

14#13?

Dr. R. Bell  
Geol. survey dept.

136 Maclaren St.

# Maritime Mining Record

Jan. 12. 1916

## DOMINION COAL COMPANY, LIMITED.

OUTPUT:—5,000,000 tons yearly.

Miners and Shippers of the Celebrated  
**"DOMINION" Steam and Gas Coal**  
and Coal for Household Use  
from the well known seams  
**'Emergy,' 'Phalen,' 'Harbour,' 'Victoria' and Hub.'**  
**"SPRINCHILL" Coal for Steam, Gas, and Household use.**  
**Screened, Run of Mine, and slack.**

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, C. B. and PARRSBORO, N. S.  
**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:

R. P. & W. F. Starr, St. John, N. B.  
Buntain, Bell & Co., Charlottetown, P. E. I.

Harvey & Company, St. John's Nfld.  
Hull, Blyth & Co., 1 Lloyd Ave., London, E.C.

**D. H. McDougall,**

General Manager  
SYDNEY, N. S.

**Alexander Dick,**

General Sales Agent.  
MONTREAL, P. Q.

# Acadia Coal Company, Limited

Stellarton, N. S.

Miners and Shippers of the

—Celebrated—

## ACADIA COAL

Unexcelled for STEAM Purposes.

Popular for DOMESTIC use.

Manufacturing, Steamship, and Railway  
Companies give It high endorsements.

Shipments by water from Pictou Landing, N. S.

Shipments by rail via. Intercolonial Railway.

For Prices and all Information, address General Offices,

**STELLARTON, N. S.**

# 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 R WATER.

**INTERCOLONIAL COAL MINING CO. LTD.**

Westville, Nova Scotia.



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<sup>®</sup> 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, General Manager.

### INVERNESS RY. & COAL CO'Y

Time Table No. 31, Taking effect at 12.01  
JUNE 28TH., 1914

SOUTHBOUND		STATIONS.	NORTHBOUND	
Superior Dir.	Infior Dir.		SI	A.M.
34	32		33	31
P. M.	A. M.		P. M.	A. M.
3 25	10 40		3 41	11 00
3 30	10 35	POINT TUPPER.	3 45	11 06
3 12	10 59	INVERNESS JUNCT.	3 50	11 11
3 52	10 12	PORT HAWKESBURY	4 02	11 25
P. M.	10 07	PORT HASTINGS	4 08	A. M.
	9 57	TROY	4 20	
	9 44	CHUGHISH	4 33	
	9 27	GLASHMOIR	4 45	
	9 08	JEDDIE	5 00	
	8 55	MARYVILLE	5 13	
	8 40	PORT HOOD	5 28	
	8 35	GLENDYKE	5 33	
	7 59	MALCOLM	6 11	
	7 49	GLENDYKE	6 23	
	7 35	BLACK RIVER	6 48	
	7 12	STRATHLOONE	6 50	
	6 55	INVERNESS	7 05	
	A. M.		P. M.	

# MARITIME COAL, RAILWAY, & POWER CO.

Miners and shippers of

**CHIGNECTO** High Grade  
—AND— **STEAM**  
**JOGGINS.** Domestic **COAL.**

Unexcelled for General Use.

Shipments by Intercolonial Railway and Bay of Fundy.

Collieries:—CHIGNECTO and JOGGINS.

Power Plant, CHIGNECTO, N. S.

R. J. BELL, General Manager, JOGGINS, N. S.



**Manufacturers  
of  
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 & Iron Goods Co.  
HAMILTON.**

CANADIAN GOVERNMENT RAILWAYS

Change of Time

**HALIFAX -- MONTREAL**

Commencing January 8

**OCEAN LIMITED**

will leave Halifax 8,00 a m daily except Sunday.

Used by Collieries in Lancashire, Staffordshire & Yorkshire

**'XTERRA'** COLLIERY LAMP OIL  
For Marsaut, Mussole, Deflector or Closed Lamp

PURE WHITE FLAME. LOW PRICE  
**E. WOLASTON, Dutton St. MANGHESTER**  
Sole Representatives for Canada, AUSTEN BROS.  
Limited, Halifax, N. S.

**MARITIME EXPRESS**

will leave Halifax 3,00 p m daily.

First Sunday Trip, January 9th.

# LATCH & BATCHELOR

LTD.,

Wire Drawers, Manufacturers of all classes of Wire Ropes,

Patentees and Manufacturers of

**LOCKED COIL and  
FLATTENED STRAND  
WIRE ROPES,**

Hay Mills,

Nr. **BIRMINGHAM.**

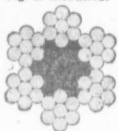
Agent:-

## H. M. WYLDE,

P. O. Box, 529,

## HALIFAX, N. S.

Fig. 2. HAULING.



### LANG'S LAY ROPES.



Fig. 26. WINDING.

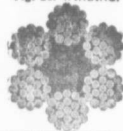
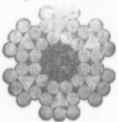


Fig. 1. HAULING.



### PATENT FLATTENED STRAND ROPES.

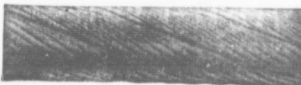


Fig. 4. WINDING.

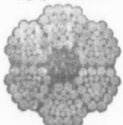


Fig. 13. SINKING.



#### 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. 11b. CRANE, &c.

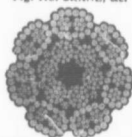
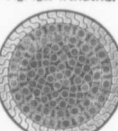


Fig. 13 for Sinking & Fig. 11b for Cranes, &c., are non-twisting.

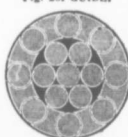
Fig. 15a. WINDING.



### 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  $\frac{1}{16}$  in.  
Duration far ahead of any other construction.

Fig. 20. GUIDE.



## DEPARTMENT OF MINES. GEOLOGICAL SURVEY.

The Geological Survey publishes annually a Summary Report giving a summary statement of the work accomplished during the year. Maps and reports on various sections of the country and on special subjects appear from time to time. A catalogue of publications will be sent free to any applicant.

A single copy of a map or report will be sent to a Canadian applicant free and to others at a nominal price. Owing to the limited supply it is impossible to send series; the applicant should therefore state definitely the precise area concerning which information is desired.

### RECENT PUBLICATIONS:

1085. Descriptive sketch of the Geology and Economic Minerals of Canada, by G. A. Young and R. W. Brock. Accompanied by a geological and a mineral map of Canada.
- Guide Book No. 1, Parts 1 and 2. Excursions in Eastern Quebec and the Maritime Provinces.
- Memoir 60. Arisaig-Antigonish district, Nova Scotia, by M. I. Williams.
- Memoir 41. The "Fern Ledges" Carboniferous flora of St. John, New Brunswick, by Marie C. Stopes.
- Memoir 20. Gold fields of Nova Scotia, compiled by W. Malcolm from the results of investigations by E. R. Faribault.
- Memoir 44. Clay and Shale deposits of New Brunswick, by J. Keele.
- Map 39A. Geological map of Nova Scotia.
- Map 53 A. Southeast Nova Scotia. Geology.

Applications should be addressed to the Director, Geological Survey, Ottawa.

## COAL SHIPMENTS, 1915.

—ACADIA COAL CO.—

## DOMINION COAL COMPANY.

## MONTHLY SHIPMENTS

	1914	1915	Inc. or Dec.
January.....	183 845	195 300	11 455
February.....	177 640	172 572	5 068
March.....	246 553	217 961	35 249
April.....	371 718	391 921	41 986
May.....	530 300	465 089	20 203
June.....	498 636	523 300	65 211
July.....	464 720	475 334	24 664
August.....	432 570	469 975	10 614
September.....	397 351	433 870	37 405
October.....	256 174	382 232	36 519
November.....	205 289	338 592	126 038
December.....			133 303
	3 941 523	4 256 604	
		3 941 523	

Increase 1915..... 315 081

## —SPRINGHILL.—

## MONTHLY SHIPMENTS

	1914	1915	Inc. or Dec.
January.....	23 657	25 102	1 541
February.....	21 923	24 714	2 791
March.....	24 827	34 170	9 343
April.....	29 549	26 575	2 974
May.....	27 607	28 336	729
June.....	28 792	26 528	2 264
July.....	38 290	34 239	5 049
August.....	31 962	22 753	9 209
September.....	29 244	27 478	1 766
October.....	33 668	27 470	6 210
November.....	32 076	29 410	2 666
December.....	29 597	31 595	1 999
	341 186	338 233	
		341 186	

Decrease 1915..... 2 953

## —NOVA SCOTIA STEEL &amp; COAL CO.—

## MONTHLY SHIPMENTS

	1914	1915	Inc. or Dec.
January.....	47 560	28 777	18 783
February.....	23 180	22 714	466
March.....	13 651	24 691	9 040
April.....	27 430	25 523	1 907
May.....	63 969	50 725	13 244
June.....	90 386	67 536	22 850
July.....	99 365	72 751	26 614
August.....	86 375	61 500	24 815
September.....	77 302	63 064	14 238
October.....	89 925	58 469	31 457
November.....	37 894	56 734	18 840
December.....	31 376	50 694	19 318
	690 403	583 238	
		690 403	

Decrease 1915..... 107 165

## MONTHLY SHIPMENTS

	1914	1915	Inc. or Dec.
January.....	42 025	20 014	22 011
February.....	31 379	18 986	12 393
March.....	29 354	20 485	8 869
April.....	33 128	18 814	14 284
May.....	22 956	20 347	2 609
June.....	22 993	25 669	2 676
July.....	24 695	27 050	3 255
August.....	26 121	25 435	686
September.....	34 179	27 184	6 995
October.....	33 082	29 844	3 238
November.....	26 317	28 856	2 539
December.....	20 987	37 034	16 037
	347 216	300 648	
		347 216	

Decrease 1915..... 46 568

## —INTERCOLONIAL COAL CO.—

## MONTHLY SHIPMENTS

	1914	1915	Inc. or Dec.
January.....	15 715	10 545	5 170
February.....	14 556	11 110	3 346
March.....	16 879	13 425	3 454
April.....	10 135	10 292	157
May.....	11 357	13 654	2 297
June.....	15 781	14 848	933
July.....	17 308	18 509	1 201
August.....	16 724	12 780	4 344
September.....	14 016	15 099	1 083
October.....	11 895	14 894	2 999
November.....	13 353	14 271	918
December.....	10 302	437	9 865
	168 021	149 464	
		168 021	

Decrease 1915..... 18 557

## RECAPITULATION.

## CAPE BRETON COUNTY.

	1914	1915	Inc. or Dec.
Dominion Coal Co....	3 941 523	4 256 604	315 081
N. S. S. & Coal Co....	690 403	583 238	107 175
Colonial Mining Co.,	68 000	54 000	
Sydney Coal Co., etc.		6 000	8 000
	4 699 926	4 899 842	1 999 916

## PICTOU COUNTY.

	1914	1915	Inc. or Dec.
Acadia Coal Co.....	347 216	300 648	46 568
Int. Coal Co.....	168 021	149 464	18 557
	515 237	450 112	D 65 125

## CUMBERLAND COUNTY.

	1914	1915	Inc. or Dec.
Dominion Coal Co....	341 186	338 233	2 807
Mar. C. Ry. & P. Co.	191 000	153 500	25 000
Other collieries.....		76 000	12 000
	532 166	567 733	I 35 567
Inverness County....	245 000	225 000	D 20 000

Grand Total 1914.....	5 992 089
" " 1915.....	6 142 687
Increase 1915.....	150 598

**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.

January 12, 1916.

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**THE PROSPECTS.**

Whatever it may be based on is not to be expressed in definite terms, yet there is no gainsaying the fact that at no previous time, in the history of the Nova Scotia coal trade, has there been so quiet yet pervasive a spirit of optimism prevalent around the collieries, as to the future, as at the present time. The operators as a whole, on the Island and more particularly on the Mainland, are in good cheer and declare that 1916 should be as good a year as the trade has experienced. The one question that is a little perplexing is: "What of labor, will there be a sufficient supply or a shortage?" There is also the question affecting the Island collieries, of water transportation. For the doing of a big and increased trade, suitable steamers must be had, and if Britain goes on commandeering all suitable craft, transportation may become a baffling problem. If these two questions could be satisfactorily answered, the RECORD would join in the optimistic chorus. At a majority of the collieries, increased trade is looked for, and where there can be no increase there will be no falling off.

There may be a few who do not share the optimism of the RECORD. Among them is that indefatigable and clever contributor to several papers, Mr. F. W. Gray. In the Mining Journal, Mr. Gray in reviewing the outputs of 1913, said, in effect, that it would be several years before so large an output was again attained, for the reason that the companies would not be in a position to increase their outputs. In reviewing, in the same paper, the output for 1915, Mr. Gray says: "It is therefore apparent that a serious shrinkage of the output capacity of the coal mines of Nova Scotia has taken place....." "independent altogether of considerations of market demand and labor supply." There are some who think the labor shortage was not so big an evil as many suppose, and these may quote Mr. Gray, in the Coal Trade Journal, as follows:

"The output of coal has been seriously diminished by recruiting. It is accurately and conservatively estimated that 22 per cent. of the mine workers of Nova Scotia have joined the colors of Britain or her allies, and of course the reduction in outputs has been in proportion."

In this quotation it is plainly affirmed that there was a reduction in 1915, of outputs, corresponding to the decrease in the labor supply, namely, twenty-two per cent. If that be really so then Mr. Gray must take back his assertion that Nova Scotia cannot reach for several years, her output of 1913. According to his latest statement, but for the labor shortage, the 1915 output would have knocked the 1913 output to

pieces. Mr. Gray puts the output of 1915 at 6,707,000 tons—but it would have been twenty-two per cent. greater only for the shortage of labor. Twenty-two per cent. shortage, due to labor, added to the actual figure, gives a total of 8,174,000 tons, or 922,000 tons greater than that of 1913. One of the positions must be abandoned, either the one asserting that 1913 must be for some years the daddy year, or that labor is responsible for a 22 per cent. decrease in output.

The New Year opened with the screeching of the politicians over the closing of the colliery at Thorburn. In view of an early local election these think the time fitting to make a little capital, if possible. It is a great pity the matter could not be discussed calmly, and wholly apart from politics. If the politicians were content to express sympathy no fault could be found, but when one side declares what should have been done, and the other declares what it will do, both go too far. No government, in justice, can compel any company to carry on business at a loss. A government, in a sense, can do anything, can even possibly, in some cases, cancel a lease, in short, a government, if it chooses, can commit a gross act of injustice, but that would not redound to its credit, to the good name, or the true prosperity of the country. If the politicians were candid they would say: "We are sorry, but the Acadia Coal Company cannot be compelled to work the mine at a loss or at a time when the working of the Thorburn mine would greatly hamper the working of the other collieries." As the RECORD understands the situation any compulsion to work Thorburn might disastrously affect the mine at Colbarton, for the working of the Thorburn mine, we are assured, will mean that the company over its whole field of operations will not be able to make ends meet, and, in that event, could they be expected to carry on operations at any point? It is greatly to be regretted that the company was forced to close the mine, but what is to be done if the company asserts that for years the Yale has not paid? The one thing the local government can do is to make inquiry into the truth of the assertions of the company as to losses at Thorburn. If the statements are true, then, we fear the politicians have no genuine remedy.

**- Rubs by Rambler. -**

A Halifax daily on receiving a despatch telling of D. A. Thomas' elevation to the peerage or something, clapped its hands and stamped its feet and with boisterous glee shouted "What has Sir Sam to say now, for is not the honor conferred on Mr. Thomas a sly slap in the face to Sir Sam and the members of his Shell Committee?" In this instance this independent, highly partizan Halifax paper was just a little "too previous." Had it waited one day longer it would have learned of the honor conferred on Mr. Bertram, the chairman of that very committee. The honor was conferred on Mr. Thomas to keep him sweet after he had a tendency to become sour on discovering that Canadians needed no instructors, but had pointers to spare, while the honor conferred on Bertram was a recognition of services rendered by the committee in expediting outputs of munitions at a time when the supply was short of requirements.



I am pleased to notice that the more respectable, and responsible, of the newspapers are giving scant space, and at long intervals, to the effusion of the writer called Gadsby. Some of them do not give his name in full, out of sheer shame, presumably. That is well, one cannot handle pitch without being defiled. Gadsby's ambition seemingly is to be considered factious. Instead of that is to be considered contemptible. It may be taken for granted that any newspaper willing to insert Gadsby's scurrilous articles is very hard up for copy, or is willing to go to any extreme in opposition to the present government, all its members and all its works. I said to a friend the other day: "I think I will enlighten Gadsby on a point or two about the late Shell Committee." He said: "Leave him alone; don't you know that it is the part of wisdom to give a certain unsavory smiling animal as wide a berth as possible!" Well, taking the advice I will not reply at any length to his latest libels on the Shell Committee. I express the hope that a parliamentary committee will be appointed to investigate what basis there is for the innuendos and assertions regarding the committee emanating from the Gadsby and other sources. The funny—the amazing—thing is that some of the newspapers willing to play fair with the Shell Committee adopt a half apologetic manner when writing in defence. This arises from the fact that they cannot be familiar with all that the committee has done, and all that they have saved, and helped, the Empire. Time will come when the actions of the committee will be vindicated and the big work they accomplished acknowledged.

It looks as if the failure of the Acadia Coal Coy. to work the mine at Thorburn at the solicitation of representatives of the people living there will furnish the politicians, local and federal, with splendid opportunities for showing zeal that consumes for the welfare of the Thorburn people, more especially the voters there. It is said that a member of the government declared publicly that the local government had made a tremendous mistake in giving the Acadia Coy. a lease for all the areas instead of leases for the areas in the several localities. If that is so then its shortcomings do not apply to the Acadia areas alone, but to those of several companies and these the biggest in the province. The politicians should be as careful as possible not to talk nonsense. If the local government is to be asked to put "on the screws" in this instance then it has a busy season before it, for the Acadia is not the only company working a colliery in one district and allownig a colliery to remain idle in another locality. For years the mine at Thorburn has been a subject of anxiety to the company, and it had been all but determined on more than one occasion to close it down, but hoping against hope the company kept working even at a loss. Of course there are those who say the mine can be made to pay. That is possible, but the way to accomplish so desirable an end has not been made plain. Thorburn has not been abandoned, else the government might have the right to step in. It is expected yet to recover the big body of coal there, but the company maintains that the present is not the time to do so. One reason given among others being the scarcity of men at their better paying collieries.

The following stunning paragraphs are from an

article written for the Herald by one evidently not to the manor born. A reading of them, from one view point, amazes, from another, amuses. The writer of them after having explained where 95% of the Dominion Coal Co.'s output went, says:—

"Leaving 5 per cent. which goes to fill contracts in the United States entered into prior to the war, when we were only too glad to furnish a winter output, when times were blue. This 5 per cent. represents a negligible quantity of low grade, non-metallurgical stock. It would be practically useless for war purposes."

"The Dominion Coal Co. has been subjected to a measure of criticism since the outbreak of the war, with regard to those United States contracts. It is but fitting that their reply to that criticism be set down baldly, and as it is given, without comment."

"When sounded on the subject came the remark 'they would welcome the interference, if the government stepped in and cancelled these contracts.'"

Taken as a whole the paragraphs are a masterpiece of misinformation. Taken separately they indicate to what a nice science some official of the Dominion Coal Co. has reduced the by-times useful art of leg pulling, or they afford striking illustrations of the wrongful and ridiculous inferences for which faulty expression is responsible. Among the inferences the ordinary reader would draw, are these:

1. That when times were not blue no sack coal was shipped to U. S.
  2. That a "winter output" is a negligible quantity.
  3. That Dominion slack is low grade, or, and that what is sent to U. S. is specially selected because of its degradedness.
  4. That the Dominion Coal Co. in sending coal to the U. S. has been censured for trading with the enemy.
  5. That these censures originated in Canada.
  6. That the company was blamed for sending low grade slack to U. S.
  7. That the large quantity, comparatively, of coal sent to the New England railways last year was "low grade slack."
  8. That the company would like the government to forbid the D. C. Co. from sending slack coal to the United States.
  9. That were it not for the war the coal trade of Nova Scotia would have went wholly to the dogs and be there now, and, the rankest inference of all that ninety-five per cent. of the coal shipped from Nova Scotia was for war purposes.
- The article from which the extracts are taken has some good points, and yet it is a wonderfully amusing illustration of how easy it is for some impulsive souls to make a precipitate descent from the most sublime to the wholly ridiculous.

#### THE COAL TRADE IN 1915.—MR. DRUMMOND IN THE HALIFAX HERALD.

Stellarton, December 30.—As Halifax Herald readers know, Nova Scotia has within her bounds the three requisites, without which, it has been declared, no country, no portion of a wide Dominion, such as ours, may hope to become of first importance. Need it be mentioned that these three are (1) large areas of land suitable for all agricultural purposes; (2) extensive, if not limitless coal fields, and (3) greatly expanding iron and steel manufac-



tures. Besides these the fisheries of the province are valuable and lumbering plays a not unimportant part. We have then, in the province, what are accounted the three essentials to progress, with two valuable contributory side lines thrown in, as a standby, as it were. Some of the fisher folk may dispute the order of my classification, but scarcely successfully.

Of the several contributories to the prosperity of our province, I need scarcely repeat that coal is the greatest. Agriculture, of course, must be given a high place, but after all is said, coal, with the steel industry dependent upon it, and is bound to remain king.

The growth and greatness of the western provinces lie in their boundless, fertile prairies; the future of Nova Scotia lies in what were once prairie and peat. The latter, through processes of nature, and the lapse of ages of time, has become solidified, and taken for its name coal. Without coal there would be no civilization as we know it now. Without coal Nova Scotia would be given a lower place than is now given it, I fear, by haughty, impulsive westerners. Since the worldwide depression precedent to the war, and since the additional disarrangement of business succeeding its declaration, one may say, of the several provinces of the Dominion, Nova Scotia was the least adversely affected, and that must go primarily to the credit of coal.

Twenty odd years ago it was freely predicted by the newspapers of British Columbia, that that province, in the matter of coal production, would wrest the laurels from Nova Scotia. At the time the prediction was stoutly disputed, and is still unfulfilled. If Nova Scotia has to step down from the first place as a producer of coal in Canada, I am of opinion that not to British Columbia, but to Alberta, she must bend the knee. As a producer of coal, Alberta has shown phenomenal growth in recent years, but still, it will be many years before she can hope to assume the place now held by this tight little province by the sea.

I was asked the other day, to give an estimate of the amount of capital invested in the coal and steel industries of the province. Making hasty estimate, I placed the sum at about ninety-five million dollars. Possibly I overestimated by two or three million dollars. A revision impels me to place the sum at ninety million dollars, divided almost equally between the two industries. A steel and iron trade champion might say forty-six million dollars in that industry, while one interested in coal might reverse the figures. This large sum divided as one will, affords proof of the great importance of these two branches of industry to the life present and future, of the province. A regrettable feature of the investment, in the case of coal principally, is that a large part of it is unremunerative, being locked up in collieries at present unworkable, from one cause or another. There remains the consolation that at some future time, the collieries now dormant, may spring into new and vigorous life.

The Dominion Coal company has saved the situation.

No small credit is due General Manager W. H. McDougall for the efficiency of his staff in general. But had he not in J. R. McIsaac, the transportation manager, and had the company not in A. Dick a salesman of highest repute, his efforts in procur-

ing a satisfactory output would be in large degree ineffective. Had I been asked three months ago, how the shipments of 1915 were likely to compare with those of 1914, without much hesitation the answer would have been "There can be no increase." And yet there is an increase, and a fair one, all things considered. The sole credit for this is due to the three last months of the year, and especially to the phenomenal shipments of the Dominion Coal company for November and December. These two months, as a rule, are classed among the slack months, as the St. Lawrence trade may be said to close with October.

The shipments for the calendar year 1914 were, in rough figures, 5,900,000 tons; this year the estimated shipments are 6,050,000, an increase of 150,000 tons, not a large increase certainly, but, seeing the increase occurred in the three last months of the year, one that may be taken as a token that 1916 will likely show the largest shipments on record. ....

Shipments to the St. Lawrence will be considerably short of last year. The high rate of charter is responsible for this. The Dominion Coal company unluckily had few old time charter boats, and new charters were very high. Neither of the two big companies took new contracts this year, but they were forced to fill old contracts, no matter the cost of transportation. I am going to hazard the opinion that the St. Lawrence trade, this year, was a losing one for these companies engaged in the trade. How much more than twenty-five cents a ton they lost on every ton that went up the river I do not think it would be polite to tell.

As a rule the companies deliver from 150,000 to 175,000 tons for the Canadian government railway at Levis; this year, I believe, the quantity does not reach 20,000 tons, and hence the scarcity of coal at all points on the government railway. Two contracts for water shipments, were entered into, I believe, by the railway. One was filled up to some 15,000 tons only, on account of the impossibility of securing steamers at a rate that would not entail a tremendous loss. The other contract was not filled because when the company was ready to supply the coal the railway was not in a position to receive it, and when ready to receive it the Coal company said it was not then in a position to supply it.

Seeing there has been a heavy falling off in the shipments to the St. Lawrence, our best market, how happens it that there is an increase in the year, over 1914. The answer is "the activity in the provincial steel trade." But for this the total shipments for the year would have shown a heavy decrease and this is said though at present, and for the past four weeks the mainland collieries especially, have not been able to meet the demand for domestic coals. In the closing months of the year much more coal could have been sold had the companies been able to furnish it. And why were they not? Largely owing to the insufficient supply of labor, and to accidents interrupting outputs at the mines. Take Pictou county.

The fire in the Allan mine caused a cessation of operations wholly for the first half of the year and is still interfering, though the output is now up to say 500 tons per day. Then the outbreak of fire at the Drummond colliery is responsible for the loss

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## AROUND THE COLLIERIES.

The Joggins mine banked some 9,000 tons of slack last year. This bank is being gradually filled away.

Things are looking bright for the Joggins during this year. The output for the past three months was 17,000 tons per month, whatever more.

If the labor shortage does not increase during 1916 the chances are that the colliery outputs will be at least as good as last year. The possibility is that the shortage may be more acute, as recruiting is still continuing.

There are some 140 men on the pay roll of the Cumming' shell factory. A majority of these are making 'big money' and go about their work as if they had been bred to the business.

The firm of J. W. Cumming & Son, New Glasgow, have so far sent forward seven cars of shells, and expect to put to the credit of January five car loads more. On a rough guess we would say there are 1650 high explosive 4.5 shells to a car.

Why is it that the makers of shells require to be so very particular as to give the shells two coats of varnish in the inside, and two coats of paint outside? The varnishing is not required in the smaller, but in the high explosive shells it is, as the Lyddite has a peculiar chemical action on the steel, and they are painted as a precaution against rust.

The output of the Inverness Ry. & Coal Co. in 1914 was 265,000 tons against 245,000 tons for 1915. The falling off is more than accounted for by the absence of shipments to the St. Lawrence, which in 1914 amounted to 25,000 tons. The St. Lawrence trade was abandoned because it was a profitless business at prevailing high transportation rates.

It has been stated that the shortage of labor in C. B., at the collieries, is more imaginative than actual. In opposition to this the officials of the Dominion Coal Company, for instance, point to the fact that in the early summer of 1915 the output went as high as 21,000 tons a day, whereas in the autumn and fall months the best that could be obtained was 17,000 tons.

Goodness! Here we were contentedly living in the belief that we knew all of the seams in Pictou County, and all about them, while it turns out that our knowledge has been of an elementary kind. The discovery of a twenty-one foot seam most colliery owners would consider a big bonanza, but what term can be applied to the announcement that thirty-eight feet below the long known 'Stellar' seam another six foot seam has been found. The drill core indicates that 5 ft. 6 of this new seam is of excellent quality. In last issue we said that possibly there were other surprises in store for the people of the County, but really we did not expect the glad surprise would come as a New Year's gift.

There have been no labor troubles at Springhill, or the Joggins, or elsewhere in Cumberland County during the year, and prospects of continued peace during 1916 are bright.

The surface plant of the Maritime Coal, Ry. & Power Co. was greatly improved during the past year. The railway also came in for attention. A new 67 ton locomotive, consolidated - without tender - was bought, and the purchase of a second one is being completed.

It is suggested that 1916 will turn out to be the best year in the history of the Maritime Coal, Railway & Power Co. That is well, for the company had its own share of lean years. Mr. R. J. Bell, the General Manager, is winning laurels, and if he is elated, he has reason for it.

The Maritime Coal, Railway & Power Co. had some slack time during the early summer of last year. Gradually business improved until at the present time the demand is greater than the production. The company also suffered from shortage of men; this, too, is being remedied, and almost all the men necessary are being obtained.

The output of the Colonial Coal Company for 1915 was some 4,000 tons ahead of that of 1914. But it must not be forgotten that the company had only one colliery in operation against two for the best portion of 1914. The output of the Colonial mine, the one colliery being operated, was, in 1914, 30,000 tons, while in 1915 it went up to 57,000 tons, a very fair increase, and one reflecting credit on the General Manager, G. B. Barchell.

There is sufficient coal in sight, in the seven foot seam now being worked at Inverness, to keep things going at an average output of 1200 tons per day for 20 years. After that there is the 13 ft. seam to fall back upon. Possibly the bond-holders may fare better than they had expected six months ago. There is now hope that the property may be placed on a paying basis.

A deputation from Thorburn, consisting of five representative citizens, and accompanied by Messrs R. M. McGregor and R. H. McKay, M. P. P's., waited on General Manager Prudhomme, of the Acadia Coal Company, in reference to the re-opening of the mine at Thorburn. The interview was long and no harsh words passed, though the delegation did not attain their object. The delegation suggested to the General Manager that if the company could not see its way clear to the re-opening of the mine, that they would sub-lease it, for a time, to others. To this the reply was that such a proceeding might interfere with the future intentions of the company. No definite promise was given by the General Manager, but the hint was thrown out that at a time not far distant plans might be adopted for the re-working of the long idle McBean seam.

## AROUND THE COLLIERIES.

Mr. J. McGillivray, Receiver for the Inverness Railway & Coal Co., has high hopes that before long he shall be able to find ready sale for the full output of the colliery, say 350,000 tons. As a domestic coal it is asserted the product of the mine will hold its own with that from any other colliery in the province.

Since our last issue that well known figure in provincial industrialism, Mr. Graham Fraser, has been called hence. The RECORD cannot add to the many high tributes that have been paid the deceased by papers, small and great, all over the land. It is content to say that Mr. Fraser's life is a splendid example for the ordinary man. He attained his eminent position by diligent plodding and not by a display of great genius.

Owing to the New Year holidays and to the encountering of a heavy feeder of gas, which has to be drained off, the whole of the face of the 21 foot seam is not exposed at this writing. The RECORD has, in its own primitive way, tested the coal from the upper part of the seam, and has no hesitation in pronouncing it excellent. Its character, as exposed by burning in an open grate, is that as a likely gas producer it cannot be excelled in the province.

The find of a twenty foot seam—not mentioned in the records—under the McGregor, has led certain interested in coal seams geology, to wonder if what was discovered at Stellarton, through means of a drill, may not be an incentive to putting down bore-holes under the known seams in other sections of the county. People who were contented to say that there were no more coal seams than those already recorded are now wavering and willing to go the length of admitting that what was possible in Stellarton may be possible in other parts of the county. In confirmation of this let me give the following.

"Some months ago a bore-hole was put down from the six foot—so called—seam to test the McBean seam. At a distance of some 750 feet the McBean seam was struck, and judging from the core, the coal is good. Now the point I wish to make is this: If a bore from the McGregor down, revealed a new seam of coal, is it not possible if the bore, which went only as far as the McBean, was continued, that what happened at Stellarton might ensue at Thorburn. It is not for one; or an official of the company to say how the McBean should be worked when the re opening has been determined upon, but I suggest that as the main slope in the six foot seam is easily kept up and in good repair, it would be possible to extract the coal in the McBean by way of the slope, if a comparatively shallow shaft was sunk from it. The cost would not be heavy. At the same time a large quantity of coal in the six foot seam could be conveniently mined, and mixed with the McBean seam coal. Suppose a larger seam was found below the McBean the shaft could be connected directly with the surface and also extended downwards. These are a few ideas which, if acted upon, might prove profitable to the company, the county, and all concerned."

There is room at the Albion mine for about fifty more miners.

As showing the effect that a shortage of labor has on output take the Allan mine. During the time the Drummond colliery was closed, many men from Westville worked at the Allan, the consequence being a 500 ton daily output. These men are again at work in Westville and the output at the Allan has gone down to 350 tons. The labor problem is causing the management no small anxiety. There are places in the mine for men sufficient to give a 600 ton daily output.

The fire at the Drummond Colliery, as the RECORD had hoped, has proven not to be so difficult, tedious and expensive to overcome as some fires which have preceded. No doubt the quick recovery of the mine is due to the intelligent and energetic efforts of the officials, who as soon as the fire was discovered took effective steps for its control. The people of Westville are of course highly pleased at the prospect of the several slopes putting out in a short time a maximum output. The water poured into the mine to extinguish the fire did so effectually, and the danger done by it to the sides and roofs is comparatively trifling. The New Year for Westville opens hopefully.

The RECORD has been favored with the following notes in reference to the work done in the two square miles of submarine territory lying outside of the "Scotia" submarine leases, and acquired under lease from the Dominion Coal Company in 1913. The sinkings have been driven into this territory 2,000 feet. To handle economically the considerable tonnage intended to be taken out of these areas it was thought necessary to drive a completely new haulage way from the bottom of the Princess Shaft direct to the new depths entering the areas referred to. This work was laid out by Scotia's engineers. To open this haulage-way through the old pillars for a distance of one and a half miles it was necessary to remove a large quantity of rock from the old working places, as well as to drive through portions of old pillars abandoned or lost, and other sections where the pillars had been crushed. The work of driving this haulage way was begun at No. 1, or Princess Pit bottom, again at the boundary between Scotia and Dominion Submarine leases, and also at two intermediary points, and so carefully and skillfully was the engineering work done that these various openings when connected were all perfectly in line, with a discrepancy of less than an inch in any part, and there is now a straight roadway from No. 1 pit bottom to the face of the new deeps—a distance of over 10,000 feet. This road is now being permanently timbered, and will be equipped with double tracks of 60 pound rails the entire distance, and when completed will be a smooth, straight tangent, and uniform grade from

the pit bottom to the former eastern boundary of the Scotia submarine areas, where the haulage engines used for assembling the coal won from the new submarine extensions will be located and where the trip to the pit bottom will be made up. This roadway being double tracked, perfectly straight, and of uniform grade, is expected to be operated at high speed and at a minimum cost of transport.

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of a full month's output, and will retard operations for months to come. In Inverness county the shortage of 25,000 tons is wholly due to the impossibility of making shipments to the St. Lawrence, and "break even" at prevailing charter rates. And yet in the ease of the Inverness Railway and Coal company, the loss of shipments to the St. Lawrence could not result in other than a financial gain to the bondholders. The company, as is known, is now in the hands of a receiver, J. McGillivray, and if all that is told be true, there might have been no default of bond interest had it been wholly in his hands years ago.

(The figures in the Herald in reference to the Joggins are incorrect. There has been an increase and not a decrease.)

The decrease shown by the Colonial Coal company is due to the fact that one of its mines—the McKay—closed down in August of 1914, and that the briquetting plant, like most every other plant of the kind on the continent, was put out of commission owing to the purchasing public not becoming enamored of the product. Briquette making won't pay until a cheaper binder is discovered. So it is seen that though in ordinary years lessened demand is responsible for lessened output, other and sinister causes must, this year, shoulder the responsibility.

There has been a marked increase of sales to the United States, as compared with previous years, which were marked by a steady decline. This increase is attributable to the perseverance of A. Dick, who sweltered in Boston in the dog days of 1914, chasing certain railway magnates and finally inducing them to make contracts for a fairly large quantity of other than slack coal. Whether contracts will be renewed is problematical. If freights decline the chances should be even, but lower transportation may not be looked for at present.

For a war year the coal trade has been fairly satisfactory. There would have been fuller satisfaction were it not that the number of individual fatal accidents is markedly in excess of any previous year. My opinion, that the fatality percentages in Nova Scotia for 1915 will show in a more unfavorable light than those of the United States which, in the past, in the matter of mine accidents, has had an unsavory reputation, will, I fear, turn out correct. This is to be deplored. In spite of the motto endorsed by every mine manager and superintendent, "safety first," accidents not only keep on occurring, but increasing. What is to be done? Our Mines Regulation act, and the special rules, for the guidance of employees at the several collieries, are good—none better. Our superintendents, while energetic and hustling, are careful, and our colliery workers are above the average, and

still constantly men are being killed in larger proportion than in other coal producing countries. Why, it may be asked? A satisfactory answer is not at hand. Possibly the sharp angle of the coal seams, or the fickle nature of the roofs, or the overhead metals—makes mining in Nova Scotia more hazardous than in some countries. The reasons should be sought out and made known, and in this the government should take a leading part. "Government by commission" is a butt which certain newspapers delight to keep firing at and yet I would suggest that the increase in mine fatalities should be gone into by a commission, whose composition might be somewhat as follows:—The inspector of mines and the several deputies; the managers or superintendents of the several mines; the underground manager and a practical miner—from each colliery, and any others interested in the matter. The companies should pay the small expenses of the officials, and of the miners in localities where there is no union. The railway department, no doubt, if asked, would provide transportation free, or at a nominal charge. The only cost to the local government would be hall rent, printing, and other small incidentals. The subject is of such importance that something must be done and soon.

Time was, and not so long ago, when certain newspapers and their correspondents, took keen delight in railing at the "coal barons," so called. Of late there has been none of this. Why, I wonder? Possibly, chiefly, because audiences took little interest in the matter, more than from the possibility that the eyes of the consumers had been opened. But, when former assailants are silent, how comes it that no newspaper has been generous enough to give the robber barons the credit of having renounced their alleged evil ways? Has The Herald and its readers taken notice that though, since the beginning of the war, prices of material have kept on increasing, wages gone higher, and the expenses of the living of the barons increased, they have not, since 1912, increased the price of coal at the pit head. This is "one for the barons," I should say, though there has been no press commendation.

There have been no serious labor troubles during the year. A couple of appeals to the Industrial Disputes act resulted in day's wage men being granted a moderate addition to their day's wage. At present there is no apparent disturbing element, and peace is expected to prevail during the coming year.

Operations at the Drummond colliery have once more been checked by fire, but it is expected matters will soon be put to rights. The Acadian is rapidly recovering from the fire in the big Allan mine. Beyond these there are no untoward incidents from a material standpoint, of a serious kind to be recorded.

The Herald will kindly intimate to those who think there is big money in coal production, that there are a half dozen or so unworked coal mines in the province, which may be had for a snap. A rare chance for governmental operation, or, better, for those who think coal should be sold at half its present price.

There have been comparatively few changes at the collieries. The more notable of the few are the appointment of H. Poudhomme, who took a leading part in the promotion of the Belgian relief fund,

to be general manager of the Acadia Coal company, and the elevation of George Gray to be assistant to the general manager.

What of 1916? Presently the prospects are cheering. There should be increased shipments, unless, indeed, there is a labor shortage. It is estimated that two thousand men have, so far, been recruited from the colliery districts. But take notice that the figures do not represent the actual labor loss to the companies. Why? Ah, well, it may not do to be specific, but still it may be hinted that the men who volunteered were the men who had "go" as a characteristic. The 2,000 who went represent the labor of a much larger number of the average of colliery workers they left behind.

#### I. C. R. TAKES OVER LINE TO MUSQUODOBOIT.

Halifax, Dec. 31.—The operation of the Dartmouth to Deans branch of the government railway system will be undertaken on Monday, January 3rd. The trains will run from Upper Musquodoboit, leaving at 5:30 in the morning and arriving at Dartmouth at 10 o'clock in the forenoon, thus making the run of 70 miles in four hours. Returning the train will leave Dartmouth at 3 o'clock in the afternoon arriving at Upper Musquodoboit at 7:30 o'clock in the evening. The trains will run on three days each week—Tuesdays, Thursdays and Saturdays. It will be a mixed service—passenger and freight. Caviechi and Pagano, the contractors who built the road, have been running the service for some months and have thereby been a great convenience to the people travelling from Halifax to Middle Musquodoboit. Now it is to be undertaken by the I. C. R. as a branch of the system that extends from Halifax to Winnipeg. The desire of the people on the shore and through the Musquodoboit valley is at last to be gratified with the operation of the road as a part of the I. C. R., and in this respect the beginning of 1916 will be memorable. It will be noted that the road in the meantime will be operated not to Deans, but to Upper Musquodoboit.

#### SHELL MAKING.

(Mr. Drummond, in Halifax Herald.)

Many people declare they do not clearly understand why so much and so nice labor is involved in the production of shells, made to be shot from cannons' mouths, and explode and go to pieces at a given spot, or at a given time, nor can they understand why a shell has to undergo so many different and intricate processes before it is entitled to be called "finished." To have more than a hazy idea of shell making, one has either the processes explained to him or better, be a witness of the processes. Assuming that many Herald readers never had the opportunity to tramp the rounds of a shell factory, I shall make an attempt to refer to the processes in short detail. Should an expert, after reading the description, pronounce it superficial, I hope I may have grace given me to throw a kiss to the critic.

Several firms in Nova Scotia are largely engaged in turning out shells, the two principal ones being the Nova Scotia Steel and Coal Company and the Dominion Steel Company. These two companies are much in the public eye, and are in a class by themselves. My remarks therefore will cover what I saw

in a smaller plant. I take that of J. W. Cummings and Son, New Glasgow, for three reasons; first, it was near by; second, the firm is more or less directly connected with coal mining, being makers of mining tools and equipment from a coal drill to a mine car; and third, because it may be taken as ideal, and typical of similar finishing plants in the province, of which there are several. By the way, an enumeration of the processes may convince some that the making of shells costing from ten to twenty-five dollars is not the huge bonanza they suppose.

The plant of J. W. Cummings and Son, will compare favorably with any of the kind in the Maritime Provinces. They were the second firm in Nova Scotia to make high explosive shells. The government inspector thinks highly of the plant and the character of its product. In short it is an up-to-date plant with a capacity of two hundred and fifty finished shells in a twenty-four hour working day.

The shell machines are placed in groups on each side of the shop, and are driven by a powerful engine; the air for the expanding man drills is supplied by a Canadian air compressor. I shall set progressive figures before the several processes.

The shell forgings are supplied by the "Scotia" Company. The first operation then is cutting the forging to length by a five inch cutting off machine. The operator of this machine does the second (2) operation which is "centering" by a 22 inch drill. The two machines are so placed that fifteen shells are turned out per hour continuously.

Three. Rough turning. The lathe for this work is a powerful and special "simplex," which makes short work of turning the rough forging to size in one cut.

Four. Inside boring. Done on two 28 inch and one 16 inch lathes, specially fitted with turrets, in which are four bars of special design to hold the necessary roughing and finishing cutters.

Five. Cutting to length is done on a special cutting-off machine, fitted with a gauge so that all shells are cut accurately.

Six. Heating the shell for nosing or bottling. For this an ingenious soft coal furnace is employed, filled with a water-cooled front, which keeps the body cool while the nose of the shell is being heated.

Seven. Boring and top nosing. This is done by a 24-inch lathe, fitted with a turret, into which is fitted "roughing" and finishing boring tools and a collapsible top for threading the nose. On this machine many shells can be bored and nosed in ten hours.

Eight. Finishing the body. Done on the 24-inch lathes with tape attachments fitted with special cams; turrets are fitted to these machines.

Nine and Ten. Wave ribbing. Done by an attachment fitted to a 20-inch lathe which holds four tools operated against the cams to make the waves. The shell is undercut also on this machine.

Eleven. Boring out base. Three lathes, 24-inch to 28-inch, shell projections first cut-off and the base roughed out for finishing lathes. The shell is now ready for government preliminary inspection.

Twelve-Fifteen. Shells examined in batches of fifty. When stamped O. K., are sent back for completion.

Sixteen. Rivet in base plate. After base plates are finished, riveting is done by a hammer running 2,800 revolutions per minute. The shell now looks

a substantial piece of work.

Seventeen. Finishing base and making to weight, and also to gauges.

Eighteen. The fitting of brass, or steel, nose sockets, after hand tapping the thread and turning socket to shape. These done, the shells are ready to varnish, after washing and brushing.

Nineteen. Varnish, pumped into the shell. When dry shell is ready for baking in a hollow wall oven which, once heated, will keep continuously, at an even temperature; shells are thoroughly baked in six hours.

Twenty. Copper banding. Bands pressed on by machine; pressure, 2,000 pounds.

Twenty-One. Turning copper bands. Shells brought to gauge; turning tools passed over the bands.

Twenty-Two. Marking of shells. The shells are marked "4.5, How. V. L. F. S.," with name of maker and date.

Twenty-Three. Shells having been examined by firm's inspector, are subject to rigid government oversight. When finally passed, the shells are sent to paint room.

Twenty-Four. Painting. Painted first, white, then given an over-coat of yellow, which indicates that the shell is of the high explosive kind.

Twenty-Five. Boxing. When paint is dried, shells are boxed; two in a box; the boxes are supplied. A box-full weighs roughly, 75 pounds. The shells are now ready for their momentous journey over the sea to the other side and thence to "somewhere."

The tool room for a shell finishing plant is of special interest. This modern tool room of Cummings' has the following machinery installations: wet grinder, power back saw, 9 inch special drill, two 18 inch lathes, 30 inch drill, cutter grinder, 24 inch crank shaper, universal milling machine, with these and expert workmen the firm made all the special tools for the shell finishing plant. Some of these are very complicated and yet quite as good and serviceable as the tools imported by some firms — of this Nova Scotia firm it may be said it has proved itself equal to the occasion.

That Canada, and possibly more particularly Nova Scotia, has participated largely in the production of shells, big thanks are due the shell committee, recently dissolved. The general public, I fear, have failed to recognize the magnitude of the work they accomplished. Indeed from what has appeared in certain newspapers one was taught to believe that the committee constituted a sorry crowd. The censures hurled at the committee, and the innuendos amounting almost to charges of graft, are but samples of the lengths to which petty people actuated by jealousy, and pettifogging partizan politicians, impelled by spleen, will go.

It has been hinted that the committee did the square thing neither by the imperial government nor by the Canadian manufacturers. This betrays how much certain newspapers and some people do not know. Had the members collectively had itching palms then, today individually they might have been millionaires. A strong assertion, you say. Yes, and I am prepared to repeat it. When the imperial government asked the shell committee if Canada could supply a given number of shells, the committee answered "yes" and named a price. The reply

flashed back was, in substance, "Go ahead." The committee not only did so but, finding that they could be produced at a less price than the imperial authorities agreed to pay, gave them the benefit of the lessened price—due to the committee's activities. "There is little in that," so many say. Is there indeed? Supposing the contract, having been duly entered into, and the committee found the shells cost more than the contract price, would the imperial authorities have paid, without demur, the extra cost? I make no answer. The committee supplied to the imperial authorities, up to the time of dissolution, shells at twelve to fifteen million dollars less price than had been mutually agreed upon, and that is not all. I believe that had it not been for the shell committee and especially the diffusive optimism of that big Nova Scotian, Colonel Cantley, the larger portion of the order for shells which came to Canada would have gone to the United States. I believe I am in a position to say, notwithstanding the assertions of a contrary nature, that the price charged by and given to Canadian makers of shells is very much less than given to makers across the line, and in some instances less than paid British makers.

If we take the saving effected by the making of shells in Canada, instead of in the United States, and add to it the sum already stated, as saved by the committee in another direction, we may place the entire saving to the imperial authorities at all the way from thirty-five to fifty millions of dollars, and even that is not all that Britain owes Canada's shell committee, and General Sir Sam Hughes who brought it into being.

To the Canadian shell committee, I make bold to say, Lloyd George is indebted for the ground work of the system adopted by him in the building up of the munitions department, none accomplishing so great and so needful a work in Britain.

Women are coming to the front in Britain these days, surely. Recommendations are made by the British Munitions Labour Supply Committee that women aged eighteen and over shall be paid £1 a week for work in engineering establishments, that women who do work customarily done by fully-skilled workmen shall be paid the men's time rates and receive same overtime, night shift, Sunday and holiday allowances, and that the men's conditions shall apply in the case of women doing piece-work or working on the premium bonus system.

Mr. Arthur Henderson, President of the Board of Education, speaking at Covent Garden, said that in the early part of next summer this country would be in a position that nobody, even twelve months ago, would ever have thought we were likely to be in. So far as munitions of war, the armies we were able to place in the field, and officers, were concerned, by then we should be in such a position to achieve that satisfactory result which all desired to see. But we could achieve this result only by maintaining the spirit of unity and hopefulness which would keep us free from pessimism.



## Synopsis of Coal Mines Regulations.

**C**OAL mining rights of the Dominion, in Manitoba, Saskatchewan and Alberta, the Yukon Territory, the North-West Territories and in a portion of the province of British Columbia, may be leased for a term of twenty-one years, renewal for a further term of 21 years at an annual rental of \$1 an acre. Not more than 2500 acres will be leased to one applicant.

Application for a lease must be made by the applicant in person to the Agent or Sub-Agent of the district in which the rights applied for are situated.

In surveyed territory the land must be described by sections, or legal sub-divisions of sections, and in unsurveyed territory, the tract applied for shall be staked out by the applicant himself.

Each application must be accompanied by a fee of \$5 which will be refunded if the rights applied for are not available, but not otherwise. A royalty shall be paid on the merchantable output of the mine at the rate of five cents per ton.

The person operating the mine shall furnish the Agent with sworn returns accounting for the full quantity of merchantable coal mined and pay the royalty thereon. If the coal mining rights are not being operated, such returns should be furnished at least once a year.

The lease will include the coal mining rights only, rescinded by Chap. 27 of 4-5 George V. assented to 12th June, 1914.

For full information application should be made to the Secretary of the Department of the Interior, Ottawa, or to any Agent or Sub-Agent of Dominion Lands.

W. W. CORY,

Deputy Minister of the Interior,

N. B.—Unauthorized publication of this advertisement will not be paid for.—83875.

## A. & W. MacKINLAY

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Rule and Print Special Blank Forms for Mining and other Industrial Corporations. BLANK BOOKS ruled to pattern and made in any Style of BINDING.

Loose leaf supplies of all kinds made to order.

135 to 137 GRANVILLE STREET.

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## 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

## MAKE US ECONOMISE!

"Don't come to us when it is too late and say, 'We can't go on. You've spent all your money on free libraries and parks and gramophones and beer and chocolate and furs. There isn't enough left to carry on the war.'"—Daily Express.

## TURKS' BAGS OF GOLD.

"A soldier at Bart's Hospital just back from the Dardanelles says that the Turks carry their money about with them in little bags, and that when captured the first thing they do is to offer this little bag of gold as a good will gift."—Weekly Dispatch.

## FOR SALE.

250 H. P. Electric Endless Rope Haulage Engine, the last word in this type of haulage gear.

A. C. three phase, 60 cycle 2200 volts, slip ring motor with reversing controller, etc.

Bull wheel, 9 feet in diameter, with brake, etc.

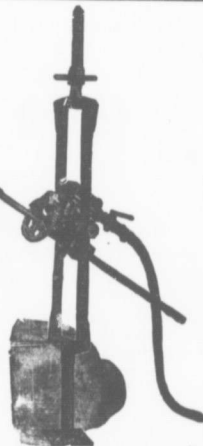
Double reduction gearing: 1st. set machine cut helical teeth, second set plain moulded.

Bed Plates of steel joists, suitable for surface or underground installation.

This Engine was never erected and is in the original shipping cases.

MARITIME COAL, RY. & POWER CO., Limited.  
Joggins Mines, N. S.

Tornado  
Air  
Power  
Coal  
Drills.



These Drills are extensively used in the Collieries of the Dominion Coal Co. and play an important part in its 5,000,000 tons yearly production

HERZLER & HENNINGER MACHINE WORKS,  
(Incorporated.)

BELLEVILLE, ILL., U. S. A.





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

**COAL.** Mining rights may be leased for twenty-one years, renewable at an annual rental of \$1 an acre. Not more than 2,500 acres can be leased to any one applicant. Royalty five cents per ton. In unsurveyed territory the tract must be staked out by the applicant in person, and personal application to the Agent or sub-Agent of Dominion Lands for the district, must in all cases be made, and the rental for the first year must be paid to the Agent within thirty days after filing application.

**QUARTZ.**—A person eighteen years of age and over, having made a discovery may locate a claim 150 feet by 150 feet. Fee \$5. At least \$100 must be expended on the claim each year, or paid to the Mining Recorder. When \$20,000 has been expended or paid and other requirements complied with, the claim may be purchased at \$1 an acre.

**PLACER MINING CLAIMS** are 500 feet long and from 1,000 to 2,000 feet wide. Entry fee \$5. Not less than \$100 must be expended in development work each year.

**DREDGING.**—Two leases of five miles each of a river may be issued to one applicant for a term of 20 years. Rental, \$10 a mile per annum. Royalty 25 per cent, after the output exceeds \$10,000.

W. W. CORY,

Deputy of the Minister of the Interior.

N. B.—Unauthorized publication of this advertisement will not be paid for.—44-9-13

### "VICTOR 200" 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.

# J. W. CUMMING, & SON, Limited.

We manufacture a complete line of Tools for the Coal Mine,  
the Plaster Mine and the Lumberman.

Wood or Steel let CUMMING'S make it.

#### OUR PRODUCTS :

Coal Boring Machines.	Steel Pit Hames.	Frogs.
Stone Boring Machines.	Screens.	Spikes.
Ratchet Boring Machines.	Light and Heavy Forgings.	Bolts.
Breast Augers.]	CASTINGS.	Mine Cars.
Tamp Bars.	Track Tools.	Surface Cars.
Spike Bars.	Bark Peelers.	Dump Cars.
Machine Picks.	Road Makers Axes and	Car Irons.
Picks.	Chisels.	Draw Bars.
Needles.	Rope Swivels and Cones.	Hitchings.
Stemmers.	Steel Rails.	

All Our Tools are built on practicable lines, and guaranteed to give satisfaction.

Home Office: **NEW GLASGOW, N. S.**  
Branch Office and Warehouse, Leithbridge, Alta.

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BOILER INSPECTION & INSURANCE CO.  
OF CANADA.**

(COMMENCED BUSINESS 1875.)

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**Thirty-Nine Years Experience in the Business of STEAM BOILER INSPECTION.**

THE ONLY COMPANY IN CANADA

MAKING AN EXCLUSIVE SPECIALTY OF THE INSPECTION OF STEAM BOILERS.

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**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.

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Contractors to Admiralty and War Office, also Colonial Governments.

# ALLAN, WHYTE & C'O'Y

**Clyde Patent Wire Rope Works,**

Cablegrams.  
"Ropery Rutherglen" **Rutherglen, Glasgow, Scotland.** Cables, Western Union,  
A. I. C. (Cable & Telegraph)  
A. I. L. L. (Cable and Private).

**Wire Ropes** for **Winding & Haulage**  
in  
**Collieries and Mines.**  
**Aerial Ropeways, Suspension Bridges, etc. Specially**  
**flexible for Ore & Coal Discharging Cranes, Winches, etc.**

The use of SPECIAL GRADES of Wire, drawn to our own specifications and rigorously TESTED before use, keeps our Ropes ahead in QUALITY of any others. We are regularly supplying the LARGEST USERS in the Maritime Provinces, to any of whom we willingly refer enquirers.

Agents in Nova Scotia:—Wm. Stairs, Son and Morrow, Limited.

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

—Different Sizes and Qualities kept in Stock—

## Concerning the 'Record'

The first Number of the 'Trades Journal' was issued the first Wednesday of 1880. The 'Journal', while taking a deep interest in the Coal Trade, was more particularly interested in matters affecting the welfare of those employed in the coal mines of the Province. Its aim was to secure for these better working conditions, and to give them the standing in the community to which, it thought, they were entitled. That much good was accomplished along these and kindred lines is acknowledged by all able to make comparison between conditions as they existed in 1880 and as they exist now.

In 1898 the name was changed to the **Maritime Mining Record**, in order to express more distinctly the place it was intended to occupy. Since then, till now, its pages have been devoted chiefly to coal mining, which is the staple industry in Nova Scotia. With the growth of the trade it has grown in influence, and is now considered the one reliable authority on all matters connected with the coal trade.

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

# BRIDGES

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

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

# MARITIME MINING RECORD

ISSUED ON SECOND AND FOURTH WEDNESDAY MONTHLY.



The organ of the rapidly expanding Coal Trade of the Maritime Provinces

It covers the entire field, and that adequately.

There is no better medium in the Dominion for "Supply" men whether they be makers of Fans, Pumps, Engines, Boilers Wire Ropes, or, in short, of any kind of Mining Machinery needed for the extraction and preparation of minerals, or if they be producers or agents for the numerous articles that enter into consumption at the collieries.



The Record is always consulted on all subjects, and its advertising columns are carefully scanned by Directors, Managers, and Purchasing agents.

**Advertising Rates are Moderate**

AND FORWARDED ON APPLICATION.

Every Coal Company of any standing is a patron of **The Record**.

# 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  
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**HEAVY FORGINGS**

**HAMMERED SHAFTS**

NOTHING REQUIRED IN CANADA TOO LARGE FOR US. . .

**Steam and Electric Car Axles**

**Fish Plates and other Railway Materials—**

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

**Scotia Pig Iron for Foundry Use.**

Also MINERS and SHIPPERS of

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**COAL**

SHIPPING PORT  
NORTH SYDNEY.

**An Unsurpassed Evaporating Coal**

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

Unrivalled Facilities for Bunkering at **North Sydney.**

*The Best House Coal.*

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QUICK DISPATCH LOADING—BEST RESULTS STEAMING!

Two points that always appeal to Shipowners.

—SAILING VESSELS LOADED PROMPTLY.—

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**Head Office, New Glasgow, N.S.**