

personal earth for paving blocks 14,
E. R. Faubault,
Geological Survey
coal in N.S.

MARITIME MINING RECORD.

APRIL 10, 1918

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
Emery, '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,

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SYDNEY, N. S.

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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.

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For Prices and all Information, address General Offices,

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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.

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Quality.

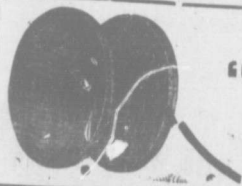
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Better than
Scotch seconds for
Ladle lining etc.

SHIPMENTS BY RAIL OR WATER.

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Get the "Safety" Habit

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"DOMINION" WIRE ROPE.

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The DOMINION WIRE ROPE CO., Limited,
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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, General Manager.

INVERNESS RY. & COAL CO'Y.

Time Table No. 35. Taking effect
12.01 June 10th., 1917.

SOUTHBOUND Superior Dir.	STATIONS.	NORTHBOUND Inferior Dir.
436		437
A. M.		P. M.
10:40	POINT TUPPER.	3:41
10:55	INVERNESS RY. COY.	3:45
10:59	PORT HASTINGS	3:50
10:12	PORT HASTINGS	4:00
10:07	TROY.	4:06
9:57	CARONISH	4:30
9:44	CRAIGMOLE	4:35
9:27	JUDITH	4:6
9:18	MARYVILLE	5:00
9:15		5:15
8:40	PORT HOOD	5:25
8:30	GLENCOE	5:30
7:51	MABOU	5:40
7:40	GLENDYRE	6:11
7:25	BLACK RIVER	6:20
7:12	STRATHLIN	6:41
6:55	INVERNESS	6:50
A. M.		P. M.

MARITIME COAL. RAILWAY, & POWER CO.

Miners and shippers of

CHIGNECTO
—AND—
JOGGINS.

High Grade
STEAM
AND
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

Sunday, January 6th., 1918.

HALIFAX and MONTREAL OCEAN LIMITED

DAILY EXCEPT SUNDAY.

Dep. Halifax	7,45 a. m.
Arr. Montreal	10,15 a. m. following day.
Dep. Montreal	6,40 p. m.
Arr. Halifax	11,40 p. m. following day.

Maritime Express.

DAILY

Used by Collieries in Lancashire, Staffordshire & Yorkshire

'XTERRA' COLLIERY LAMP OIL
For Marsaut, Mossels, Deflectors or Closed Lamp;
E. WOLASTON, Datton St. **MANCHESTER**
Sole Representatives for Canada, **AUSTEN BROS.**
Limited, Halifax, N. S.

Dep. Halifax	3,00 p. m.
Arr. Montreal	7,40 p. m. following day.
Dep. Montreal	9,25 a. m.
Arr. Halifax	4,00 p. m. following day.

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.
Brest 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.

Concerning the 'Record'

The first Number of the 'Trades Journal' was issued the first Wednesday of 1850. 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.

MARITIME MINING RECORD

Vol. 20

Stellarton, N. S., April 10th., 1918

No 19.

ERECTION OF THE QUEBEC BRIDGE

The project of building a bridge over the St. Lawrence River at Quebec first assumed definite form in 1898, when tenders were called for on specifications issued by the Quebec Bridge & Railway Company, which finally resulted in awarding the contract to M. P. Davis & Sons for the substructure, and to the Phoenix Bridge Company for the superstructure. On August 19, 1907, the entire superstructure which had been erected on the south side collapsed, involving the complete abandonment of the enterprise.

In August, 1908, the Dominion Government appointed a board of engineers to prepare plans and specifications of a new bridge. This board was composed of Mr. H. E. Vautelet, Mem. Can. Soc. C. E., chairman; Mr. Fitzmaurice, C. M. C., of London, England, and Mr. Ralph Modjeski, Mem. Am. Soc. C. E. This board, toward the end of 1909, developed what was known as the "official design" and tenders were called for its construction, the tenderers being given the privilege of submitting their own designs if they so desired.

Four tenders were received, and eventually the design and tender of the St. Lawrence Bridge Company, an amalgamation of the Dominion Bridge Company and the Canadian Bridge Company, were accepted.

A prominent clause of the contract was as follows: "The contractor will be required to guarantee the satisfactory erection and completion of the bridge, and it is to be expressly understood that he undertakes the entire responsibility not only for the materials and construction of the bridge, but also for the design, calculations, plans and specifications and for the sufficiency of the bridge for the loads therein specified, and the enforcement of any part or all parts of the specifications shall not in any way relieve the contractor from such responsibility."

The bridging company immediately began to organize to carry out the work, and built a shop to fabricate the structure amounting to 66,000 tons of steel for the bridge and 10,000 tons for shop and erection purposes. This plant represented an outlay of \$1,300,000 and included cranes of 190 tons capacity and many machines of unusual type. At the same time that the drawings for the bridge were being made the method of erection was being developed in detail, as it was necessary to know how every member was to be handled in the field before the drawings could be completed. Drawings were also made for shipping many of the larger members, and special cars built to carry them. Four different methods of erecting the suspended span were considered: First, it could be cantilevered out to the centre; second, build a light structure to be floated in and raised to position and used as a staging to erect the span on; third, to float it in a high

enough position to connect it to the cantilevers, letting the supporting barges float out as the tide subsided, and lastly, the method used of erecting it on a low staging, floating it on barges to the site and raising it to its final position with specially designed tackle.

The traveller used in erection was of original type. It has four tackles of 60 tons capacity mounted on electric cranes which travelled on top and were high enough to place the highest and heaviest members. It had four 1-ton tackles on four booms on each corner, eight 5-ton tackles mounted on galleys which were placed on the top of the electric cranes and an elevator of 3 tons capacity for going to the top. The whole was electrically operated, controlled from a deck immediately over the railway tracks, enabling the operator to see what was being done at all times.

The staging of the anchor arm was entirely of steel and built on separate foundations. During the season of 1915, the two anchor arms were completed and preparations were made for the erection of the suspended span which was fabricated at Sillery, and in the meantime six steel scows, manufactured at Sorel, arrived on the site, and everything was ready with the lifting apparatus in place on the cantilevers, scows in place under the span, for the operation of lifting the huge span into place on September 11th, 1916. The place selected for the erection of the centre span was a comparatively level place near Sillery. The site was so situated that there was no water under the span at low tide, and 15 feet under it at high tide. The scows had valves fitted to the bottom and when the tide rose the span was lifted from its supports and towed into the stream and to the bridge site. Six lifts had been taken and the critical stage of the operation considered past, when there was a loud report at the southeast corner which suddenly dropped from its support and the whole span was precipitated into the river.

On the same day the St. Lawrence Bridge Company announced that they would take immediate steps to replace the span and that they proposed using the same method over again, and in spite of the difficulties encountered were ready to begin erection on the anniversary of the day it was begun in 1916. On September 20, 1917, the last lift was made and the last coupling made, and on October 17 the first locomotive and cars passed over the bridge.

Mrs. Nuritch—Yes, we were going to leave our flat for the summer and take a bungalow at Benton Beach.

Mr. Kawler—What stopped you?

Mrs. Nuritch—We discovered at the last minute that the bungalow had no elevator in it—just fancy!—Boston Transcript.

MARITIME MINING RECORD.

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

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

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

Subscription \$1.00 a Year. — Single copies 5 cents

R. DRUMMOND, PUBLISHER.

STELLARTON, N. S.

April 10, 1918

GOVERNMENT OWNERSHIP.

Referring to the fuel situation the Port Hood Greetings has an article from which we make the following extract. Perhaps in asking that the federal government acquire the Mines, and Coal areas, as well as the Inverness Railway, Greetings is asking more than the government will be willing to concede. To buy all the Mines and Areas from Port Hood to Chimney Corner, would involve the expenditure of a very large sum of money. In the event of the federal government acquiring the Mines, the Record presumes the payment of royalty would be made to the local government, and that the Mines would still be subject to the Coal Mines Regulation Act, and would have to be worked as the Department of Mines directed. The Record is not sure whether the federal Government would have rights not now possessed by the operators of our Coal Mines. We think, with Greetings, that the present railway should be acquired and extended to Chimney Corner.

Coming right home, touching this vital issue, we beg to point out to the powers that be, that the Inverness Railway and Coal Company's line—sixty two miles in length,—is now a feeder to, and connects with, the Canadian Government Railways, at Point Tupper, that it taps the Coal Mines at Port Hood, Mabou and Inverness, and is within a few miles of large deposits of Coal at St. Rose, to which point this railway can be easily extended, that all the coal areas in question contain immense deposits of coal, and are practically in their virgin state. That under the very grave conditions relative the shortage of fuel supply, present and prospective, the acquiring of the railway above referred to and the coal mines adjacent thereto by the Government of the Dominion, will be in the public interest and the outlet therefor amply justified.

CORONERS AND MINING FATALITIES INQUEST.

The assurance is given that in due time there shall be resping if there be no fainting. And it is true at least at times, if one keeps pegging away, he may be gratified with the results. The Record has for a long time expressed dissatisfaction with the manner in which Coroner's inquests into mining fatalities have been conducted, and has advocated a drastic change. The bill introduced into the House

of Assembly consolidating the Coal Mines Regulation Act, contains a lengthy amendment which must be satisfactory to all who desire that a thorough investigation should follow every mining fatality. Were the Record to follow the course of some well known newspapers it might claim some credit for the introduction of the amendment. We are content to say that the similarity of the views of the Commissioner of Mines and the Record, is a move of gratifying coincidence. There is no necessity for restating the reasons why the old mode of holding inquiries was unsatisfactory, beyond saying that inquests on the whole, were very disappointing in failing to make plain why the accident occurred, and in placing the responsibility for its occurrence. It is possible that there may be minor changes made in one or two sections of the amendment. These effected and the Record will be entirely satisfied that the change from Coroners to Special Examiners will meet with general approval. The proposed amendment reads:—

Special Examiners To Replace Coroners.

50. Where any accident occurs in any mine from any cause resulting in the loss of life, no Coroner of the County in which the accident occurs, shall hold an inquest touching the death of such person, but the following provisions shall have effect:—

(1) The Governor-in-Council shall appoint in each of the districts into which the Province is divided for the purpose of holding examinations for Certificates of Competency under this Act, one or more competent persons to be called Special Examiners, who shall have all the powers and privileges of Commissioners appointed under the provisions of Chapter 12, Revised Statutes, 1900, "Of Enquiries Concerning Public Matters," and all the powers and privileges of the Inspector under the provisions of Section 49 of this Act, as well as all the powers and privileges of a Coroner, except as in this Act otherwise provided.

(2) Such Special Examiners shall hold office during pleasure.

(3) The Commissioner may appoint any person or persons possessing special knowledge to act with said Special Examiner in holding any enquiry.

(4) Such Special Examiners shall make enquiry and report respecting the death of each person, separately, or may make one report upon the cause of the death of all such persons, and shall at such enquiry report as to whether such accident was or was not preventable, as to whether any neglect either caused or contributed to the explosion or accident, and as to whether there was any defect in or about the mine, or the modes of working said mine, or in the observance of this Act or any General or Special Rules and shall send to the Inspector a copy of his findings in these respects.

(5) If, upon such enquiry, the Special Examiner is of the opinion that death was caused by explosion or accident and resulted from culpable negligence or that there is reasonable ground for suspecting the same, he shall forthwith file a copy of his report with the Clerk of the Crown for the County in which the accident occurred, and transmit a copy thereof to the Attorney General, together with a notice stating that in his opinion it is ex-

pedient that a further enquiry shall be held, respecting the cause of such accident.

(6.) When such Special Examiner holds an enquiry on the body of any person whose death has been caused by an explosion or accident, of which notice is required by this Act to be given to the Commissioner and Deputy Inspector, he shall immediately notify the Deputy Inspector for the district, of his intention to hold such enquiry and fix a time and place therefor. Where the Deputy Inspector is unable to attend such enquiry at the time fixed, the Special Examiner shall adjourn such enquiry whenever practicable to enable the Inspector, Deputy Inspector or some other properly qualified person appointed by the Commissioner to be present at the enquiry.

(7.) The Special Examiner, at least four days before holding the adjourned enquiry, shall send to the Commissioner or to the Deputy Inspector for the district, notice in writing of the time and place of holding such adjourned enquiry.

(8.) The Inspector, Deputy Inspector, or such other person so appointed or a person appointed by the workmen of the mine at which the accident occurred, shall be at liberty at any such enquiry to examine any witnesses, subject nevertheless to the order of the Special Examiner.

(9.) Such Special Examiners appointed under the provisions of this Section shall be paid for every enquiry into the cause of any accident in any mine resulting in death, the sum of \$———

(10.) Except as is otherwise provided, all fees, remuneration and expenses incurred by the said Special Examiner in connection with any enquiry and report shall be paid out of the Provincial Treasury.

(11.) Such Special Examiners for the purpose of making an enquiry shall have the power to summon any witnesses who may be able to give expert testimony as to the cause of the accident or as to whether there was any defect in or about the mine in which the accident occurred. The Special Examiner may fix a special fee to be paid such expert witnesses.

(12.) Every person who fails to comply with the provisions of this Section shall be guilty of an offence against this Act.

By order in council of 20th March, the Minister of Trade and Commerce issues new orders with reference to the importation, production and distribution of fuel. The following form parts of the new order:

Provincial.

(2) The Government of each of the Provinces of Canada may appoint a Provincial Fuel Administrator or Board of Administrators for such province and may create such central provincial organization as may be deemed necessary. Any expense so incurred shall be borne by each Province.

(3) The duties of Fuel Administrators shall be:—

(a) To supervise the distribution of all coal and other fuel imported into or made available within such Province.

(e) To promote within the Province the great-

est development of any coal areas available.

(f) Generally to assist and advise the Fuel Controller for Canada in the discharge of his duties and to enforce any regulations that may from time to time be prescribed by him.

Municipal.

(4) The Council of any municipality may appoint a Local Fuel Commissioner or Board of Fuel Commissioners with such organization as may be deemed necessary. Any expenses so incurred shall be borne by the municipality.

(5) On the petition of two-thirds of the dealers in any municipality addressed to the Fuel Administrator preferring complaint against any Fuel Commission, the said Fuel Administrator shall forthwith cause an investigation to be made into the said complaint and if sufficient cause be shown, may call upon the municipality to remove such officer.

(6) The duties of Fuel Commissioners shall be:—

(a) To co-ordinate the work of fuel dealers in apportioning and delivering coal during any period of fuel scarcity within such municipality.

(b) To institute when deemed necessary a system of controlling retail coal deliveries through orders on dealers within the municipality issued by the Fuel Commissioner.

(c) Generally to assist the Fuel Administrator in enforcing such regulations as may from time to time be made by the Fuel Controller for Canada.

In towns where there are no coal dealers, such as Glace Bay, Stellarton, Louisburg, etc., a special commissioner will likely be appointed, and this official will have power as to the supply to which the several dealers in districts outside of the localities where there are Coal Mines, are entitled. Just how the Provincial Board of Administration is to promote the development of coal areas is not known. Will the Board be in a position to advance the necessary capital to a person or persons desirous of opening a mine on an unworked area?

"Rubs by Rambler."

The Fuel Controller, Mr. McGrath, is to be commended for his willingness to be advised. It was suggested to him that the first great duty was to get the coal, and afterwards to arrange as to prices. It was told him that the prices offered by the C. G. R. was insufficient to incite the operators to enthusiasm. The Railway people are not to have it all their own way. They are not to be more favored than the ordinary consumer, but must pay the same price demanded of him. The Controller has sanctioned, or rather has fixed the price of coal at an advance of \$1.60 from prices prevailing till March. There has been loud screaming against the increase in price, but it had to come. It is most inconsistent for those newspapers, which have been demanding increased wages for mine workers, to make outcry against increased price of coal.

Every increase in wages, every increased cost

of materials, every assessment for Compensation Act, every additional cost entailed upon the carrying out of new laws, such as weekly pays, etc., etc., must come out of the pockets of the consumers, and the sooner they and the press realize this the better. The increase allowed by Mr. McGrath, it is declared, is far too great. How do those who make the assertion know? They cannot tell. Mr. McGrath can. Before arranging for increase in price, he had a thorough and independent audit made of the coal companies books, and that investigation revealed the fact that the companies were losing by selling at the price formerly fixed. Of course the smaller companies, who have shallow mines, will be great gainers, if they take advantage of the new maximum price.

* * * * *

The member for North Cape Breton and Victoria has been telling the federal parliament its duty in respect to coal production. According to a despatch from Ottawa, to a Halifax paper, he advised the government to deal directly with the men who produced the coal. I wonder what he meant? In asking that more coal be produced are the operators to be overlooked, completely ignored? This is a new phase of the vexed subject, and the newspapers will please take notice and govern themselves accordingly. If there is a scarcity of coal in any district let them instead of censuring the officials, demand of the men why the production is not greater. If the men say they are working to their limit, and acknowledge that all the coal they cut is being taken from them, then the censor must get to work and procure more labor. D. D. is right in saying that Nova Scotia has magnificent deposits of coal, which could be converted into coke, and briquettes. Coal is now being converted into coke, but there is no reason that it should be converted into briquettes. These only are made from unsaleable coal, that is, from coal for which there is no sufficient demand. Slack coal. It would be a foolish thing to make briquettes so long as slack coal can all readily be disposed of either by itself or incorporated in run of mine. But is not D. D., a "little" off when he declares that N. S. Coal can be converted into electricity. That is something new, and should open the eyes of Nova Scotians; to the fact that the province has a coal, the like of which has not yet been discovered in any part of the globe. We know provincial coal can be employed in the production of electricity; until now few were aware it could produce the genuine article. D. D. exaggerates a little in saying the coal supply is inexhaustible. That cannot be said of any County producing coal. Mr. Bob Butts, D. D.'s South C. B. neighbor, could not understand what members meant in talking of a coal scarcity. He asked members to explain the reason for the closing of a number of mines in N. S., in recent years? The explanation is so simple that no member explained. In the past three and a half years, mines have not been closed, indeed a number of new mines have been opened. When the mines were closed down, there was not the present active demand for coal. Indeed there was difficulty in making sales, and there was labor shortage.

THE AMENDING AND CONSOLIDATING OF THE COAL MINES REGULATION ACT.

Below will be found some of the amendments in the bill to consolidate the C. M. R. Act introduced into the House of Assembly by the Hon. Commissioner of Mines. The interpretations would take up unnecessary space. They are now given in alphabetical progression instead of in regular sequence of position from Manager down. After Agent, the highest official comes boy. If the Merchant Shipping Act has interpretations, then Cabin Boy will come first and the Captain come next, wedged in between him and the cook. Interpretations in the British Columbia Act are given in Alphabetical order, but then in that Act there are interpretations we never heard of, and dont want to hear of, in Nova Scotia. We give one or two of the new interpretations.

(c) "Colliery" means a mine, and includes two or more adjacent mines under the same control and ownership.

This interpretation is either unnecessary or it means something contrary to the act of 1913. This interpretation ought to be struck out. The word Colliery is not used in the largest coal producing country in the world. Look at an unabridged dictionary for the meaning of the word.

(k). "Mine Examiner" means a person appointed to inspect the working places of a mine and approaches thereto, the air ways, road ways and other accessible parts of a mine; and to see that such are safe before a shift is allowed to enter such workings or other parts of the mine; and to examine as to the safety of using and to supervise the use of the explosives used in breaking coal, and who is possessed of a Certificate of Competency as such, issued under this Act.

Managers.

(3). Subject to the next succeeding subsection if any mine is worked without there being such a manager for the mine as is required by the following sub-sections, the owner and agent shall be guilty of an offence against this Act.

(4). Where the person appointed to be manager of a mine by reason of death, resignation or otherwise ceases to be manager, the mine may be worked for a period not exceeding fourteen days, until a new manager is appointed, if in the meantime a competent person holding a certificate as manager or underground manager under this Act is temporarily appointed to perform the duties and exercise the powers of a manager.

6. (1) In every mine required to be under the control of a manager, daily personal supervision shall be exercised by the manager, and, where an underground manager has been appointed by the owner or agent of the mine, also by that underground manager.

(2) In cases where, on account of the absence of the manager or underground manager on leave or from sickness or any other temporary cause, such daily personal supervision as is required by this section cannot be exercised, arrangements shall be made for the duties of the manager or underground

C. continued on page 11.

AROUND THE COLLIERIES

On his last visit to Halifax, Fuel Controller McGrath got along very well without the promptings of the President of the T. & L. C.

The coal heaps at the collieries this winter are very small and nothing like they used to be. Small as they are they show that the winter time in Cape Breton will always bring banking conditions to the larger mines.

Chignecto, which was a deserted village for many years, has once more sprang into active life. It is said that the population is now five hundred and that the village is no longer one of rambling huts, but of modern habitations.

There has been considerable grumbling around the Cape Breton collieries over the numerous collections taken at the offices of the different coal companies, caused by the cessation of the relief funds. Good institutions are seldom appreciated until they are out of business. Then and then only are their better parts noted and lamented, because gone.

It is reported that pressure may be brought to bear upon the Dominion Coal Co., to either lease to those agreeing to develop, or to work on its own account, one or more of the areas held by the Company to the south of Springhill. At the present time many have a desire to possess themselves of coal areas. If a Company having several areas is forced to lease, then a stipulation should be that there will be a stated production when normal times come round.

The Dominion Coal Company recognizing the advantages of electricity over steam and other motive powers, and with a view to greater conservation of coal, have a big programme of installation of electricity on for the summer months. A central electric power station is to be built near to the railway station, New Waterford. From this center, branch lines will be run to the different points where the electric juice is required. This will ensure better service and will help to overcome much of the difficulty of electric breakdown encountered this winter.

T. H. Harrington, et al., have secured the "areas" from the Sydney Coal Coy., near North Sydney. The area, while two and a half miles long, is not deep, only some 400 feet. If the promoters have money, and believe there will be a big demand for coal for two or three years, they could make a fine thing of it by driving a level the full length of the area, and then retreat, taking every part of the coal with them. There is no overlying seam. T. J. Brown is consulting engineer, at least, so it is declared. Names beginning with B., are becoming famous as money, as well as coal getters.

It is claimed that the Joggins has now a population of two thousand people, and that soon a movement will be made to have the town incorporated. Much of the progress of the town, in many directions of late, is due to the progressive policy of the Maritime Coal Ry. and Power Co.

With nearly all the men of influence working to increase the coal output, it shows but a very tardy response to the efforts made. However, as the amount of labor increases there should be a very noted improvement. Already quite a number of men have been brought in.

The rope of the new haulage system of Dom. No. 2 and No. 9, has been put on, and a trial made with good results. The compressed air locomotives will now be discarded. This will give a better supply of air power for the coal cutting machines in these two collieries.

Branch electric lines are to be run from Dom. No. 2, to the new shaft to be put down for the men of Dom. No. 1, and also to Dom. No. 6. It would not surprise some of us to see the Sydney and Louisbourg electrically equipped before long. The electric motor has a tremendous advantage over the steam locomotive especially in the winter time.

And yet there are unsettled questions around some of the coal mines of the province. Sydney Mines and other parts have shown a great deal of patience and have waited long but they are beginning to say things. It is to be hoped, however, that they will not now spoil a good name by doing anything rash.

Premier Murray is not going to allow the Federal Government to have exclusive use of the persuasive tongue of Mr. J. C. Watters. The premier, it is alleged, sent Watters down to Cape Breton in an effort to keep the Steel Workers of the two Sydneys from doing anything rash. The Minister of Labor may feel a trifle out at this encroachment on what in the past was considered a wholly federal right and privilege.

The many old friends of Mr. C. A. Meisener, of 45 Lemox St., Brooklyn, formerly of Londonderry and Sydney, N. S., will be interested in knowing that his three sons are doing their bit. The Record has no doubt that the three boys will do valiantly for their country and do credit to their parents. Clarence Edward, has enlisted in the 27th Engineers, and is now a member of Company C, in training at Camp Meade, Admiral, Md. He is a graduate of the Brooklyn Polytechnic Institute, and in 1914 graduated from Columbia University as a Mining Engineer. While there, he was Chairman of

the Student Board and Manager of the Track Team. He was employed by the Inspiration Consolidated Copper Company, of Miami, Arizona, and became a mine foreman. He is a member of the Sons of the Revolution and of Phi Kappa Psi Fraternity. He has two brothers in the Army in France: Harold C., who left for the front in June, 1917, and is with the Ambulance Corps, and James A., who left for the front in July, 1917, has finished his training as aviator, and has been awarded his commission as 1st Lieutenant.

The Record was grieved to receive a few days ago intelligence of the death of our old friend, Frank Burrows, and this will be painful news to very many in Cumberland, Pictou, Annapolis and other Counties in the province. Our acquaintance with Frank began long years ago in the misty past, and the friendship began then has been continued unbroken. Frank held many important positions in several mining districts, and also was manager at Torbrook shortly before iron mining in that region ceased. Wherever his bent or his duty led him, Mr. Burrows was highly esteemed. It is common now-a-days to use extravagant language in speaking of the dead. The Record is content to say that we always liked Frank, and the longer we knew him the better we liked him.

The deceased left the office of the Nova Scotia Steel and Coal Co., Wabana, at ten minutes to twelve on the 2nd March. His nose was bleeding slightly when he left, and after arriving at the house it became worse. When the Doctor arrived he said it was a Cerebral Hemorrhage and serious. He became unconscious at twenty five after twelve and passed away in that condition at 5 p.m. Good-bye, Frank, till we meet again.

Under an arrangement with the Hon. C. C. Ballantyne, Minister of Marine, the Dominion Iron & Steel Corporation will construct a plant at Sydney, Cape Breton, for the rolling of steel plates for shipbuilding purposes. The plant will be ready in about 15 months. The company will receive Government orders, and will also be open to execute ordinary commercial orders. The arrangement is part of the Government's programme to meet the world-wide shortage in vessels and to assist the Canadian shipbuilding industry. The contract with the Government calls for 250,000 tons of ships' plates, over a period of five years, with a minimum of 50,000 tons a year. The cost of the mill is estimated at five million dollars.

Large piles of coal in storage are often in serious danger of spontaneous combustion. The height, to prevent this, should never be more than 20 ft. and sometimes not more than 12 ft. Care should be taken to limit the horizontal area of the piles in order to make them accessible for inspection and segregation to provide for their proper draining, and to avoid the storage in them of different kinds of coal, and coal containing large percentages of sulphur. The piles should be ventilated with horizontal flues through the lower parts and should periodically be sounded for temperature.

Continued from page 9.
manager, as the case may be, in respect of daily supervision being performed.

(a) in the absence of the manager, by the underground manager, appointed in writing by the owner or agent;

(b) in the absence of the underground manager in the case of a mine for which a separate underground manager is required by this Act to be appointed, by a person not under the age of twenty-five years and holding a certificate as an overman, under this Act; and any person performing the duties of a manager or underground manager whether under this Act or under the last preceding section, shall have the same responsibility and shall be subject to the same liability as the person whose duties he is performing.

(3) If in any mine there is a contravention of, or non-compliance with the provisions of this section, the mine shall be deemed to be not managed in conformity with this Act.

Certificates of Competency.

7. There shall be the following descriptions of certificates of Competency under this Act, that is to say:—

1. Manager.
2. Underground Manager.
5. First, Second and Third Class Stationary Engineers.

8. (1) For the purpose of ascertaining the fitness of applicants and recommending the granting of Certificates of Competency under this Act, the Commissioner shall appoint a Board of Examiners consisting of:—

- (a) the Inspector of Mines;
- (b) two Mine Managers,
- (c) two experienced Coal Miners
- (d) two Mechanical Engineers holding First

Class Certificates of Competency.

(2) The members of said Board shall hold office during the pleasure of the Commissioner.

(3) The procedure of the Board shall be in accordance with regulations made by the Board, subject to the approval of the Commissioner.

(4) The Board shall, at such intervals as the Commissioner determines, make to him a report of its proceedings and such other matters as may be required by the Commissioners.

10. (2) The Board shall, subject to the approval of the Commissioner, make regulations for the qualifications of applicants for Certificates of Competency under this Act. Such regulations shall amongst other things provide:—

(a) If a candidate for manager, underground manager or overman, that the applicant is a British subject of the full age of 21 years and has had at least four years experience underground in a coal mine, one year of which must have been at the working face;

(b) if a candidate for manager, that the applicant, must in addition, be the holder of a Certificate of Competency as an underground manager and have served one year as such;

(c) if a candidate for underground manager, that the applicant, must in addition be the holder of a Certificate of Competency as an overman and have

served one year as such:

(d) if a candidate for overman that the applicant, must in addition, be the holder of a Certificate of Competency as a mine examiner and have served one year as such;

(e) if a candidate for First Class certificate as Stationary Engineer that the applicant;

(1) is at least twenty-four years of age;

(2) is the holder of a Second Class certificate, and has served one year at mechanical work on mine machinery, and has for one year been in charge of a hoisting or haulage engine, or for two years in charge of a colliery engine other than the engine last above specified, or;

(3) is the holder of a Second Class certificate and has been Engineer in charge of a steam plant for twelve months, or has served at mechanical work in a machine shop for three years.

(f) If a candidate for a Second Class Certificate, that the applicant;

(1) is at least twenty-one years of age;

(2) is the holder of a Third Class certificate and has been employed as a Third Class Engineer for not less than one year.

(g) If a candidate for a Third Class certificate, that the applicant;

(1) is the holder of a license as a fireman, or has served not less than six months as a fireman; or

(2) has served at least twelve months as Engineer, Assistant Engineer, Pumpman, Oiler or Locomotive Engineer; or,

(3) has served at least 18 months at mechanical work in a machine shop.

(4) is not less than 18 years of age.

(h) If a candidate for Mine Examiner, that the applicant is a British subject of the full age of 21 years, has had at least three years experience in and about the practical working of a coal mine, is the holder of a Certificate of Competency as a coal miner, and has a practical knowledge of gas, explosives, ventilation and timbering;

(i) for the holding, if deemed advisable by the Board, as a part of the examination, of viva voce examinations in the several districts established by this Act, with a view to ascertaining the practical knowledge of applicants for certificates in each district being tested with reference to the local mining conditions, and requiring at least one of the Examiners in every viva voce examination to be a person possessing practical acquaintance with those conditions.

(3) Any person conducting the examination under the next preceding section shall not take any part in the examination of the papers, or in the viva voce examination of any applicant for a certificate, whom he has in any way trained or instructed in any of the subjects of the examination.

(4) Experience had outside of the Province may be accepted should the Board consider the same of equal value to the experience otherwise required.

(5) The Commissioner shall deliver to every candidate who is duly reported to the Board to have satisfactorily passed the requisite examination and to have given satisfactory evidence of his sobriety, experience, ability and general good conduct, such a Certificate of Competency as the case requires.

Miners.

18. No person shall be permitted to cut, shear, mine, fire, blow, loosen or extract coal by hand, machinery or otherwise in any mine who is not in possession of a certificate of Competency as a coal miner.

19. (1) No person shall be given charge of a working face in a mine who is not in possession of a Certificate of Competency as a coal miner and in addition has been employed in a mine for at least one year as a coal miner.

(2) Every Owner, Agent or Manager of any mine who gives charge of a working face to any person contrary to the provisions of this section, and every person who obtains or seeks to obtain such employment by means of a false or fraudulent certificate, shall be guilty of an offence against this Act.

(3) In the case of the introduction of any coal cutting machine not in use in the Province before the 11th day of March, 1898, any person may work such machine, if he is accompanied by a person capable of taking charge of a working face under this Act.

20. (1) The Commissioner may appoint Boards for granting Certificates of Competency to coal miners in such places as he deems expedient, who shall examine candidates for such certificates, and grant such certificates to persons found duly qualified.

(2) Such Boards shall consist of not less than three persons who shall be called the Local Board of Examiners, and shall consist of the following persons:—

(a) one, appointed by the Commissioner;

(b) one, with two alternatives, appointed by the Manager;

(c) one person who is a practical coal miner and actively engaged in coal mining in Nova Scotia, and who holds a Certificate of Competency as such, with two alternatives, to be nominated by the vote of the men employed underground.

(3) The members of such Boards shall hold office for two years to begin on the first day of January, in the year in which their appointment is made or until their successors are appointed.

(4) The Commissioner may make regulations for the guidance of Local Boards of Examiners in the performance of their duties, and may prescribe the times and places at which the examinations, shall be held.

(5) Such Boards shall report in writing to the Commissioner at the times and in the manner prescribed in the regulations, after each examination, the name, address and place of employment, if any, of every candidate to whom a Certificate of Competency is granted under this section.

(6) Members of such Boards are for the purposes of the examination authorized to administer oaths and affirmations.

21. Every person who gives any false certificate of employment, or other certificate to be used under the provisions of this Act, shall be liable to a penalty of not less than twenty nor more than fifty dollars.

Mine Examiners.

23. (1) In every mine there shall be appointed by the Manager, in writing, one or more com-

petent persons who hold a Certificate of Competency as a Mine Examiner under this Act, whose duty it shall be:—

(a) to fire all shots in the mine, and perform all other duties prescribed by any Special Rules;

(b) to make such inspections and carry on such other duties as to the presence of gas, ventilation, state of roof and sides, as are required by this Act and by any Special Rules.

(c) to have the general charge of the safety of the mine and the workmen, including the checking and recording of the number of persons under his charge as required by this Act and by any Special Rules.

(2) A Mine Examiner shall be required to devote his whole time to such duties as aforesaid, but the provisions shall not apply in the case of a Mine Examiner in

(a) any mine in which the total number of persons employed underground at one time does not exceed thirty, or,

(b) any mine exempted by the Deputy Inspector of the district, on account of the special circumstances of the mine.

(3) No person not employed as a Mine Examiner or Shot-firer in any mine previously to the first day of August, 1918, shall be employed or permitted to act as a Mine Examiner or Shot-firer, unless he is possessed of a Certificate of Competency as such, under this Act. Provided, however, that all persons who, on the passing of this Act, are the holders of a certificate of Mine Examiner or Shot-firer issued by any Board for the examination of workmen and who are now employed as Mine Examiners or Shot-firers, shall be granted a Certificate of Competency as Mine Examiner by the Commissioner upon the Manager of the mine in which such Mine Examiner or Shot-firer is employed, filing a certificate with the Commissioner that such Mine Examiner or Shot-firer is so employed in the mine as such, is a British subject, and has written or is competent to write in the English language a report of his examinations in the book kept for that purpose at the mine in which he is employed.

(4) That part of the mine assigned to a Mine Examiner shall not be of such a size as to prevent him from carrying out in a thorough manner the duties assigned to him.

Plans.

(3) The Owner, Agent or Manager shall before the 20th day of each of the months of January, April, July and October of each year furnish to the Commissioner a correct plan or tracing on a scale of not less than 400 feet to an inch of the workings up to the first day of the months above mentioned.

Use of Electricity.

36. (1) Electricity shall not be used in any part of a mine where, on account of the risk of explosion of gas or coal dust, the use of electricity would be dangerous to life, and if the owner of a mine, on being required by the Deputy Inspector not to use, or to desist from using, electricity in the mine or any part thereof, for the reasons aforesaid, refuses to do so, the question as to the application of this Section to the mine or part thereof shall be

settled in manner provided for settling disputes under Section 34 of this Act.

(2) If at any time in any place in the mine inflammable gas is found the electric current shall at once be cut off from all cables and other electrical apparatus in that place and shall not be switched on until the place is reported to be clear of gas and permission is given to switch on by the Manager. Provided that nothing in this sub-section shall apply to any telephone or signalling wires or instruments as long as the conditions prescribed with reference to the installation and use of such wires and instruments are complied with, nor to any electric lamps of a type for the time being approved.

(3) When any question under this Section is to be settled in the manner hereinbefore provided, the Owner shall, pending the settlement of the question, comply with the requirements of the Deputy Inspector subject to an appeal to the Inspector.

Deputy Inspector.

(3) The Deputy Inspector shall visit every mine within his jurisdiction and every working part thereof, all underground travelling roads and all air courses including examination of stoppings at least once every month.

Payment of Wages.

(3) Every such employer shall without any order retain out of the wages or salary of any such employee any sums due by such employee in respect of powder, coal, oil, rent, check-weigher's fees, doctor's fees, or church or society dues.

As will be noticed there is only one word changed in the foregoing sub section, the changing of the word may, in to shall, and that innocent looking change makes a wonderful alteration in the reading and the meaning of the sub-section, and indeed makes it nigh impossible to arrive at what the sub-section now means. Payments to a doctor should, we believe, be compulsory, but where there are three doctors, which? We are not so sure that payments to a church should be compulsory for a majority of the churches these days glory in being supported by voluntary contributions. And what is meant by "Society dues, Tory Society, Rechabite, I. O. T., K. of C., K. of P., I. O. F., I. O. O. F., A. F. M., etc., etc? We wouldn't wonder if the A. M. W. is included. If the clause passes as it stands, the Record may make a few comments on the new way of securing the "closed shop."

When vertical timbers like piles, posts, and others supports are partly embedded in the ground they are likely to fail rapidly by decay at ground level, while the timber above and below that point remains sound. It is said that the decay can be greatly retarded and the life of the structure much prolonged by enclosing the timbers just above and below the ground level by sleeves filled with common salt.

The Rock Ornamental Company has been incorporated, with a capital of \$20,000, to engage in all business allied to the cement industry. The head office is in Quebec City.

EMINENT ENGINEER PASSES AWAY.

In the person of Sir Collingwood Schreiber, who died on March 23, at his home in Ottawa, aged 87, Canada has lost one of her greatest engineers and railroad builders. For sixty years the late Sir Collingwood had been actively associated with the building and development of both publicly and privately-owned railways in this country, and for his outstanding services in connection with the construction of government lines he was knighted in 1915. He was born in England and came to Canada as a young man, in 1852. He first secured a position on the engineering staff of the Toronto and Hamilton Railway, staying with this road until 1856. Having demonstrated his capabilities as an engineer, he was then taken into partnership in the engineering firm of Fleming, Ridout & Schreiber, of Toronto, thus becoming associated with Sir Sandford Fleming. He remained in practice until 1860, when he superintended the construction of the Northern Railway now a part of the northern division of the Grand Trunk—till the year 1863. During the four years following he was engaged in the construction of the Pictou Railway, in Nova Scotia, and then assisted in laying out the Temiscouata section of the Intercolonial Railway. Later he built and became superintending engineer of the Eastern Extension Line, now part of the Intercolonial, and in 1873 was appointed chief engineer and general manager of all government railways in operation. Seven years afterwards Sir Collingwood also was appointed as chief engineer of the C. P. R., succeeding his old partner, Sir Sandford Fleming. He retained his position on the government railways and with the C. P. R. until 1892, when he became chief engineer of the Department of Railways and Canals. Later he was appointed deputy minister of the department, and continued to administer this office until 1905. In that year he became general consulting engineer of the Dominion Government and chief engineer of the western division of the National Transcontinental Railway. Since that time his chief work has been the inspection of the construction of the Grand Trunk Pacific.

SLIPPERY PAVING BRICKS.

A study of paving bricks shows that their greatest disadvantage is the smoothness and slipperiness which they develop as the result of wear. This is so serious as to preclude their use in many places where they would otherwise be extremely satisfactory.

Various methods have been tried in order to overcome this smoothness, such as grooving the upper surface of the bricks, imprinting a pattern in low relief, and so on, but such devices are clearly only palliative, and are often accompanied by serious drawbacks.

What is required is a hard and impervious material which will remain rough under abrasion in-

stead of being polished. The United Mosaic Works of Friedland-Sinzig claim that by the use of a material the particles of which are hollow, they have been able to produce an ideal paving material, and one which is quite impervious to water, yet never becomes quite smooth. The nature of the material is not disclosed; it is presumably some form of kieselguhr, which consists of minute hollow particles. On mixing a suitable kieselguhr with an appropriate bond and making bricks from the mixture and burning to a sufficient high temperature, it should be possible to produce an impervious brick which would not wear smooth, but whether such a brick would be sufficiently hard and durable remains to be proved.

Joe Keefe

MINERAL EXPORTS TO BRITAIN.

Canada's mines have been working overtime furnishing metal for the outside world. For the United Kingdom alone, the exports of copper in 1917 totalled 144,613 hundredweight, worth \$1,080,133, as compared with only 53,855 hundredweight, worth \$403,851, in 1913. Nickel worth \$1,862,796 (124,001 hundredweight) was sent to the United Kingdom, compared with 48,267 hundredweight, valued at \$718,145, in the year before the war. The bulk of Canada's nickel still goes to the United States, and the figures for the fiscal year 1917 were 702,203 hundredweight, worth \$7,062,758.

Some forms of lumber have tended to swell Canada's war exports considerably. In 1917 the Dominion sent 50 per cent. more spruce and other deals to the United Kingdom than in 1913, but the price had so increased that the value of this form of export nearly doubled, being \$8,594,803, as compared with \$4,683,821.

Only 74 horses, worth \$14,400, were exported to the United Kingdom in 1913. By 1916 the number had risen to 21,833, worth \$3,899,822. In 1917 the number dropped again to 9,499, worth \$1,898,820.

A curious feature of the customs report is that it records imports of gold bullion from the United Kingdom in 1917, worth \$14,461,131, as compared with only \$98,409 worth in 1916.

More than 250,000 refugees from the regions taken from Russia by Germany are seeking safety from the German troops on the eastern frontier of the Ukraine.

Baking of white bread and rolls will be discontinued throughout the United States after April 13.

"The war is becoming more and more a machine war, and along with the change comes a steady decline of casualties—Manchester Guardian.

ONTARIO'S EFFORTS TO RELIEVE THE FUEL SITUATION.

(From an Ontario Paper.)

The Ontario Government is busy working out a solution of the problem of fuel shortage. They are of the opinion that, while this is a very great problem, it is not altogether the shortage of fuel, but also there is involved the question of teaching the people of the country to economize and conserve. The people are slow to realize that there is a real shortage and that the war has only aggravated a condition that we would have had to cope with in any case. Our present condition is only one other example of our unpreparedness, though this very unpreparedness for the war is our great vindication. The government is taking very active measures to impress upon the people the actual fuel situation, and are instituting an educational propaganda by circularizing the whole province and advertising in all the local papers.

In Ontario, owing to our geographical position, our denser population, and the fact that we have no coal deposits, the situation is more acute than in the other provinces. The Eastern and Western provinces could, with some additional development, look after themselves. The increased tax on the United States resources means that we cannot look forward for the abundant supply of coal we have had to us in the past.

There are two known sources of fuel in Ontario—peat and wood, with wood available during the coming winter. Each province has a fuel controller, and in the large centres deputy fuel controllers have been appointed. The government has granted to municipalities the wood on crown lands, and they are to cut this during the coming summer. Toronto, Hamilton, Ottawa, and Sudbury have already taken advantage of this offer.

The department itself has taken action, and expects to cut and deliver enough wood this summer to supply fuel for all government institutions. This means in some cases a readjustment of some of the heating plants in order that wood may be used profitably and economically. An appropriation of \$100,000 has been set aside for the investigation and working out of the problems as they arise.

The lesson of the war is self-reliance; had we been thrown entirely on our own resources we would have been in a very bad condition.

The efficiency of manilla rope connections and fastenings in terms of percentages of the tested strength of the new rope has been found by careful experiment to be 90 per cent. for an eye spliced over an iron thimble, 80 per cent. for a short splice, 65 per cent. for a timber hitch, slip knot, or clove hitch, 50 per cent. for square knot, weaver knot, or sheet bend, and 45 per cent. for a Flemish loop or over-hand knot.

There are, approximately, 7,500 parts in the American war truck, which weighs complete just over four tons, and is propelled by a 58 horse-power engine, running at 1,350 revolutions per minute.

According to Les Mouvelles, of Maastricht, Holland, another long-range gun, similar to the one already bombarding Paris, passed through Belgium, from Essen, on Monday. The length of the barrel is from 20 to 25 metres, and the calibre from 20 to 25 centimetres.

Passenger—Who's the swell ye was talkin' to, Jimmie? Newsboy—Aw, him an' me's worked together for years. He's editor o' one o' my papers.

Two Canadian soldiers were talking. One said: "I hear the Australians were in Jerusalem on Christmas Day." To which the other replied: "Betcher the shepherds watched their flocks that night."

A visitor to the household of a colored man in Georgia was much impressed by the thriftiness of the mistress of the house, according to Harper's. "That's a hard-workin' wife you've got, Joe," said he. "Ye," said Joe, with the utmost gravity, "I wish I had a couple more like her."

"Tell you what, old man, this sugar shortage is getting serious," "Doesn't affect me. I've got 120 pounds of it at home," replied the smiling optimist, quoted in Judge. "Great Scott, man! How did you manage to get it?" "Oh, I married it."

Judge (sternly)—Did you steal that chicken, Sambo?

Sambo—Yes, sah, I took dat chicken. It was the cookery book told me to take it. De cookery book say, "take one chicken." It don't say buy one chicken, or beg one chicken, or borrow one chicken; it say "take one chicken." And it don't tell you whose chicken to take; so I took the first chicken I could lay my hands on. I followed the directions of the cookery book, sah."

An elderly lady of very prim and severe aspect was seated next a young couple, who were discussing the merits of their motor cars. "What color is your body?" asked the young man of the girl at his side, meaning, of course, the body of her motor. "Oh, mine is pink. What is yours?" "Mine," replied the man, "is brown with wide yellow stripes." This was two much for the old lady. Rising from the table, she exclaimed: "When young people come to asking each other the color of their bodies at a dinner party it is time I left the room."

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Synopsis of Coal Mines Regulations.

COAL 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.

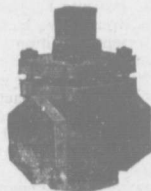
For full information application should be made to the Secretary of the Department of the Interior, Ottawa, or to any Agent or Sub-Agent of Dominion Lands.

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

N. B.—Unauthorized publication of this advertisement will not be paid for.—89576.

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CANADA. DEPARTMENT OF MINES.

Hon. Martin Burrell, Minister.

Mines Branch.

Recent Publications:

Building and ornamental stones of Canada, (Quebec), Vol. III, Report on, by W. A. Parks, Ph. D.

The Bituminous Sands of Northern Alberta, Report on, by S. C. Ellis, M. E.

Peat, lignite, and coal; their value as fuels for the production of gas and power in the by-product recovery producer, Report on, by B. F. Haanel, B. Sc.

The petroleum and natural gas resources of Canada: Vols. I & II. by F. G. Clapp, M. A. and others

Electro-plating with cobalt, Report on, by H. T. Kalmus, Ph. D.

The Mines Branch maintains the following laboratories in which investigations are made with a view to assisting in the developing of the general mining industries of Canada:—Fuel Testing Laboratory, Ore-Dressing Laboratory, Chemical Laboratory, Ceramic Laboratory, Structural Materials Laboratory.

Application for reports and particulars relative to having investigations made in the several laboratories should be addressed to The Director, Mines Branch, Department of Mines, Ottawa.

R. G. McConnell, Deputy Minister.

Geological Survey.

Recent Publications:

Summary Report of the Geological Survey for the Calendar Year 1916.

MEMOIR 20. Gold fields of Nova Scotia, by Wyatt Malcolm.

MEMOIR 44. Clay and shale deposits of New Brunswick, by J. Keel.

MEMOIR 59. Coal fields and coal resources of Canada, by D. B. Dowling.

MEMOIR 60. Arisaig-Antigonish district of Nova Scotia, by M. Y. Williams.

MEMOIR 78. Wabana iron ore of Newfoundland, by A. O. Hayes.

MAP 63A. Moncton Sheet, Westmorland and Albert Counties.

MAP 150A. Ponthook Lake Sheet, Nova Scotia.

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

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