

D. coal Areas p. 13. (good reasons)

E. R. Faribault,
Geological Survey

MARITIME MINING RECORD.

FEBRUARY 13. 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.,
"SPRINGHILL" 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 Avu., 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.

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

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.

Used by Collieries in Lancashire, Staffordshire & Yorkshire

'XTERRA' COLLIERY LAMP OIL
For standard, Muesels - Deflecto - or Closed Lamp,
PURE WHITE FLAME. LOW PRICE
E. WOLASTON, Dutton St. MANCHESTER
Sole Representatives for Canada, AUSTEN BROS.
Limited, Halifax, N. S.

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 Hammers.	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.

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.

MARITIME MINING RECORD

Vol. 20

Stellarton, N. S., February 13th., 1918

No 15.

BRITISH LABOR WAR AIMS.

Restoration of devastated areas to be met as far as Labor Movement Special Conference, at the Central Hall, Westminster, adopted with practical unanimity the Memorandum of War Aims submitted jointly by the Parliamentary Committee of the Trade Union Congress, and the Executive Committee of the Labour Party. The Memorandum supports the continuance of the struggle "that the world may henceforth be made safe for democracy," and as a means to this end relied on the complete democratisation of all countries, the abandonment of every form of "Imperialism," the suppression of secret diplomacy, universal abolition of compulsory military service, common limitation of armaments, and the establishment of Super-National Authority, or League of Nations. For the purpose of removing any obvious cause of future international conflict, certain territorial readjustments are required, but they must be arrived at by common agreement on the general principle of allowing all peoples to settle their own destinies.

To Belgium there must be reparation by Germany, payment for damage, and destruction of complete independence.

Alsace and Lorraine to decide freely what shall be their future political position.

The Balkans should form a federation of independent States, according to predominant nationalities.

The claim of people of Italian blood "left outside" the Italian boundaries to be united with their own race is supported, but Imperialist aims of conquest are repudiated.

Poland and Luxembourg to settle their own destinies.

Palestine to be a free State for Jews, under international guarantee.

Armenia, Mesopotamia, and Arabia to be administered by a commission under the League of Nations.

The colonies of the European Powers in tropical Africa should be transferred to the League of Nations and permanently neutralised as a single independent African State.

Restoration of devastated areas to be met as far as possible by an international fund.

Reparation, after judicial investigation by a Court of Claims and Accusations, of acts of cruelty, violence and theft against individuals.

ECONOMIC STRUGGLES AFTER THE WAR.

The reconstruction of the country as quickly as possible after the war is necessary if the nation is to retain its trading and commercial eminence. To do this many ideas hitherto held by both employers and workmen must be abandoned. Both sections

must adapt themselves to changed conditions, for it is certain that international competition will be keener than ever.

Even though one result of this war be to end military wars, economic struggles between nations will remain, and whilst none desire the economic destruction of even enemy peoples, our primary concern will be to secure the economic recovery of our own and the Allied nations. The demand for the materials of production will be so great that we must exert ourselves to control them as much as possible and to divert them to our own shores and to Allied countries. If it be that the sufferings of enemy countries are prolonged, is not this the just punishment of the sins they have committed?

With a view to securing the greatest possible harmony in national industry the Government has encouraged the establishment of councils equally representative of employers and workmen in every industry. These councils should help to remove trade matters from the cockpit of party politics. Both employer and employed will increase their knowledge and understanding of each other, and the advice they tender could not be ignored by any Government.

In connection with reconstruction, many projects are being framed. The Ministry of Labor, for instance, contemplate considerable expansion of the Trade Board system in order to secure that every willing worker shall receive a wage corresponding to a decent living standard. This is supplementary to the work of trade unions, and will provide workers generally with the means of steady progression towards the perfectly just and equitable system of reward for good labor.

In enumerating some of the advantages of electric light, Professor J. A. Fleming, in his lecture on electricity at the Royal Institution, said the light produced no ashes, no smoke, no products of combustion; there was no wasteful radiation; it was clean, instantly ready, and economical, although as to the last point it depended on the price at which electrical energy could be supplied. In speaking of the uses of the electric current he said that it was now used in the making of clothing for our airmen, a current carrying the electrical heat into the materials of the garments worn by them.

An Italian girl enjoys the honor of being the first regularly-appointed captain in her country's merchant marine. In a letter to the Petit Journal she writes: "If my fate is to be torpedoed, I shall observe the traditions of the sea and be the last to leave the ship entrusted to me. My life I sacrifice in advance; it is at the service of my country and of my dear, noble sisters, France and England."

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.

February 13, 1918

THE LATE DISASTER.

So fully has the press, daily and weekly, entered into details of the explosion at the Allan Shaft, that it is scarcely necessary that the Record say much other than what may be desirable for future reference.

The accident occurred shortly before 6 o'clock on the evening of Wednesday, 23rd inst.

At that hour the night shift was on duty. The number of men who had gone down, according to the number of safety lamps given out, was 96. Of this number nine got out alive, leaving a death roll of eighty-seven.

Up to the time of writing any opinion expressed as to the immediate cause of the calamity is wholly conjectural. Something, possibly, may yet be discovered which will give an inkling as to the promoting cause, and, yet, the possibility, perhaps we could say probably, is—as was the case in the explosion of 1880—that no definite, and fully acceptable, reason shall be forthcoming. The general opinion at the time of the 1880 explosion, was that it originated in the south side of the mine, where a number of men had been instructed to go and remove a drum not in use. It is presumed that some overhardy workman unscrewed the top of his lamp to get it relighted, or for another purpose. At that time the lamps were not "securely" locked, and at that time, also, the law in reference to pipes, matches, and tobacco was not, it is feared, rigorously carried out. Indeed the Record is assured by one who worked in the Foord Pit, previous to and up to the time of the explosion, that there were, on not rare occasions, violations of the law, or instructions. It is doubtful if, in 1880, special rules were in vogue at any of the collieries. The explosion of that year is responsible for the securing of many needed amendments to the Coal Mines Regulation Act. As in the late disaster, so in the explosion of 1880, no damage, of any nature, was done to the surface plant. There was no indication whatever on the surface of the devastation created underground. Fire followed the 1880 explosion, and after all inlets of air had been securely closed, a connection was made with the East River, and the mine flooded. An attempt was made in the late 'eighties to recover the mine, and to work the under part of the seam by a system known as the "umbrella" roof. From some reason—the point is a debatable one—the attempt, we dare not say ended in failure, was abandoned. Different reasons are assigned for the abandonment.

The damage done in the late disaster is reparable without any great expense, and the delay is not expected to be serious.

On the 23rd inst., and succeeding days, there was no lack of volunteers to aid in rescue work. A dislocation of some kind at the bottom of the shaft interfered with the proper working of the cage for a time. A number of men, nine in all, working in the 500 and 900 lifts, were taken up in the cage before the bottom of the shaft was put in order. These were the only men who escaped. Some declare that there was tremendous force to the explosion. Possibly, but the fact remains that it was not any noise or concussion that caused the men in the upper lifts to conclude that something unusual had occurred. No entrance could be made by way of the second shaft, as it was the uptake or outlet for the air, and of course at the time was charged with deadly gases.

Draeger men from Cape Breton were to hand in remarkably short time, ready to assist in any work that might be required of them. Mr. Tonge, of the Dominion Coal Co., and the ever ready T. J. Brown, were at the pit head all the way from Cape Breton within twelve hours after the explosion. These were followed closely by mining experts from far and near, and by miners from the collieries in the county. Indeed some of the officials of neighboring mines, accompanied by practical miners, were on the spot before many in the community had become fully aware that so terrible a thing had happened.

Deputy Inspector of Mines Gray was on the spot at six o'clock, as were all the mining and engineering staff of the Acadia Coal Co., with Mr. Prudhomme, General Manager, to advise and render encouragement. Malcolm Beaton, Malcolm Blue and Harry Coll, the three of them formerly superintendents of the colliery, were leaders of the various squads engaged in rescue and first exploratory work. As for helpers there were more volunteers than work or places at the times could be found for.

As has been characteristic of nearly all the great and lesser mine explosions in Nova Scotia, there were witnessed none of the distressing, heartrending scenes which the papers have described as following similar catastrophes in some other lands. The fortitude, the grave and appealing composure of the relatives of those imprisoned in the mine, was most remarkable. Each heart knew its own bitterness, and wisely, heroically, and of course unselfishly, forbore to add, by giving way to wailing expressions of agony, to the bitterness in the hearts of the others, in similar case. There was none of that piercing wailing which is contagious, and whose effect is confusing and dispiriting. Of the volunteers it may be truly said that they well maintained the best traditions, the grand reputation for fine heroism which has ever been accorded to the men of Nova Scotia, a reputation of "aye ready" when and where duty and danger call.

MINE VENTILATION.

Commenting on the late disaster the Eastern Chronicle devotes much space to that most difficult subject, "Ventilation of Mines." While the Record may hold opinions not quite in consonance with

those expressed, no criticism is possible of the spirit which characterizes the article. The proper ventilation of any coal mine, worked on a big scale, and having hundreds of ramifications through which the air must travel, or be carried, is a subject attended with tremendous difficulties. If a mine consisted of only long levels or roads, then ventilation would be child's play. It is these ramifications that cause the trouble. No one would engage in mining if a condition was that every section of the mine, however limited the area, should have an independent intake and return air course. In almost every mine there are parts that get more air than necessary, while there may be some that do not get as much as desirable. Then, conditions in a mine are variable; a supply of air sufficient for to-day, and ordinary days, may be insufficient for to-morrow, and days when conditions are abnormal. One of the largest collieries in France, if not in Europe, had several years ago, so high a reputation for being well conducted that a delegation of experts was sent from Britain to examine and report upon the mine, so that, if the system of operation was found to be in any way in advance of those in Britain it might be adopted. The delegation brought back a report which eulogized the system and recommending the adoption of certain features of it in the British mines. Not very long after this most favorable report had been published, an explosion occurred at this very colliery, considered to be a model, which resulted in an appalling loss of life.

Not long ago the writer had a talk with a high official of the Government on this subject. The remark was let fall that it was impossible to keep certain mines free of gas. To this was made the retort, "If that be so, then why should Rule 1 of General Rules, remain on the statute books. Why not remove it wholly, or have it amended that it will not ask that an impossible thing must be done?" Rule 1, Sec. 46, C. M. R. reads:

"An adequate amount of ventilation shall be constantly produced in every mine to dilute and render harmless noxious gases, to such an extent that the working places of the shafts, levels, stables and workings of the mine, and the travelling roads to and from such working places shall be in a fit state for passing and working therein."

"If this rule could be complied with there would be no purely gas explosions. Can it fully at all times? Our contemporary in the opening sentences of the article says:

"The terrible disaster at the Allan Shaft demonstrates anew that the Government should take charge of the way mines are operated. We do not mean that the Government should operate the mine, but that they should lay down positive rules for operating them. Without going further away than this county there have been warnings enough to show that there is something radically wrong in the system under which they are operated. Take, for instance, the Allan Shaft with the repetition of the tragedy of the Foord Pit. The coal in that mine is valuable, but the mines are permeated with inflammable gas—the cause of all the trouble so far as men on the street know."

The Record is afraid too much is asked of the Government in the above extract. Can positive rules be formulated and acted upon? We are afraid not.

Rules can only, in a majority of cases, be general, much being necessarily left to the judgment, common sense, of the mine officials. The ablest mining men in the province are in the service of the companies, fully as competent as men in the United States or elsewhere, to intelligently conduct mining operations. Where would the Government get men to frame and see to the carrying out of positive rules? The question is beyond the Record.

CAUSES OF DECREASE IN OUTPUTS.

Lately, in a speech, the President of the Halifax Board of Trade, Mr. McGillivray, made the following reference to the decreased coal production of the province:

"The decrease in the production of our coal mines was the most disappointing feature of our industrial position, and every well wisher of the Province of Nova Scotia will hope that the management of the mines and the miners themselves will be able so to co-operate that this vital industry shall in future be kept at its maximum production."

Mr. F. W. Gray in no censorious spirit criticises the reference. Being an official of the biggest company he cannot speak with that abandon which is the privilege of the Record. He must tread gently, lest he trample on the toes of any body of workers, or their leaders. Mr. Gray demurs to President McGillivray's suggestion that there was a lack of co-operation between mine workers, and mine operators, and that this lack was responsible, in part, for the aggravating reduction in output in 1917. Mr. Gray proceeds to give what, in his opinion, was the chief factor in the diminished output. With this no possible fault can be found; on the contrary, every statement which throws light on the vexed question should be welcomed. The question, then, naturally arises, Had President McGillivray any justification, any reasonable grounds, for his statement? The Record is inclined to think he had. Through the Halifax press the public of Nova Scotia were unhesitatingly told that but for the favoritism displayed, or from the discrimination practiced by the officials of the Dominion Coal Co. towards certain of their employees, the output would be, oh, ever so much larger, and all diminution removed; in short, that there would be an increase in output that would astonish greatly the community. Of course that was all the most beloved kind of bunkum. There was, however, no contradiction; the assertion was passed unnoticed by those it affected most, and little wonder, then, if President McGillivray came to the conclusion that what the press said, on the authority of a labor leader, was the unvarnished truth. The name of the one who made the assertion that there was lack of co-operation, was given in the press, and this was a challenge for a denial, if one was possible. Mr. Gray now makes the assertion that the statement was incorrect. Pity it had not been made previously. Presumably it was not contradicted on the assumption that no one would believe it. The fact that so astute a man as President McGillivray took it as a truth, bears out the contention in the last Record, that silence at times is, well, say, sinful. The Record agrees with Mr. Gray that shortage of men, due to enlistments, was the chief factor in the

diminished output, in Cape Breton County. Mr. Gray, in justice to himself, should have stated that his references were to Cape Breton County alone, for what he claims to be the chief factor is scarcely applicable to the Mainland collieries. It may not be denied that Cumberland and Pictou Counties contributed their full quota of men for overseas, or that, proportionately, they did about as well as Cape Breton County. If, then, the output of the two mainland counties has increased, it cannot be claimed that the shortage of men has vitally affected them, as is the case in Cape Breton. Indeed there were other causes that prevented an enlarged increase on the mainland. The two causes were mine fires and inadequate transportation facilities. Curiously, the shipments from the mainland in 1917 were the best since enlistments began, and only three thousand tons less than the best output year, 1913. Here are the outputs from 1913 to 1917: Year 1913, 1,109,000; 1914, 1,047,000; 1915, 1,017,000; 1916, 1,016,000; 1917, 1,106,000 tons, a most remarkable showing. But a still more remarkable, indeed an almost inexplicable thing is, assuming that the tables, giving number of men, in the official yearly report are reliable, that in 1915 it took 1,800 men to produce 1,017,000 odd tons of coal, whereas in 1916 it took only 1,520 men to produce 1,012,000 tons odd. Put another way, the men of 1916 produced 104 tons each more per man in the year than was done in 1915. This is something to be grateful for, and, for impelling us to ferret it out, the Record's thanks are due Mr. Gray. In speaking of outputs it might be well to differentiate as between the Island and the Mainland.

careless of duty, and not to find out whether "economy of production" of the company's part was responsible, for the very reason that at times the writer believes, that on certain past occasions extreme precautions had been taken, in short there have been at times all but unnecessary precautions. What I am sure is most desired by all interested in coal mining is an investigation that will bring out facts, and opinions, that will tend to the prevention of such terrible occurrences. It may be taken for granted that the Acadia Coal Co. will place no obstacle, but rather render help in any investigation that may be instituted.

I wonder if the locomotive engineers ever asked their President or Secretary, Mr. Stewart, if he ever heard of the old saw, "Let the shoemaker stick to his last." No doubt Mr. Stewart is thoroughly familiar with what concerns railway travel and traffic but that is not a sufficient reason for assuming that he is competent to tell the public the ins and outs and whys and wherefores of inadequate outputs. Mr. Stewart boldly declares that the assertion that the miners were not all doing their utmost in this time of stress is unfounded. That is equivalent to saying that he knows more about the coal business than Mr. Baxter, the vice-president and a leader in the A. M. W., the Nova Scotia miners' union, with a membership, it is claimed, of 9,000. Mr. Baxter and other leader of the society began a propaganda a fortnight or so ago, the object of which was to enjoin upon the men not only the desirability but the absolute necessity, of working regularly. Mr. Baxter to a Cape Breton press representative declared that a big effort would be made to induce the miners to work steadily and not go idle on the Mondays after each weekly pay, as so many did. If Baxter and other of the officials of the A. M. W. see the necessity for thus enjoining the members, then Mr. Stewart is wholly astray in asserting that the workers are in no way responsible if there is diminished output.

The coroner's inquest in connection with the disaster did not begin as expected last Wednesday. When the coroner was about to begin his inquiry objection was taken to the constitution of the jury in that it did not comply fully with the statute, as miners from other collieries were lacking. The act, sub-section 7, section 45 reads: "Whenever practicable the coroner shall require the constable, or other officer to summon, as jurymen, not less than three working men employed at any other mine than that at which the accident occurred, who shall form part of the jury sworn at such inquest." This section of the act has not, it is feared, been generally complied with for some time, and it is well objection was taken. At the time the clauses in references to inquests were framed things were somewhat different than they are to-day. For instance, in South Cape Breton the collieries are under the ownership of one company. Should an accident occur at, say, Dominion No. 1, and three jurymen were sworn who worked at Dominion No. 2, that would be a compliance with the letter of the law, but not with what

(Continued on page 12.)

- Rubs by Rambler. -

The following from the Coal Trade Journal has in it, shall it be said, a hidden truth, that may be well taken to heart by certain newspapers and many individuals who are clamoring for government control of the coal mines: "Why do the heathen so furiously rage and why do the people imagine a vain thing? A great deal of the criticism on the Garfield order seems to reflect disappointment more than anything else. The public in general was crazy for Government control, as the saying is. It wanted to have the coal trade controlled as the railroads had been controlled for years past. Well, they got what they wanted, but if it so happened that they got it in the neck, that is another story, as Mr. Kipling said. And now, to quote that virile writer of pioneer days, old Brew Harte of California, "Walk, damn you, walk!"

The Halifax Herald calls for a thorough, fearless, and immediate probe into the causes of the Sellar-ton disaster. The Record, I am sure, supports the call, but possibly not from the same motives, or for the same reasons as your contemporary. The Record desires a thorough and public investigation not for the purpose of inflicting punishment on some one who may have committed an error of judgment, or been

AROUND THE COLLIERIES

An exchange places the Vale explosion as occurring in 1885. If we are not in error the Amalgamation took place in 1886, and the explosion two years later, in 1888.

The number of dependents of victims of the late disaster is placed at three hundred. The number of widows is given as sixty. That means that on an average there are four children to each family. The average may be said to be high. One who is interested in relief work put it thus, "This is a case of 'big' families and 'little' children."

The heavy falls in the Allan Shaft are scarcely sufficient to justify the assertion made by some that the explosion was a most violent one. Owing to the heavy inclination of the seam, and the fact that the shafts are sunk in disturbed, indeed a better word might be distorted, strata, very little concussion or other disturbance is necessary to induce a fall. Nor should it be forgotten that the mine is affected by heavy lateral as well as superincumbent pressure.

In a talk between several men the other day one declared that the snow which covered the earth was responsible in part for the late explosion. That can scarcely be, as the Drummond explosion occurred the middle of May, the Foord Pit on a bright day in early November and the New Waterford in mid-summer. There may have been a covering of snow over the earth at the time of the Springhill explosion in February. The months of the explosions were May, November, January, February and July. This is proof that mine explosions are no respecters of months. Mid-summer or mid-winter matters little.

Some time in the eighties, after the Foord and Cage Pits were found to be, beyond doubt, on fire, the then General Manager, the late H. S. Poole, made an attempt to extinguish the fire in the latter mine by the manufacture of carbonic acid gas, which is one and a half times as heavy again as air, and sending it down the pit through a bore hole. The plant was not an elaborate nor a large one. Too small to make a success of the experiment, in the writer's opinion. The gas was made by an admixture of lime or chalk, sulphuric acid and water. It was sent down the mine, of course, in the form of gas. After a time the attempt to extinguish the fire in this manner was abandoned. The plant for the manufacture of the carbonic acid gas was far too small for the work expected of it. There had been heavy falls to the west of the Cage Pit shaft, which probably admitted air; and then again there was open connection with the Foord Pit. Coal mine fires have been subdued by this gas, and if all efforts presently being tried to smother the fire, assumed to be in the Third seam, it might be well to try, on a fairly large scale, the employment of this heavier than air gas.

Messrs. T. J. Brown, Malcolm Beaton and G. Greenwell, and also three representative workmen examined the McGregor Mine and said in substance that there was no danger in working it. The men's representatives advised that the under seam should not be worked until all places had been freed from gas. On Wednesday morning a few men only went down the McGregor, but on Thursday the force had increased to sixty and the increase since has been gradual. The leaders of the A. F. L. are to be commended in advising the men to resume work, so far as possible, in order to prevent the public and the industries generally from suffering from a shortage of coal.

Wm. Maxwell, General Manager of the Intercolonial Coal Co., is one of the jurymen on the inquest on the bodies of those who fell in the disaster. If the Record is not suffering from an unpardonable lapse of memory this is the first occasion on which a G. M. formed one of the jury in an inquest relating to deaths in the mine in Nova Scotia. Simon Lott, former superintendent of the Allan Mine, is also a member. It is possible there may be interesting discussion after the jury has retired to consider the verdict. There is at least one outsider who would like to be a listener.

On high authority it is told us to "Muzzle not the ox that treadeth out the corn." That carries the double meaning that if good work is to be done the ox must be well fed; and further, that an ox should not be tantalized like the man in the fable, dying of thirst when his body was up to the neck in water. So far so good. We are not told, on any known authority, what should be done to the ox who advises other oxen to cease treading at a time when food and fuel are scarce, to cease treading on two days each week, on occasions. Would it be not an unwise but a commendable act to have this ox muzzled?

In last issue the Record commended the action of the officials of the A. M. W. in setting out on a propaganda whose object was to advise the colliery workers to lose as little time as possible, and to work with more regularity on the Mondays succeeding pay days. Again the Record commends the officials in urging the men not to cause the pits to be idle on occasions of funerals. The Record has ever bewailed this action as not an excellent way to display sympathy. The experience of the writer constrains him to say that better respect would be paid to a dead comrade by working, then by idling nine-ninths of a day on which a funeral is held. Practical respect could well be made by working and giving the day's wage to dependents of the deceased, when in need. This would be surely better than remaining idle and giving no substantial aid. Old customs, or may it better be said old superstitions, die hard.

AROUND THE COLLIERIES.

The Record's estimable friend, the G. S. of the A. M. W.—understudy of the notorious Jas. Watters—would have his predictions, received with more confidence were his utterances not marked by great haste. He is always in a tremendous hurry to make proclamation that certain things must be done within a certain specified date, else there is sure to follow the direst consequences. In nine days from, say, the 20th January he made solemn assertion that if the Nova Scotia Steel and Coal Company did not bend the knee his patented formula "two idle days a week for all miners," would certainly be acted upon. The time is up long ago, and as yet everything goes on as usual.

We notice that the daylight saving proposition that was approved by the Senate early in the year, but was permitted to slumber in a House committee, is again being discussed. Setting the clock forward is a very definite and important move in the direction of fuel economy, and if there is no radical change in the situation by the time next May rolls around it might well be arranged for. In fact, it might be well to so arrange in any event, in view of the many advantages appertaining to the greater availability of daylight under the proposition planned.

In giving the number of deaths that followed the four great explosions in Nova Scotia, the newspapers were not at one. And it must be confessed that it is not an easy matter to specify exactly the numbers. For instance in the official Report of the Department of Mines the names of sixty are given as having been killed in the Drummond explosion, while the records in the company's office show the number to be one less. Again in the case of the Foord Pit explosion the official report gives the number lost as fifty-two and only accounts for fifty-one by names. The writer in the list compiled by him on the day of the explosion has the figures 52, and that he thinks is correct. Again in the case of Springhill the figures officially given are 125. Another account puts the number at 122, and these figures have been frequently quoted. The numbers in the various explosions the Record places as follows: Drummond, 59; Foord Pit, 52; Springhill, 122; New Waterford, 65 and Allan Shaft, 86.

Mr. Fear, the Principal of the School for the Deaf, is very much elated over the generous offer of the staff of Acadia College to supply all the accommodations and appliances necessary for the purpose of effectively carrying on the work of the school until the buildings in Halifax injured by the disaster, are put in suitable repair. Acadia College is certainly to be commended on the extended generosity and timeliness of this gift.

Long ago that part of the Town of Stellarton north and west of the "Car Barns" was known as the Old Mines, and it was entitled to be called by that name. On the first of January, 1818 two mines south and west side were leased to E. Mortimer for 21 years, at a rental of £370.0.0 currency. The royalty was three shillings per chaldron on every chaldron over 1,400 sold, a fairly stiff royalty compared with that now charged by the Government. The quantity of coal mined from 1st January, 1818 to 1st January, 1819 was 3,030 chaldrons.

In 1818 and 1819 the coal sold in Pietou County was a trifle over 9,000 tons. In 1827 the sales were under 4,000 tons. From 1828 to 1837 there was a remarkably steady increase in shipment. From 6,590 tons in 1828 they rose to 46,000 tons in 1837. From 24,000 odd tons in 1835 there was a phenomenal jump to 46,000 tons in 1836. A similar quantity was raised in 1837. These were boom years.

In 1828 what were known as the "store" pits were "bottomed."

On December 29th, 1832 it was found that the pits—they were in the vicinity of the Company's old office on Bridge Street—were on fire. A number of horses were burned. The evidence at the investigation which followed went to show that the fires were the work of an incendiary, as they had broken out at the same hour in two parts of the pit distant from each other.

In a fire in the Store Pit in 1836 three men were killed. There were probably two fires, or accidents, in that year, an explosion as well as a fire, as we find that in September, 1836, there was an explosion in the Store Pit whereby two men and two boys were killed and six persons severely burned. The pit was very little damaged, except at the point of the explosion. Perhaps there is a mistake in the year, or some confusion of the names of the pits. It is possible that in one case "Bye" Pit should have been used. In some old notes there is a gloss to the effect that in 1838 three men were killed. This is possibly a repetition, with confusion as to the year.

The Bye Pit had a second fire in 1861 and the water had to be let in. Again in 1867 there was a fire and once more the mine was flooded.

In 1866 the Foster Pit was sunk. This certainly was a short-lived mine, as in 1871 the pit fired and was finally abandoned. This must have been a second fire, as mention is made of a fire in this pit in 1869.

In 1872 the General Mining Association bade the Albion Mines and Pietou County good-bye. In that year they sold out to the Halifax Company. The

G. M. A. spent far more many in the County than they dug out of it, and yet some glibly talk of princely fortunes of coal operators.

In 1877 the Cage and the Foord Pits were connected. It was by means of this connection that many lives were saved when in 1880 the Foord Pit exploded.

In the case of the Drummond explosion, fire preceded and was responsible for the disaster. In the case of the Foord Pit the explosion preceded and was the cause of the loss by fire of the mine.

A most remarkable thing in connection with the Drummond explosion is that the death roll would have been only 28 or 29 had no attempts been made at rescue. There were no fewer than thirty or thirty-one of those who volunteered in rescue work killed. Possibly such a thing has never happened in the case of any great colliery explosion, and is abundant proof of the willingness of miners to risk their lives in attempts to save the lives of their comrades. The Drummond furnishes the one instance in Nova Scotia where a General Manager was killed while attempting to prevent a pit going on fire, or exploding. His name was Dunn.

The old Foord Pit can claim to have had victims by flood as well as by fire, an unenviable reputation in this respect. By an inrush of water from old workings driven into, due to defective plans, six lives were lost, among them Underground Manager Fraser, whose widow lives in the south end.

The loss of the Foord entailed also the loss of the Cage Pit. The way of escape for many who worked in the former was the only way fire could travel from the one to the other. The connecting tunnel was at times called the "stone drift." If it really was a way hevn through rock, then suction must have played a big part. The Foord Pit fires could not be attracted to or by any gas in the Cage Pit, while any gas there would be attracted to them.

There were many more men in the Foord Pit when it exploded in 1880 than in the Allan Shaft on the 23rd inst., and, yet, the fatalities were thirty-five fewer. This was due to the fact that there was a way of egress, by the tunnel, connecting the Foord Pit with the Cage Pit. Very many escaped that way by walking swiftly from the danger zone.

In 1880 no one after the explosion was brought out by way of the main shaft, and only one dead body was brought by the cage to the surface, that of John McGillivray. When brought to the surface a ruddy and healthlike glow was over his face, as if he had been walking smartly when he encountered the deadly after damp, and that was a probability. He was, it is assumed, hastening to his work, when caught by the fumes in the level. There was not a smudge of black or a trace of burn, on his face, which looked, indeed, as if it had been freshly washed.

There were no "scenes" of any kind at the shaft mouth in 1880. In fact there were few persons around. This was due, first, to the fact that it had

become known that men were coming out by the Cage pit drift, and relatives, friends, and the curious had rushed thither, and, secondly, to the announcement made by Joseph Hudson, after coming to the surface with the dead body, that it was futile to make attempt at rescue by way of the shaft, as the body was found not far distant from the bottom, giving proof that the mine was full of the death-dealing monoxide.

As a rule, at every explosion, where there is the necessity, volunteers to assist in rescue work come forward freely and in greater numbers than can be accepted. After the Foord Pit disaster no volunteering took place for the simple reason that no rescue work was to be attempted. Any work to be done was on the surface, and that made no appeal to them. The management was forced to enlist the services of the Grand Secretary of the P. W. A., who at the time was at a discount as recruiting officer. The needed men were readily secured.

RUBS—(Continued from page 9.)

was originally intended. It was intended that the three jurymen should be drawn from a colliery operated by a different company. That was then possible, as in Cape Breton South there were a half a dozen companies and three or more in Pictou; it is not possible to-day. This is a further reason why there should be changes in the law in referrence to inquests in mining districts. The objects of an inquest should be restricted to: Was the death caused by accident, or was it a case of murder? After that there should be an investigation under government supervision, as to the causes leading to the accident. It would not be necessary at this investigation to have more than six persons all versed in matters relating to coal mining. As a rule, coroners' juries on inquests following mining accidents have not been a success, as in a majority of instances they have not in their findings adduced facts, or made recommendations that could be called really helpful. The true purpose of all inquests, after mining accidents, is to bring out faults, and suggest improvements, else what is their purpose?

Friend F. W. Gray will have to look to his laurels. He must sit down on the President of the A. M. W., who lately declared in Ottawa that the production of the Dominion Coal Co., presumably, could be increased 1,500 to 2,000 tons daily. Mr. Gray has in the press expressed the opinion that the output of coal this year will be 400,000 tons less than last year. Assuming that the pits' work only 270 days, and the output is increased by the president's lowest figures, then the expected, or predicted, decrease is wholly wiped out, and 5,000 tons to spare. The president's assertion is that a better system of haulage in the mines would accomplish the increase. This carries with it a heavy hint that the mining staff are not quite "up to stuff," notwithstanding the many compliments showered upon it by the Record. There is just a suspicion that the president is not speaking as one with authority. A prediction was made a long while ago, by a colleague of the president, that if a certain thing was brought about there would be

a very marked increase in output. Well, the thing came about, but the predicted increased output has scarcely followed.

The Nova Scotia Compensation Act, so far as it applies to coal mining, to be really effective must be radically amended. What is the main object of the act? To provide against want or destitution of the dependents of bread winners who have lost their lives through accidents. The aid provided by the act should be immediate, and not available only after a considerable lapse of time. The aid should be available as soon as the need arises, or the necessity demands. A main object of the act was to duly provide for dependents without the necessity of appeals to the charitable. The act fails lamentably in this particularly. Immediately after the New Waterford explosion, and also that in Stellarton, appeals had to be made for assistance. Why could not the town councils or other authorities in certain districts be empowered to render aid immediately in all necessitous instances, the money so expended by the councils to be afterwards refunded by the Compensation Board? Such a plan would render unnecessary all charitable appeals, which must be hateful to dependents of ordinary spirit, a spirit commendable and which should be encouraged.

NOVA SCOTIA'S COAL AREAS.

The Province of Nova Scotia has an area of 21,428 square miles and had a population, in 1911, of 492,338 or about 23 persons to the square miles. It juts from the east coast of North America, easterly, and lies diagonally between latitudes 43 and 47 north. It is about 320 miles long by about 100 miles wide, and is a continuation of the Appalachian Mountain range, which extends along the east coast of the continent, and which range is now incorrectly called the Allegheny. Appalachian is the Spanish name given to these mountains by De Soto, after the Indians of that name. The Province is part of the continent called by Dawson the "Acadian Region."

Nova Scotia is, undoubtedly, rich in coal. The estimated number of tons in situ in 1914 was 8,730,000,000, distributed as follows:—

Cape Breton County	5,664,268,000
Pictou	1,324,076,000
Chimberland	845,544,000
Victoria	14,112,000
Inverness	882,000,000

In addition to this, which many hold to be a very conservative estimate—there are others who are satisfied to place the figures at a thousand million tons less—there are the great undersea seams, which have been proved to be valuable for at least two miles oceanward, and there is no reason to think other than that valuable seams lie for many miles to the eastward under the sea.

Previous to the year 1763 coal was not reserved. After that, between the years 1763 and 1767, it was reserved, except in a few cases. All coal is now reserved.

At Glengarry, in Cape Breton County, a seam of coal, four feet thick, has, it is declared, been discovered, but the development has not been sufficient

on which to base a calculation of the amount of coal in the basin.

In Antigonish, Richmond and Colchester Counties, a number of leases have been taken for coal lands, and exploratory work is now being carried on in the first named but, as at Glengarry, the data are not sufficient to assist in a calculation of the quantity of coal that may be contained in these areas.

Up to January, 1915, there were 1,143 square miles of coal area leased in the Province, 50 square miles of which had been mined in.

The valuable coal seams lie in the Middle Carboniferous system, in a series of basinlike formations. The coal basins formed along the east coast of Cape Breton contain some valuable seams of coal ranging in thickness from two to nine feet. This section is known as the Sydney Coal Field. The strata throughout are almost free from faults or disturbances, which renders the veins regular and persistent. The seams have an easy dip seaward, of about one foot in ten or eleven feet, except the Victoria seam at Low Point, which dips at a much greater angle. This coal field extends 35 miles along the coast from Big Bras d'Or Gut to the head of Cow Bay, and comprises a land area of 200 square miles; it reaches inland from five to six miles. The coal lies in four basins, known as the Cow Bay, Glace Bay, Lingan and Bras d'Or basins. There are excellent exposures of the coals of this district in the banks of the several bays on the eastern coast of Cape Breton from Bras d'Or to Mira.

This coal field produces about four-fifths of the total output of the Province. The whole field is underlaid by the Millstone Grit to a thickness of 1,800 feet. The measures over the coals are strong, rendering them safe to work at shallow depths.

On the western side of Cape Breton Island lies the Inverness coal field. It extends about 50 miles north from Port Hood to Chimney Corner. Some valuable seams have been opened in this district. Like the Sydney coal field, it is divided into four basins; the Port Hood, Mabou, Inverness and Chimney Corner.

In the early 70's a mine was opened at Chimney Corner. A number of workmen's houses were built and a good start was made to develop the seams in that region; but in 1873 a fire occurred that burnt the bankhead and destroyed the machinery and since that time nothing, except a little prospecting, has been done in that section of the Inverness coal field.

A bore-hole put down at St. Rose, near Chimney Corner, in 1904, found a seam of bright coal four feet thick, at 89 feet, and a seam of eight feet at 285 feet. These coals are of good quality and the facilities for mining them are as good as anywhere in the Province. With railway connection to Bras d'Or lake, excellent shipping sites can be obtained.

The Port Hood and Richmond Coal and Railway Co.'s mine at Port Hood, and the Mabou and Gulf Coal Co.'s mine at Mabou, have been flooded for these last seven or eight years, and now the only mine in operation in the Inverness field is the Inverness mine, owned by the Inverness Railway and Coal Co. This mine produced 278,821 tons in the fiscal year ended September 30th, 1916. There are a

number of large and undeveloped coal seams in the flooded districts that are awaiting courage and capital only in order to become producers. It is not possible that these splendid areas will long go begging for somebody to take hold.

The Pietou coal field has an area of about 35 square miles and contains some of the thickest seams in the world. This district has been producing for nearly 100 years. Like the other coals of the Province, the principal beds lie in the Middle Carboniferous series. East of New Glasgow, and toward Little Harbor, the Upper Carboniferous comes in, but the seams of coal thus far discovered in this section are of minor importance.

In the Pietou coal field proper, the strata are much faulted and the structure is intricate. Disturbances of much magnitude have been numerous, and the productive measures appear to be entirely encircled by them. In no other part of the Province have the geologists, great and small, had occasion to so often revise their knowledge concerning the positions and locations of the coal seams, and in no other part of the continent have they been so often in error. The Great McCulloch Fault that was as real to Pietou coal men as was the old Foord Pit pump-beam, has disappeared, and in fact some authorities are bold enough to tell us that it never has existed. Seams of coal that were surely running in a certain direction, have been discovered going in an altogether different direction. Recent borings have brought very many new and undreamt of seams of coal to light. The recent opening of a coal seam near Thornburn by the Greenwood Coal Co. has shown that our geologists were in error even in that section of the coal field. All these developments have so changed the opinions of men interested in coal mines in Pietou County that it appears to be in order now for some person to guess anew the geological mysteries in the Pietou coal field.

In Cumberland County lie coal beds from which the Joggins and the Springhill mines have won millions of tons and in which millions of tons remain. The seams in the Joggins area occur on one side of a synclinal basin of carboniferous measures, which toward the center of the western is overlapped by the Permian beds. In the western part of this district the seams are thin, except the Joggins, which is about 5 feet thick. The measures in this section dip south-west. In the strata exposed along the shore of Chignecto Bay there are more than 70 coal seams shown. Several of these are about 5½ feet thick. One is 9½ feet, but has shale parting aggregating 2½ feet.

In the Springhill basin which lies about 15 miles east of the Joggins basin, the structure is not so simple, and the strata dip at about 30 degrees. There are a number of seams in this basin some of which are 10 feet thick and have been producing regularly for 40 years.

The following seams of coal have been mined:

Cape Breton County.

Phalen	6 to 8 feet thick
Hub	4 feet 5 inches "
Harbor	5 " 6 " "
Emery	4 " 6 " "
Victoria	6 " 6 " "

Lingan	5 " 6 " "
Block House	8 " 0 " "
MacAulay	5 " 3 " "
South Head	3 " 4 " "
Tracey	5 " 0 " "
Sydney Main	5 " 6 " "
Lloyds	6 " 9 " "
Sydney No. 3	4 " 0 " "
Collins	4 " 9 " "

Victoria County.

New Campbellton	4 " 0 " "
-----------------------	-----------

Inverness County.

Inverness	7 " 0 " "
Port Hood	7 " 0 " "
Mabou	7 " 0 " "
Chimney Corner	6 " 0 " "

Pietou County.

Foord	25 to 40 feet "
Cage	13 " "
Third Seam	12 " "
Stellar do. (coal oil)	4 " "
McGregor	14 " "
Acadia	15 " "
Scott	15 " "
Nos. 4 and 5	8 to 12 " "
Nale	3½ to 7 " "
McBean	6 " "
Marsh	4 " "

Cumberland County.

Springhill No. 2	8 " "
Springhill No. 3	4 to 8 feet 3 inches "
Joggins	4 " 5 " "
Minudie	2 " 9 " "
Hardserable	2 " 9 " "
Chignecto	6 " 0 " "
Kimberley	" " "

During the year ending September, 1916, 65,000,000 bushels of grain were used in the manufacture of liquor. If, says Mr. W. Straker, the secretary of the Northumberland Miners' Association, the Government had stopped this and thrown the grain on the food market, the extraordinary rise in bread prices need not have occurred.

Mr. MacPherson, in replying to a toast proposed by Mr. A. Fisher, High Commissioner for Australia, on behalf of the Imperial Forces, said our sailors had always sailed with clean hands, and if there was to be a clearing from the seas it must be a clearing of the barbarous and treacherous foes who had polluted the ocean with the worst form of crime.

General Pershing, of the United States Army, who is himself a strict teetotaler, says: "If I win no other victory, I mean to win a moral victory for our soldiers."

Professor Bell, the inventor of the telephone, in the course of an address at Liverpool, predicted the day when the flying machine would attain such speed that wings might be unnecessary.

Mr. G. H. Roberts, British Minister of Labor, in an interview last evening gave a message to the workers of the country. He said:—

"I would like at this moment to emphasise the need of national unity. All of us, not excluding the Government, are keenly desirous of an early peace. But in order to attain a peace that will be satisfactory and enduring it is necessary to retain a war-strengthened nation at its highest capacity. If we do not win now, conscription, burdensome armaments, and ever-threatening warfare will be the destiny of future generations. The idea of a League of Nations is acclaimed generally by all peoples who would banish war; but we must be careful not to be misled by specious phrases, for such are calculated to be as illusory as chasing the end of a rainbow. Facing actualities, we must see that a triumph for the Allied peoples is an essential prelude to the establishment of such a league.

I wish to appeal to British workers to show faith in the American nation. That great democracy struggled to avoid entry into the war. That America feeling that democratic government was in danger the world over, could no longer keep out of the war should be proof to every democrat that the Allied cause has been well tested and shown to be right and true.

The shortage of the tonnage may compel drastic reduction in consumption, but at least one advantage will accrue from war experience, inasmuch as we are being taught to develop our own resources and make the nation more self-contained.

At a Jewish demonstration in the London Opera House, Lord Robert Cecil, M. P., said that the recognition of Zionism was probably the greatest step yet taken towards one of the rights for which we were fighting—the right for all nations to govern themselves and work out their own destiny. Mr. H. Samuel, M. P., on behalf of the Jews, thanked the Government for having made it possible for them to say—as they had always said on Passover night—not as a pious and distant wish, but as a near and confident hope—"This year in Jerusalem."

In a prohibition plebiscite at Paisley 19,837 papers were issued. Of these 444 were spoiled, 11,182 votes were cast for prohibition during the war and demobilisation, 2,508 for State purchase, and 1,782 for no change. A plebiscite taken at Lesmahagow resulted in 1,076 votes for prohibition during the war and demobilisation and 32 against. Women gave 586 votes for and nine against, and men 490 for and 23 against.

In Edinburgh and Glasgow recently there has been a marked diminution of drunkenness among women. In Edinburgh, in 1914, 1,961 women were arrested for drunkenness; in 1915, 1,721; in 1916, 1,225. The figures for 1917 are expected to be still lower. In Glasgow the figures for arrests for drunkenness fell from 16.8 per 1,000 in 1913, to 10.7 in 1916. The total figures for that year were 11,735 of which only 3,484 represented women.

If one attempts to trifle with the British food restrictions he does so at his peril. Here are a few of the penalties enacted in one city in January. Brewery company fined \$125.00 for using more sugar than allowed. For acquiring more meat than necessary a woman was fined three dollars and an advocate's fees. A dairy company was mulcted over \$600.00 for selling butter at a price exceeding the maximum. At Birmingham a butcher was fined \$250.00 for selling meat at 40c. when the price should have been 36c. Another butcher was fined \$125.00 for overcharge on mutton. A Welsh woman was fined £25 for feeding seventeen dogs daily with bread and milk. A boy servant stated that in addition to this food, the dogs were given a daily supply of milk, biscuits and horseflesh.

At the inauguration of the "S. O. S." (Save or Starve) week, Sir Arthur Yapp, in reply to a question, stated that his wife did not stand in queues; if she could not get anything she went without. For a fortnight she had not been able to get any tea or butter and in one or two weeks only just a little margarine.—The "S.O.S." week is in connection with the League of National Safety, which now numbers over 3,000,000 members, more than 100,000 having joined during Christmas week.

In reply to an expression of fear that the Government control of industry after the war might continue too long, and that a man might not be able to conduct his business on his former lines of doing as he liked and selling where he pleased, Mr. A. H. Stanley, M. P., said it was the Board of Trade's desire that the control should be brought to an end at the earliest possible moment, and he did not think it would take a very long time before industry could re-establish itself and go on unfettered.

Paraffin has been discovered in two water wells at Ramsay, in Huntingdonshire, and has been successfully used in ordinary oil lamps and for running an oil engine.

At Willesden a policeman, giving evidence against a man charged with drunkenness, said, "His head was fairly sober, but his legs were very drunk."

A. & W. MacKINLAY, LIMITED

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.

HALIFAX, N. S.



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 2560 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 of 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.—88575.

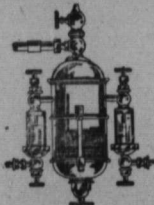
"McSHANE"

(PATENT)

Sight-Feed

LUBRICATORS

Single or Double Feed.



Double Feed

Capacities $\frac{1}{2}$ pt. to 4 pts.

ESPECIALLY ADAPTED FOR THE
HIGHER CLASS OF ENGINES.

T. McAVITY & SONS, Limited.

WHOLESALE AND RETAIL HARDWARE
BRASS AND IRON FOUNDERS.
MINING, MARINE AND MILL SPECIALTIES.

ST. JOHN, N. B.

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. Keele.

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 75. 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.

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

(COMMENCED BUSINESS 1875.)

Head Office Continental Life Building, Toronto

Experts in

SAFETY - ECONOMY - EFFICIENCY

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.

FAULKNER & CO., Hollis St., Halifax, N. S.

Chief Agents for Nova Scotia.

INSPECTORS

W. C. MACDONALD,

Stellarton, N. S.

G. S. MACDONALD,

Stellarton, N. S.

HIGH GRADE RUBBER GOODS.

HOSE--for Air Drills, Pneumatic Tools, Steam, Suction,
Fire Protection, etc.

BELTING--for Power Transmission, Conveying, Elevat-
ing, etc.

PACKINGS of every kind and all Mechanical Rubber
Goods.

Automobile, Carriage, and Truck Tires, Etc., Etc.

Made in Canada by

Gutta Percha & Rubber, Limited, Toronto, Ont.

Maritime Branch: 143 Granville St., Halifax, N. S.

ALLAN, WHYTE & CO'Y

Clyde Patent Wire Rope Works,

Cablegrams "Ropery Rutherglen" **Rutherglen, Glasgow, Scotland.** Codes: Western Union, A B C (44) & 25th Edn
A. L. Liebers 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—

DOMINION BRIDGE COMPANY, LIMITED, MONTREAL, P. Q.

—ENGINEERS, MANUFACTURERS AND ERECTORS OF—
STEEL STRUCTURES,

Railway and Highway Bridges, Buildings, Turntables, Electric and Hand Power Travelling Cranes, Coal and Ore Handling Machinery, Lift Locks and Hydraulic Regulating Gates, Transmission Poles and Towers.

Tank and Plate Work of Every Description.

FORCINGS

GEAR CUTTING AND GENERAL MACHINE WORK.

Marine Boilers and Engines.

Head Office and Works: Lachine, P. Q., Canada.

P. O. Address: Montreal, P. Q. Cable Address, "DOMINION."

Branch Offices and Works: TORONTO, OTTAWA, WINNIPEG.

Sales Offices:

MONTREAL, TORONTO, OTTAWA, WINNIPEG, EDMONTON, REGINA, VANCOUVER.

Large Stock of Structural Material at all Works.

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**

WC

NOVA SCOTIA STEEL & COAL COMPANY,

LIMITED,

MANUFACTURERS OF

 **STEEL** 

MERCHANT BARS,

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

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

The Famous Old Mines "SYDNEY"

COLLIERIES
SYDNEY MINES

COAL

SHIPPING POINT
NORTH SYDNEY,

An Unsurpassed Evaporating Coal

Highest in Carbon, Lowest in Ash.

Unrivalled Facilities for Bunkering at North Sydney.

The Best House Coal.

The Best Steam Coal

QUICK DISPATCH LOADING—BEST RESULTS STEAMING

Two points that always appeal to Shipowners.

—SAILING VESSELS LOADED PROMPTLY.—

For Prices and other Particulars. apply to.

Head Office, New Glasgow, N.S.