cent. Nova Scotia is not being treated fairly in her most important industry.

Every mine manager should ask his men to travel by the return airways four or five times a year so that all of the miners will be familiar with this means of reaching the upcast shaft. Many lives could have been saved if the men had been familiar with more than one way out of the mine.

## COAL MINES BILL

(EXPLOSIVES AND COAL DUST.)

The Standing Committee of the House of Commons which is considering the Coal Mines and Coal Dust Bill lately dealt with the questions of explosives and coal dust. Mr. E. Wason was in the chair.

Clause 61 lays down that the Secretary of State by regulations may regulate the supply, use, and storage of explosives at mines, and may prohibit absolutely or conditionally the use of any explosive which is likely to become dangerous in mines. The second sub-section prescribes that no explosive shall be used in any mine except explosives provided by the owner.

Mr. J. Duncan Millar moved an amendment to the effect that the explosives should be supplied free to persons using the same. In support, he said, ought to be carefully considered by the Committee. He did not agree that this was a question entirely of wages, but considered that this was a fair charge to put on the mine owners themselves. It was very important that when power was given to the mine owner to provide the explosive it should be seen that the miners could obtain it at a fair price. The men could in many districts obtain their explosives from co-operative stores and other sources than the owners, and in dealing with so dangerous a substance it was essential that every risk of accident should be removed.

Sir. W. Menzies supported the amendment.

Mr. Bruce said that at present it was open to the miners to obtain their supplies of explosives from whatever source they liked. In the past, when owners had sold them, there was no doubt that they had been making a profit on the sale. In some districts the miners had adopted the co-operative principle, and had bought their explosives in large quantities. If Parliament was taking away this right of purchasing explosives from the miners, surely it was only fair that the masters should provide them with their own coal.

The Solicitor-General for Scotland spoke against the proposal. Under the Truck Acts, he remarked, the masters were not allowed to make a profit.

The amendment was rejected by 27 votes to 16, but a proposal that the explosives should be supplied to the miners at a cost which must not exceed the net cost to the owner was adopted. Clause 61 as amended was agreed to.

Clause 62 deals with prevention of dust in mines, and in the first place lays down that in every mine, the roads of which are naturally wet throughout, arrangements shall be made to prevent as far as practicable coal dust from the screens entering the downcast shaft.

Sir. A. B. Markham moved as an amendment to substitute the following for the proposal of the clause:—"No coal screening or coal sorting plant shall after the passing of this Act be erected within a distance of 80 yards of any winding shaft. Where, however, owing to geographical reasons or other special causes the shaft cannot conveniently be sunk at a distance of 80 yards from the screening or sorting plant, then in such cases a divisional inspector shall grant an exemption to the owner to enable the shaft to be sunk without regard to the said distance of 80

yards. Where an inspector grants an exemption under this section efficient dust catching apparatus shall be erected at the said screening or sorting plant. The distance for the purpose of this section shall be calculated in a straight line measured from the shaft to the centre of the place where the coal is tipped or tumbled. Provided always that in the case of an established mine and at any mine where actual bona fide sinking operations have been commenced prior to June 30, 1911, the provisions of this clause shall not apply."

The Solicitor-General for Scotland was of opinion that better phraseology could be adopted in carrying out the object of the amendment. He would therefore suggest that the following provision should be adopted rather than the amendment:—"And in the case of a mine newly opened after the passing of this Act no plant for the screening or sorting of coal shall be situated within a distance of 80 yards from any downcast shaft unless written exemption is given by the inspector of the division."

The amendment in the form suggested by the Solicitor-General for Scotland was agreed to.

Mr. L. Hardy, at the adjournment for lunch, asked whether the Government were serious in asking the Committee to meet day after day. They had now considered only 62 out of 124 clauses, and five of the 62 had been postponed. The attitude of the government was very unexplained, and the Committee ought to have a little explanation of their intentions.

The Solicitor-General for Scotland said that he would be in a position to explain things more definitely next week. There was every desire so far as the government was concerned to accelerate the course of the bill so as to place it as soon as possible on the Statutes. The Committee afterwards disposed of clauses 62 and 63, and adjourned.

Clause 72 prohibits inexperienced persons from working alone as coal getters. The clause is in these terms:—"No person shall be allowed to work as a coal or ironstone getter otherwise than under the supervision of a skilled workman until he has had two years' experience of such work under such supervision, or unless he has been previously employed for two years in or about the face of the workings."

Mr. Bruce, for the Labour men, moved to delete the provision which allows people who have been "previously employed for two years in or about the face of the workings" to be employed. They desired to make mining a really skilled industry, as indeed it was. Workers should form some part of apprenticeship. Many men had been killed and had been responsible for the killing of others because they had insufficient knowledge. The clause in the present Act had been of no value as a protection against unskilled workmen.

Sir. A. Markham said the effect of the amendment, which was a trade union proposal, would be to keep men from working at the face and compel them to work on the roads, where, according to the Chief Inspector of Mines, more accidents took place than in any other part of the mines. Mr. John Wilson said the amendment would create great hardship by preventing the sons of miners, who had perfect knowledge, be-

ing employed.

Mr. Hunter supported this view.

After further discussion, the miners' representatives on the Committee expressed their willingness to allow the clause to stand if a proviso were added to the effect that no skilled workman should have more than one unskilled workman under his care and supervision at any moment.

Mr. Hunter did not think such a limitation was required. No case had been made out for it by the Royal Commission.

Mr. W. E. Harvey said there were men working in the mines in Scotland who could not speak a word of English, and who frequently could not read the regulations of the mine. Employers were not at all particular as to the men employed. They swept all the greenhorns of the country into the mines.

Sir. A. Markham declared that there was not a single case of a Pole having been the cause of injury to a British workman, and the proportion of accidents where Poles were employed was less than elsewhere.

Mr. Anderson said the amendment meant more practical training of the men who had to look after the roofs and sides. Sir. A. Markham had not told the Committee as to whether the lack of the knowledge of the language among the Poles of Scotland which would have enabled these people to read the rules which governed the industry, had been the means of causing the deaths of a considerable number of people. In the part of Scotland where these men were employed it was a common practice for one of the number to get one or more working places and to employ under his supervision a number of his fellow-countrymen who were without knowledge of mining. That was a dangerous practice. It was curious that while the law prevented one unskilled person being employed alone, it enabled several unskilled persons to be employed together.

The Labour proviso was carried by 16 to 13.

The Committee adjourned.

#### GAS TESTS IN COAL MINES.

The third report of the Royal British Commission dealing with the subject of mine ventilation has been issued.

In the first portion of the report it is stated that the best means of removing firedamp is ventilation. It is needful not only that there should be a sufficiency of fresh air brought into the mine, but also a judicious system of distribution.

The commissioners say that a rule might with advantage be framed enacting that when gas is found to exist in any place to a greater extent than some specified percentage, no men should be permitted to go there or work there except under special supervision for the purpose of removing the excess of firedamp or otherwise securing the safety of the mine. Their chief difficulty has been to determine what that percentage should be, and how it is to be ascertained. If a percentage is to be prescribed, it must be one which can be discovered by the diligent use of the means ordinarily in the possession of miners, supplemented in the case of the officials of the mine by the more scientific instruments which are

available for their use.

The general conclusions of the commissioners are:

1. The prescribed percentage should be well below the limits of an explosive mixture, for a certain percentage found in an air current will often be indicative of far larger proportions in crannies. Mine air becomes explosive, in practice, when about 6 per cent. of pure methane is present in it. The amount of gas that can be seen upon an ordinary lamp has been the subject of some differences of opinion. It is undoubtedly easier to detect a cap in some lamps than in others.

The capacity of men for seeing gas also varies considerably. Some persons have great difficulty in detecting the pale gray ghost-like cones, and with advancing age, the capacity of seeing gas appears with some persons to be diminished. Moreover, there is no doubt but that a short training by an experienced teacher enormously improves the power of gas detection by means of the lamp. After giving full consideration to the views of men of science, managers, deputies, firemen and miners, it appears to the commissioners that the prescribed percentage should be two and a half per cent. of firedamp. In cases of dispute, they are of the opinion that samples of the air should be taken and tested by the Haldane apparatus.

2. The place for taking the sample should be in the general body of air in the working place, for it is obvious that in breaks or crannies the amount of gas may easily be abnormal.

3. While adopting this percentage, the commissioners wish it to be distinctly understood that it is designed chiefly with reference to smaller roads and working places. It is far too high a percentage for the main haulage road of a mine, which ought to be practically free of gas.

They recommend, therefore, that it should be made a law that no men shall work or pass, in the ordinary course of their employment, in places where there is more than two and a half per cent. of gas in the general body of the air.

Such an enactment is in addition to the existing duty of adequately ventilating the mine. For example, if in the main body of the air at a working place, less than two and a half per cent. of gas were found, it would not from that circumstance necessarily follow that the whole place was safe; near the face there might be a dangerous percentage which would necessitate the removal of the men.

4. For mines worked with naked lights the commissioners think a similar rule should be adopted with the substitution of 1½ per cent. for 2½ per cent.

Attached to the report is a memorandum by Sir Henry Cunningham in which he sets forth the means for detecting the presence of firedamp at our disposal as follows:

(a) Chemical analysis by burning up the firedamp in a specimen of the air by means of an electrically heated platinum wire, and observing the proportion that disappears in the process. This is accurate but takes time and requires considerable skill.

(Continued on page 16.)

# AROUND THE COLIERIES.

Springhill collieries from henceforth are to be known as District No. 5. of the Dominion Coal Co.

Visitors pronounce the Allan Shafts as a model in many ways. Though building operations are not yet quite completed, general tidiness prevails.

Harry Coll and his staff feel much more comfortable in their new offices than in the old shack—as a matter of course.

The I. C. R. coal inspectors are highly pleased with the coal presently being received from the Vale. It is free from material other than coal.

Canada imports more coal from the United States than is produced by all the collieries in Canada combined. Including anthracite there were imported in 1910 into Canada no less a quantity than eleven million seven hundred and fifteen thousand short tons of coal.

No attempt will be made to get into the old Foord pit until the full equipment of the Allan Shafts overground has been completed. In the mine there is no present need for development work, as there are sufficient places for all requirements for months.

Development work on the surface at the Allan Shafts is proceeding satisfactorily. The new boilerhouse is a creditable piece of work, and is said to be the best of its kind on the mainland. The boilers are at hand and will soon be set up.

The Acadia Coal Co. continues to make satisfactory increases in its outputs. Already this year the company is 73,000 tons ahead. At this rate of increase for the remainder of the year the increase over 1910 will be considerably over a hundred thousand tons.

Facing a duty of 53 cents a ton the U. S. sent, in 1910, over eight million five hundred thousand tons of bituminous coal into Canada. According to the reciprocity agreement the duty is reduced eight cents. Will this decrease enable the yankees to increase their exports to Canada.

The Robb Engineering Co., Amherst, Nova Scotia, and South Framingham, Mass., are building a return erset, N. S., and a boiler of the same type, 42 in. by 12 ft., for the Veniot Wagon Co., Ltd., Bridgewater, N. S. With this last order is included an 8 by 8 engine and stack.

The splendid showing in the matter of coal shipments made by the Dominion Coal Co. makes the RECORD hopeful that its prediction as to increased sales for 1911 will be more than fulfilled. The output for July was a record, and as the new collieries at Waterford on the Lingan side are rapidly opening up, there is no doubt that increases will be recorded month by month.

It is reported that the Port Hood Coal Co. are boring for coal on their area at some distance from the flooded slope. It is to be hoped that success will attend their efforts.

It is estimated that the I. C. R. will require 600,000 tons of coal this year. Last year the estimated consumption of 500,000 was exceeded by 30,000 and this year the railway is busier.

The output at the Allan Shafts is maintained at about 450 tons per day. No attempt at increase will be made till the two 1500 K. W. generators are installed which may not be for a few months yet.

The RECORD had better take no side in the present political campaign contenting itself with giving some figures which may be useful or otherwise to propagandists of reciprocity or their opponents.

Mr. J. C. McIntosh & Co. Bankers and Brokers have opened an office in New Glasgow, which is connected by direct private wire with the Halifax and other offices and with the exchanges.

Nova Scotia in 1910 sold 4,896,000 tons of coal all told, an increase of say 280,000 tons over 1909. In the same year the United States sent into Canada 8,627,000 odd tons being an increase of one million three hundred and fifty nine thousand odd tons.

If as has often been asserted there is a coal combine, or monopoly, in Nova Scotia it is a funny one. A combine is supposed to be for the maintenance of prices. Well the combine was unable this year to resist the reduction of twenty-five cents a ton made conditional in making contracts with the I. C. R.

A new slope is to be sunk on the Dominion Coal Co's areas at Birch Grove, Port Morien. The new slope is about two fifths of a mile from the trial slope. The coal is free, in large measures, from gas and is held to be an excellent coal for metallurgical purposes. It is possible therefore that the output of Birch Grove may be reserved for the Steel Works at Sydney.

It looks at this time as though Great Britain was undergoing similar experiences to those New Zealand went through before its adoption of the compulsory arbitration act. It was a strike of those employed in transportation necessitating the general public going to work as dockmen and stokers etc. that led to the enactment of compulsory arbitration.

Though for the seven months of this year the shipments of the Nova Scotia Steel and Coal Co. are considerably less than for the corresponding period of 1910, improvement will be noticeable from this out. The decrease is chiefly due to the damage caused by explosion in one of the collieries, repairs have been affected and this pit which was a large producer will give better results.

## AROUND THE COLLIERIES.

Plans for the surface and underground plant of No. 17, the newest colliery of the Dominion Coal Co. are all but completed and already mining plant and machine manufacturers are figuring as to cost.

It is noticeable that a portion of the press and a large number of public speakers avoid all reference to coal when addressing their constituencies in Nova Scotia. How is that?

It is maintained by reciprocity advocates in the west that the farmers will get better prices for the products of the farm, while speaking for the east the Amherst News, liberal, says: "The chances are that the price would not be higher, but there would be a chance for the farmer to do business on a larger scale."

The works at Trenton of the Nova Scotia Steel Company are as busy as they can be. There are sufficient orders on hand to keep the several departments of the plant busy for the next three months, and new orders are coming in to take the place of those completed.

The foundations for the new big forge of the Steel Works at Trenton have been ready for some time for the plant. A portion of the plant has arrived and this week its erection will be proceeded with. As previously stated when the forge is completed it will be away ahead of anything in Canada, and possibly of anything this side the ocean.

"Give the farmers a chance." In Nova Scotia for the past eight years they have had more chances than they were able to overtake. They could not properly supply the home market, and therefore it is that in the mining counties consumers are using beef brought in refrigerator cars from Ontario, butter from the same province, hay from Quebec, eggs from cold storage, and etc.

The mining and shipment of ore at and from Wabana is highly satisfactory. Development work is rapidly proceeding and the shipments this year will be in excess of any previous year. Over six hundred thousand tons will be mined and shipped. As ore shipments are more profitable than coal shipments, any loss sustained through short coal output is much more than made up by the increased ore shipments.

It is said that Mr. Ghuer of Stellarton in association with other capitalists are thinking of acquiring the iron ore properties at Arisaig held chiefly by Halifax parties. The sum named as the purchase price is so high that the RECORD does not care to name the figures. If the mining of ore should be entered upon the presumption is that the ore will be smelted by the electrical process. Transportation will be the first problem to be attacked. The RECORD will be interested to hear further of the projected development of Arisaig.

The colliery of the North Atlantic colliery is pegging away though greatly handicapped for want of shipping. The mine has been idle for days on this account. The loss of a steamer has greatly retarded operations. It is hoped that the insurance would fully cover the loss as the company cannot afford to lose a penny. B. F. Pearson who has taken the whole responsibility of operating the colliery upon his shoulders visited the mine last week. What his plans are for the future even shareholders, have no idea. Some of the bonds of the company were sold lately at a fourth of their face value. It is to be hoped the bond holders, not forced to sell, may in time fare better. Mr. Pearson's paper is a rabid exponent of reciprocity. Had he not better, then, induce the Americans to exchange some of their stupendous wealth for this extensive property at Port Morien, and thereby make glad the heart of those interested.

### ITEMS FROM 'COAL AGE.'

Coal mining is the support and dependence of all other industries.

There are more than 2000 coal mines operating in the state of Pennsylvania. West Virginia has nearly 800 producing mines.

The amount of oxygen required by an individual varies with the degree of bodily activity. A man of rest uses about 0.3 liter per minute, while severe exercise on the part of the individual raises the consumption to 2 liters per minute.

The time to formulate rules and lay plans for action in case of mine explosion is before the accident happens and when everything is running smoothly. There is no time to think when the pit mouth is surrounded by a crowd of anxious relatives waiting in dreadfull suspense.

Rescue apparatus or breathing appliances are useful at coal mines, not so much because of the utility of such devices in saving life, but for the reason that these appliances facilitate the rapidity and safety with which the ventilation can be restored after an explosion has occurred.

Unless the wearer of a breathing apparatus has been trained systematically in its use, such a safety appliance is likely to prove a death-trap rather than a means of succor. No recent invention for use in mines is more important than the proved types of rescue apparatus; however, to permit a green man to go into a dangerous mine atmosphere equipped with a breathing apparatus is criminal.

The amount of ash that any coal will yield depends largely upon the rapidity with which the coal is burned. When coal is burned slowly under the influence of a moderate draft, the ash will remain pulverent, and will pass through the grate as formed. When coal is

used for industrial purposes, however, rapid combustion usually takes place, and under these conditions, nearly all coals will yield ashes which fuse, thus forming clinkers.

One writer, who has given thought to the subject of the waste and inefficiency in operation is due to the low price received for the product, sees difficulty ahead when the public are asked to pay a higher price for their fuel. His solution is to create, or permit, a carefully guarded monopoly in each field. It would take the form of either a consolidation of ownership, or the pooling of interests under Government supervision. Such a plan, he says, would result in better methods and safer mining.

By going for tuition to the universities, the men are brought into contact with scientific thought in a way that they never can be made in a mine, and are encouraged to seek higher education for themselves and for their children. An educated and practical body of mining professors, accustomed to deal with miners and their difficulties and in close touch with the mining trade, is an asset of importance and ought to be of the greatest value to the government, the owners, and the mines. It is for this reason, quite apart from motives of economy, that the work of testing and educating miners ought to be placed as far as possible in the hands of universities and mining schools under the superintendence of the Home Office.

(Continued from page 13)

(b) Instruments depending on the fact that air contaminated with methane diffuses through a porous diaphragm faster than air not so contaminated. This method is easier than the last, but it requires that fresh air should be constantly at hand or some reservoir to serve as a standard of comparison. It has not hitherto been successful.

(c) Instruments depend on specific gravity, as for instance, observing how much heavier a light ball is in the suspected air than in air of normal quality. This method requires instruments too delicate to be of practical use in a mine.

(d) Observation of the glowing appearance of a platinum wire rendered incandescent by electricity and around which the suspected air is allowed to circulate. This method gives a striking result at first, but in some cases the platinum rapidly becomes clogged. The method seems of practical use, but has not as yet come into use.

(e) There remains the method of observing the flame of the lamp. This has the advantage of being simple, of requiring no special instruments, and of being the one now universally in use.

There are two methods of observation. One giving full light. The effect of each percentage of methane on a lamp thus burning is to raise the yellow flame about one-fifteenth of an inch from what it was before. This method does not give the absolute quantity of methane present, and is an insufficient means of testing the general condition of a mine.

We have to fall back on the ordinary cap method, turning down the flame until the yellow flame entirely disappears. The need to turn down the flame is a great disadvantage, for lamps often go out when thus turned down.

In the course of some general remarks, Sir Henry says it is highly to be desired that the various mining schools should receive every encouragement in their plan of training working miners to detect gas. In some cases this has already been done, and it is anticipated that with lectures and practical demonstrations lasting over six evenings, most miners can be sufficiently trained.

The professors are keenly interested and de-

The girls and women employed at the surface of coal mines in Britain are threatened with abolition by the adoption of an amendment to a clause in the mine bill to the effect that "no girl or woman other than those employed on or before the first day of January, 1911, shall be permitted to be employed above ground on any mine." All over the country 5188 women are employed at mines, and of these 2000 are in Scotland. The opinion expressed by the Committee by 15 votes to 13, however, is not shared by the men and girls who work in our coal-fields; but it often the case that people or stiff to acknowledge the benefits of a revolution which has been brought about a decent livelihood is our first concern, and if the piters' households are thrown out of work the loss to the mine to be an additional argument for their retention—no less than a claim on the score of health. The women are employed at the picking tables, taking out defective coal, and so on, and on these covered platforms or wooden rooms have much more ventilation than ordinary workshops. One well-known doctor in the Midlands, who speaks from an experience of thirty years, says morally that the pit-head woman workers are at least equal to any class of indoor women workers and that physically they are much superior. The coal dust, he says, does not seem to be injurious. There is very little sickness amongst them, and except for small contusions accidents are rare. The Cambuslang district has been the first to take up arms against the proposal vehement and indignant protests at the prospect of losing their work. It appears that in many cases in and around Wigan girls had to leave cotton factories owing to ill-health brought about by the most unpleasant atmosphere in those places, and that they had improved considerably since they had taken up their duties on the coal screens and belts. There is no doubt that the proposed displacement of many thousands of these men workers will be strenuously opposed. Its final adoption, at least at the outset, would cause much distress to the families directly concerned. The work at times may not be of the lightest nature, but the girls seem the healthiest class to be found in any occupation. And the question may be asked, what benefit would it be to the girls to take away the work they wish for at present and present them with a choice of a mill workroom, or standing behind a counter?



(Continued from page 10)

of stocks of coal and the sinking of the price of coal, and to allow the workmen to take a rest whilst maintaining wages at a rate sufficiently high to live decently. (Belgium.) This Congress advocates the introduction of holidays for the miners of a fortnight's duration. The work in mines is so dangerous and injurious to health that the introduction of such holidays must be regarded as a necessity. (Germany.)

A motion put forward by the German representatives that the Congress should be held every two years instead of annually was not adopted.

Mr. Enoch Edwards, M. P. was re-elected president of the International Committee, and the Congress then terminated.

#### THRIFTY RAILWAYMEN

In hopes of encouraging thrift amongst its employees the North Eastern Railway Co. (British) many years ago established a savings bank at which deposits of 1s and upwards are received from any person in the service, interest at the rate of 4 per cent. per annum being allowed on accounts up to £200, and 2½ per cent. on any excess over £200. According to the 51st annual report it appears the bank continues to make steady progress, and that its exceptional advantages as a savings bank and medium for investment are being more and more appreciated by the company's employees. During the 12 months ended April 30 last 980 new accounts were opened and 652 closed, showing a net increase of 328. The total number of depositors is now 11,728, as against 11,400 at the close of the previous year. The large sum of £212,128 11s 10d was dealt with during the year, £112,203 18s 5d having been deposited and £99,924 13s 5d withdrawn, whilst the total amount, inclusive of interest now standing to the credit of depositors is £998,584 12s 6d, being an increase of £45,925 18s 11d over the previous year, and representing an average amount of £85 2s 11d for each depositor.

#### THE BRITISH COAL INDUSTRY.

Figures relating to the operation of the mines of the United Kingdom have been issued. The statistics cover the year 1910 and show that the total coal production was 264,292,588 tons. The English mines contributed 183,773,071 tons; Wales, 39,104,583; Scotland, 41,335,132, and Ireland 79,802 tons. Total indicated increase of 534,026 tons.

No fewer than 1,049,407 persons were employed in and about the coal mines. The tables that accompany the report indicate that for every person employed, 265.3 tons of coal were mined; this compares with 274.07 tons in the preceding year.

The year was disastrous so far as accidents are concerned; there were 1,769 persons killed, which is an increase of 316. The death rate per thousand rose from 1.43 to 1.68 throughout the Kingdom. Viewed from another standpoint, the deaths per million tons of coal mined figure out to 6.31 last year as against 5.2 in 1909. The high death rate was caused by the accidents at the Hulton and Whitehaven collieries.

A servant who says things behind his master's back that he would not dare whisper in his presence, is a coward and a hypocrite. There may be a modicum of

truth in it all, but there should be a sense of loyalty and fidelity in the make-up of every one who gets his living from a firm. The traitor, the backbiter or the slanderer never did himself or those he serves any good, and it is a short-sighted policy to be incessantly trying to kick down the ladder by which you have climbed or topple over the house that affords you shelter.

#### Intercolonial Railway

##### TENDER FOR TIES AND SWITCH TIES.

Sealed Tenders addressed to Mr. Louis Lavoie, Purchasing Agent, Department of Railways and Canals, Ottawa, Ont., and marked on the outside "Tender for Railway Ties," or "Tender for Switch Ties," as the case may be, will be received up to and including

THURSDAY, AUGUST 31st., 1911.

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Tenders will be received for any number of Ties and Switch Ties.

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A. W. CAMPBELL,

Ottawa, Ont. Chairman, Government  
August 1st. 1911. Railways Managing Board.

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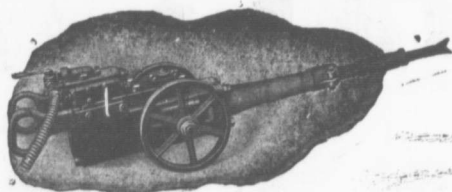
Agents in New Brunswick:—W. H. Thorne &amp; Co., Ltd., Saint John.

—Different Sizes and Qualities kept in Stock—

## THE H. H. COAL MINING MACHINE.

Built in several sizes to meet various requirements.

Almost entire absence of repairs.



Simple, Durable, and Effective. Will run with less Air than any other machine. Will run successfully with high or low pressure.

HERZLER & HENNINGER Machine Works, (Incorporated),  
BELLEVILLE ILL., U. S. A

CANADA FOR THE CANADIANS!

## WIRE "DOMINION" ROPE

For Everybody.

PATRONIZE HOME INDUSTRY

The DOMINION WIRE ROPE CO., Ltd., Montreal

## 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; J. McGILLIVRAY, Superintendent.

### INVERNESS RY. & COAL COY

Time Table No. 28, Taking effect at 1 a. m. OCT 17TH., 1909.

WESTBOUND		STATIONS.	EASTBOUND	
Superior Dir.	Inferior Dir.		Superior Dir.	Inferior Dir.
P. M.	A. M.		P. M.	A. M.
3:30	10:40	P. TUPPER JUNCTION	3:40	11:00
3:55	11:55	INVERNESS JCT.	3:50	11:05
8:17	10:29	PORT HAWKESBURY	3:55	11:11
3:04	10:12	PORT HASTINGS	4:00	11:20
P. M.	10:07		4:10	A. M.
	9:57	TROY	4:20	
	9:44	OREGONISH	4:35	
	9:27	CRAGMOOR	4:50	
	9:08	JEDBUR	5:05	
	8:55	CATHERINE'S POND	5:18	
	8:41	PORT HOOD	5:33	
	8:33	GLENCOE	5:53	
	8:23	MAROU	6:07	
	7:50	GLENDYRE	6:28	
	7:40	BLACK RIVER	6:48	
	7:25	STRATHLORE	7:00	
	7:12	INVERNESS	7:10	
	6:55		P. M.	
A. M.				

## CAPELL VENTILATING FANS.

Capell Fans have shewn themselves to be more efficient than those of any other make.

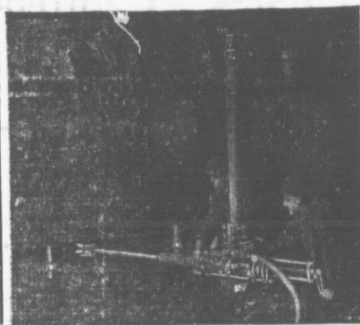
Built under special arrangement with, and from the designs of the Inventor by

**I. MATHESON and COMPANY, Limited.**  
ENGINEERS.

NEW GLASGOW, NOVA SCOTIA.

Makers of Complete Equipments for COAL and GOLD Mines.





## The RAND New Radial Coal Cutter

The Rand No. 37 Coal Cutter is a Thoroughly up-to-date machine, built entirely of Steel.

The weight of this machine has been reduced far below anything on the market, and the cutting capacity wonderfully increased.

**CANADIAN RAND CO., LIMITED**  
**MONTREAL.**

TORONTO, LETHBRIDGE, WINNIPEG, HALIFAX

## THE BOILER INSPECTION & INSURANCE CO. OF CANADA.

(COMMENCED BUSINESS 1875.)

Head Office: Continental Life Building, Toronto.

Issues Policies of Insurance after a careful Inspection of the Boilers, Covering  
**ALL LOSS OR DAMAGE TO PROPERTY**  
and Loss resulting from  
**LOSS OF LIFE AND INJURY TO PERSON,**  
caused by **STEAM BOILER EXPLOSIONS.**

**ASSETS FOR THE SECURITY OF POLICYHOLDERS, \$4,244,438.53**

JOHN L. BLAIKIE, President.

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AGENTS: FAULKNER & CO., Halifax, N. S.

R. W. W. FRINK, St. John, N. B.

A. M. CROFTON, Sydney, C. B.

## RUBBER HOSE

for Air Drills. Pneumatic Tools, Steam, Suction, etc.

## "REDSTONE" SHEET PACKING.

For highest pressures with Steam, Hot or Cold Water and Air.  
The most durable and satisfactory Packing on the Market.

## RUBBER BELTING

For Transmitting, Conveying and Elevating

Unequalled for Durability and Power Transmitting Qualities.

— MANUFACTURED BY —

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

Branches:—Montreal, Halifax, Winnipeg Vancouver

Head offices, 47 Yonge Street Toronto

# EDGE & SONS, LIMITED.

CABLES:—"EDGE" Shifnal.  
CODES:—A.B.C. 4th. Edition.  
Bedford McNeill's

SHIFNAL, (England),

Have always in Stock every size of their standard

## TREBLE BEST SPECIAL CRANE CHAINS

Manufactured in our own Workshops under Strictest Supervision and every Link carefully Tested.

**We welcome your inspection.**

Mine Car Drawbars and Hitchings a SPECIALTY.

# MARITIME COAL, RAILWAY, & POWER CO.

Miners and shippers of

CHIGNECTO High Grade

—AND—

JOGGINS.

STEAM

AND

Domestic

# COAL.

Unexcelled for General Use.

Shipments by Intercolonial Railway and Bay of Fundy.

Colliers:—CHIGNECTO and JOGGINS.

Power Plant, CHIGNECTO, N. S.

DAVID MITCHELL, General Manager, MACCAN, N. S.

# The BROWN MACHINE COY.

New Glasgow, N. S.

## Coal & 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

ESTIMATES CHEERFULLY GIVEN. CORRESPONDENCE SOLICITED.



# DRUMMOND

**COAL**

High Grade Fuel  
for Steam Domestic and General  
Purposes.

**COKE**

**From Coal Washed by Latest Process**  
Growing more popular daily—and considered to  
give as good results for Foundry purposes  
as the United States Article.

**FIRE CLAY**

of Fine  
Quality.

**FIRE BRICK**

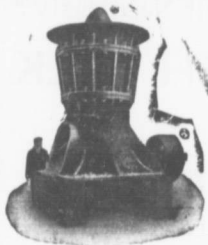
Better than  
Scotch seconds for  
Ladle lining etc.

SHIPMENTS BY RAIL OR WATER.

**INTERCOLONIAL COAL MINING CO. LTD.**

Westville, Nova Scotia.

**HADFIELD'S** STEEL Foundry Co. **SHEFFIELD**  
Limited.



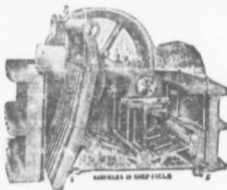
PERFECT GYRATORY  
STONE CRUSHER.



CAST STEEL  
BRONZE BUSHED  
SELF OILING.

**WHEELS & AXLES**

WE MANUFACTURE  
CRUSHING ROLLS  
ELEVATORS,  
and Gold Mining Requisites.



HADFIELD'S PATENT

**JAW CRUSHER**

(Solid Steel Construction)

The Parts which are subject to Excessive Wear are made of

Hadfield's Patent 'Era' Manganese Steel.

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

**PEACOCK BROTHERS, 68 Beaver Hall Hill, MONTREAL**

# Amatite

## ROOFING

For Mine Buildings.

AMATITE is exactly suited to mining buildings because:

1. It can be laid by unskilled labor.
2. It has a real mineral surface which requires no painting.
3. Its cost is lower than that of other roofings of less weight.
4. It comes in rolls ready to be unrolled on the roof and nailed down.
5. The necessary nails and cement are supplied free, packed handily in the centre of each roll.

The mineral surface of Amatite is somewhat of a novelty; and the fact that it obviates the old painting nuisance, is giving to this roofing the leadership of the ready roofing industry.

The surface consists of mineral particles embedded under great pressure into a tough plastic matrix of pitch.

A sample of Amatite will be sent free on request.

THE CARRITTE-PATERSON MFG. CO.  
Limited.

St John, N. B.

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## FOR THE YOUNG, THE MID-AGED, AND THE OLD.

You Have but One Life to Live

Why Expose it Needlessly?

# HOMOGENIZED FRESH MILK AND CREAM

Is the only MILK and the only CREAM which consumers of all ages, and of every condition, can drink with confidence, free from the haunting fear of exposing themselves to contract Typhoid Fever, Tuberculosis, Measles, Scarlet Fever, Diphtheria, Etc., diseases to which all are exposed who persist in using the ordinary, unsterilized milk.—(Consult a doctor on this point.)

## HOMOGENIZED MILK

keeps pure and fresh for weeks and months.

For Sale at Leading Grocers.

# HYGIENIC FRESH MILK COMPANY, LTD.

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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.

Head Office \_\_\_\_\_  
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**NOVA SCOTIA STEEL & COAL COMPANY,  
LIMITED,**

MANUFACTURERS OF

 **STEEL** 

**MERCHANT BARS,**

**SHEETS AND PLATES**—From 12 gauge up to 1 inch thick. Any Widths  
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**HEAVY FORGINGS,**

**HAMMERED SHAFTS**

NOTHING REQUIRED IN CANADA TOO LARGE FOR US. . .!

**Team and Electric Car Axles**

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

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SHIPPING PORT

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**An Unsurpassed Evaporating Coal.**

**Highest in Carbon, Lowest in Ash,**

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Two points that always appeal to Shipowners.

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