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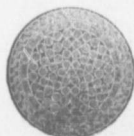
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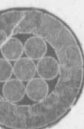
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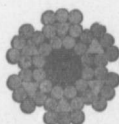
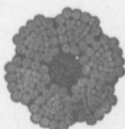
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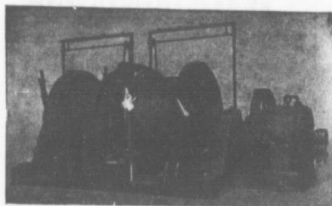
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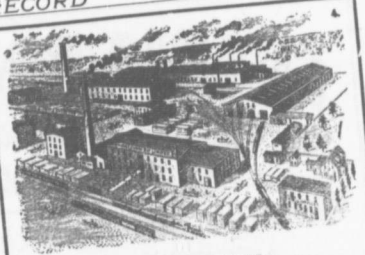
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21 Mixed for Pictou.....	8.30
21 Mixed for Mulgrave.....	11.10
19 Express for Sydney.....	11.15
26 Mixed for Pictou.....	15.35
26 Mixed for Trenton.....	15.10
100 Mixed for New Glasgow.....	15.25
100 Mixed for Halifax and Montreal.....	16.45
21 Express for Pictou.....	15.10
140 Mixed for Pictou Landing.....	9.50
21 Mixed for Hopewell.....	11.15
63 Mixed for New Glasgow.....	21.55
17 Express for New Glasgow.....	21.50
66 Express for Pictou.....	21.55

—TRAINS ARRIVE AT STELLARTON.—

No. 79 Mixed from Trenton.....	6.30
12 Mixed from Hopewell.....	7.00
18 Express from New Glasgow.....	7.35
21 Mixed from Trenton.....	8.00
21 Mixed from New Glasgow.....	10.35
26 Mixed from Pictou.....	10.35
27 Mixed from Mulgrave.....	11.60
26 Mixed from Halifax and St. John.....	15.40
19 Express from Pictou.....	15.05
130 Mixed from Sydney.....	15.10
21 Express from Pictou Landing.....	15.43
21 Mixed from Hopewell.....	19.35
63 Mixed from Pictou.....	21.45
66 Express from New Glasgow.....	21.45
17 Express from St. John and Halifax.....	21.45

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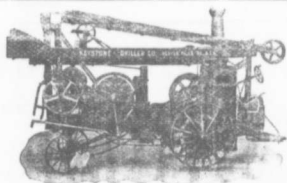
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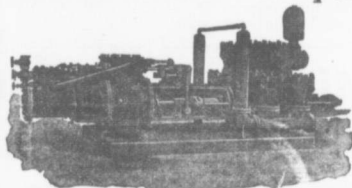
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The Gold District covers over three thousand square miles, and the deposits of coal iron ore, etc., are practically unlimited.

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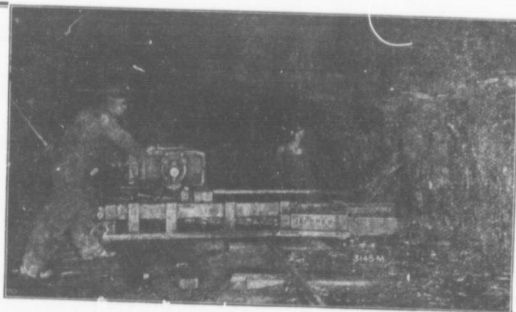
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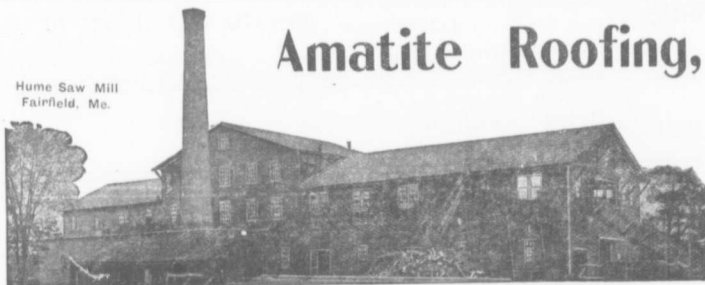
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All smooth surfaced ready roofings require a coat of paint or some other liquid every year or so. The roofing itself merely acts as a base for the paint. If you fail to put it on, your roof doesn't last very long.

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What you spend merely for paint and repairs on other roofs will in a few years pay entirely for an Amatite roof.

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Anyone can lay Amatite. It requires no skilled labor. Nails and liquid cement for laps are furnished free with each roll.

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The....

MARITIME MINING RECORD

Vol. 11, No. 20. Stellarton, N. S., April 28th, 1909. New Series

SELECTED QUESTIONS AND ANSWERS.

(Science and Art of Mining.)

SHOT FIRING.

Q.—Do you consider shot-firing dangerous on a roadway where large quantities of air are passing, and why? What regulations would you propose and adhere to?

A.—In the writer's accepted answer to the former part of the above question which appeared in a late issue, he expressed his opinion by saying that it depended upon what was present in the roadway, beside the large amount of air, as to whether shot-firing was dangerous or not. If dust is present, then shot-firing is dangerous, provided the dust is coal dust. Stone dust is not dangerous so far as is known at present, and experiment has discovered that when the dust contains anything like 50 per cent. stone dust, this is no longer inflammable or explosive. If the roadway contains coal dust it is the writer's opinion that shot-firing is dangerous, and more dangerous with the high velocity than with a sluggish current. The reasons for this are that, with a large amount of air, proportionately more coal dust is suspended in that air, and if the air-way is of moderate size and the velocity of the current is high then more danger still is to be apprehended. Recent explosions prove without a doubt that collieries with large amounts of air suffer worst in a coal dust explosion. The danger attached to shot-firing is, of course, due to the liability to blown out shots, and experience seems to prove that no matter how dependent an official may be, the danger of having a blown-out shot remains.

The chief reason why a blown-out shot is more dangerous in a roadway passing large quantities of air than in one with a poor current is owing to the behaviour of the waves preceding the flame. If we imagine a flame coming from a shot and passing through coal dust with such a velocity as will be imparted to it by the force of the explosion of the charge, we can readily see that with a quick current the flame will be more rapidly passed on to the dust particles than if a sluggish current prevailed. Then, again, the high velocity will cause the path of the explosion to be more favourable, owing to it stirring up the dust more quickly through the medium of the preceding waves, and then adding fuel to the fire, so that with a dusty roadway, a blown-out shot, and a large quantity of air passing, we have everything favorable to a large explosion, and strict attention must be paid to all shot-firing on main roads if we are to prevent such happenings.

The regulations proposed in the Explosives Order of 1906 are in every way conducive to safety, and if

adhered to will undoubtedly lessen the risk which inevitably attends shot-firing. Such regulations are: (1) (b): In all coal mines which are not naturally wet throughout, no explosive, other than a permitted explosive, shall be used in, or taken into any road which is dry and dusty, or any shaft or means of communication therewith. In all such coal mines the use of permitted explosives is prohibited unless (1) the charge is fired by a competent chargeman, termed the shot-firer, and appointed in writing by the owner, agent or manager. Every charge must be placed in a properly drilled shot hole, and must have sufficient stemming, the hole containing a charge of one class of powder, no two explosives being allowed in one hole, and no cartridge must be used unless stamped according to requirements. No charge must be ignited except by electricity, and with a cable not less than 20 yards in length. The shot-firer, before firing, should see that all roads within a radius of 20 yards are free from gas, and unless naturally so, must be thoroughly wet by artificial means. Where shots are fired singly his examination must be made before each shot. The electric apparatus must be provided with a detachable handle or button which must never leave the charge of the shot-firer.

Where shot-firing is being done on any main road which is within 100 yards of the coal face, the shots must not be fired unless all workmen have been removed from all seams communicating with such roads except the fireman engaged in firing the shot, and in addition not more than ten persons who are necessarily employed in attending machinery underground, etc., or in attending to horses, or inspecting the mine, unless a permitted explosive is used with all roadways round the shot within 20 yards radius in a wet state, either naturally or artificially.

Other regulations which the writer is acquainted with are: No stemming other than clay is used in firing any hole, and any shot-rer found stemming with anything inflammable is prosecuted. No shots fired in ripping or on any roadways during working hours, and only when all coal dust has been removed, and the road watered the specified distance. No other method but electric firing should be employed in ripping in any mine, whether dusty or not, while the use of a good class and well tried explosive is absolutely essential. The regulation which the writer considers the very best is to abolish shot-firing during drawing hours wherever possible, and if it must be done at all it should be when all ordinary workmen are out of the mine. In cases where the beam is worked bord and pillar this regulation is hard to carry out, but in all long wall work it is feasible, and should be carried out, but until a really safe explosive is discovered or shot-

firing altogether superseded, the danger from blown-out shots will remain no matter how or where we regulate.

RESCUE STATIONS.

In the prize competition questions in "Science and Art" the following question is asked:—

Give your idea of a central rescue station. Do you consider them advisable. To what radius should they be limited etc.

The first answer published is wholly in favor of these stations; the second which is the best written and more thoughtful of the two, takes the opposite ground. We publish below the article favoring rescue stations, and next issue will publish the article taking an opposite view.

My idea of a Central Rescue Station is that it should be established and under Government control. A fully qualified colliery manager, holding at least the third class certificate (this is the highest class) and medallion of the St. John Ambulance Association, also well acquainted with the construction of various parts of the particular kind of life saving apparatus used in connection with the station, and able to instruct classes in its construction application and use, should be appointed by the Home Secretary to take charge of the station and instruct corps from the various collieries in the construction, application, and use of the various apparatus. The instructor should have under his charge at least four assistants, who may with advantage be in possession of second class certificates of efficiency, also possessing a thorough knowledge of the construction, application, and use of the whole of the apparatus kept at the station, and able to instruct classes in the absence of the person in charge; they should also be in possession of certificates for rendering First Aid.

The station should be in direct telephonic communication with every colliery within its radius, by means of a private wire to each, the telephonic line to be tested daily between the station and colliery, and the test recorded in a book at the station, where at least one assistant should be continuously on duty, in readiness to receive telephonic communications, etc.

I do most certainly think them advisable, and further that suitable buildings should be erected at the earliest possible moment, with the necessary out-buildings, and that the stations should be established and become operative as early as conveniently possible.

Radius to which they should be limited—Owing to the varying local conditions in the different coal-fields, it is very difficult to state a fixed radius in all cases. But I think that in no instance should any station have a radius of more than 20 miles. This would give an area of $40 \times 40 \times .7854 = 1,256.64$ square miles, which, in my opinion, should not be exceeded in any case.

Appliances, etc., necessary to be kept at the Station—In the first place, the station should consist of suitable buildings, such as a large drill hall, for the purpose of training men in the wearing of the life saving apparatus, rescue drill, methods of conveying unconscious persons, etc., and also for the storage of the various life saving appliances, and ambulance appliances.

A large experimental gallery erected so as to pro-

duce as near as possible the conditions of the roadways of a mine, in which noxious gases should be artificially produced and disposed of at will. In this men could be trained in the use of the life saving apparatus under actual working conditions, as we should expect to find them in a mine after an explosion.

A telephone call room, and store room, combined, so that the stores would always be under observation, and kept at practically an equal temperature.

A suitable garage for the motor ambulance, etc.; residential quarters for the staff, and their families.

A powerful motor ambulance large enough to convey the five men, with a sufficient number of life saving apparatus (say 20 sets,) stretchers, medical boxes, splints, bandages, etc., for First Aid. The motor ambulance should have a plainly distinguishable sign, say of a distinctive colour, or by having a large Maltese cross painted upon it, so that the police and general public could easily recognize it and facilitate its free and quick passage along the various roads when required to do so. The power employed to drive this vehicle should be sufficient to generate and maintain a speed of at least 20 miles an hour along the generally rough and heavy roads of a mining district. At least 20 sets of life saving apparatus with the necessary tools and appliances for repairing and recharging the same as required. A sufficient number of stretchers for drill purposes, and use in case of necessity. First Aid boxes, splints, bandages, carron oil, etc. Besides the foregoing, which should be compelled to be kept at the station, it would be necessary to keep a sufficiency of spare parts for repairs, also cylinders for oxygen, with the necessary plant for the making of oxygen, and compressing it into the cylinders, and such other acids and chemicals as may be used with the particular class of life saving apparatus in use at the Station. Readers will also no doubt think of some other appliances of a minor order, such as cells for the electric batteries for the telephone bells, etc.

I would further suggest that one of the assistants went to the makers of the motor ambulance for a course of instruction in driving, and in the execution of travelling repairs, etc. A second to the makers of the life saving apparatus with a view of learning repairs, and the method of recharging, etc., after which such knowledge should be interchanged so that each and every one of the assistants would be able at any time to do any necessary repairs etc., and thus make the station practically independent of outside help.

Some readers may say that I am expecting the assistants to be highly trained in a number of sciences and trades, and so I am. But I have kept in view the fact that at some future date (let us hope it never occurs) perhaps hundreds of lives will be dependent upon their expertness, knowledge, and skill, therefore, I don't think I have asked too much. The person in charge should have entire control and be in charge of all stores, etc.

All these persons should be appointed by the Home Office upon the recommendation of the local district Inspector Mines, be attached to the Civil Service List, and held accountable to the Home Office through the district Inspector of Mines.

Multiplied instances have made it clear that local prosperity and morality have been enhanced by the restriction and suppression of the liquor traffic.

COAL IN THE UNITED STATES.

So far as known, the first mention of the occurrence of coal in the United States, is contained in the Journal of Father Hennepin, a Jesuit missionary, who in 1679 recorded a "cote mine" on Illinois River near the present city of Attana, Ill. Coal was first mined in the Richmond basin, Virginia, about 70 years after Father Hennepin's discovery in Illinois, but the first records of production from the Virginia mine were for the year 1822, when, according to one authority, 54,000 tons were mined. Ohio probably ranks second in priority of production, as coal was discovered there in 1755, but the records of production date back only to 1837. The mining of Anthracite in Pennsylvania began about 1790, Pa., in 1807. Reports of the Anthracite in coal trade are usually begun with the year 1820, when 365 tons (one for each day of the year) were shipped to Philadelphia from the Lehigh region. Before this, however, in 1814, shipment of 22 tons was made from Carbondale, also to Philadelphia. It is probable that the actual production prior to 1820 was between 2,500 and 3,000 tons.

More than 50 per cent. of the total production of coal in the United States from 1814 to the close of 1908, or 3,978 million tons, was mined in Pennsylvania. The Anthracite production in the State amounted to 2,005 million tons, and the Bituminous output was 1,973 million tons. Illinois ranks second, with a total production of 695 million tons, and Ohio third, with 519 million tons. West Virginia, although not coming into existence as a separate State until 1853, ranks fourth, with a total production in 46 years of 473 million tons. Alabama comes fifth, 175 million tons, and Maryland sixth, with 151 million tons.—Coal Trade Journal.

A correspondent of the Truro News writing on "practical Education thus refers to the insane cry for the removal of Norwegian steamers from our coasting trade:

"Thirty-five years ago Nova Scotia as a ship Building centre was without a rival, but times changed, and though Nova Scotia could again have taken the lead in steel ship building, her captains of industry let slip the golden opportunity for the moment, through want of foresight and education and now her ship masters are calling to the Federal Government to protect them from the Norsemen and their own apathy and upset the trade of the country when the whole fault lay on themselves and their want of technical education. How absurd! Let them now begin to seize their opportunity, and like will arise from the ashes of the past, and Bass River, Great Village, Farrisboro and other centres of by-gone shipping glory will again hum with the busy industry of the new material as it is rolled from the mills at Londonderry and elsewhere to manufacture hulls and engines of future grey-hounds of the Atlantic; whilst the water power now running to waste of the many rivers and stream-lets, as well as the tidal energy of the Bay of Fundy, converted into electrical power, will render Nova Scotia industrially and commercially impregnable, provided her citizens at last wake up to the potentialities of her tremendous natural resources, and realize that how-ever brainy they may be, whilst they are inferiorly educated, they will occupy an inferior plane in the society of the nations and states that compose modern industrial society.

One cannot help being struck with the small number of electrical accidents, considering the extent of the applications of electricity in mining, but examining the circumstances from another point of view, it is apparent that a large proportion of the comparatively few accidents that do occur would be prevented by a closer observance of the special rules issued for this particular purpose. That these rules are valuable in preventing risks that might otherwise be present, is vouched for by more than one inspector of mines. On the other hand, pure carelessness has been responsible for a number of accidents, while there have also been some cases in which what might at first sight appear to be carelessness might more accurately be ascribed to ignorance of the danger caused by lack of familiarity with the application of electricity. Improvement may be anticipated in this direction, however, for the inspector emphasises how quietly persons in charge of electrical machinery have been able to grasp its details and its dangers, and have learned to handle it with absolute safety. Taken all round the record is highly creditable, and when reading the collected accounts of such few electrical accidents which have occurred in the hundreds of collieries where electricity plays a part, one must not forget the other side of the account—namely, the number of cases in which possible risk of accident has been avoided by these improved methods of working.

An explanation of the manner in which a soft steel disc, revolving at a high velocity, cuts hard steel has been sought with the aid of a microscopic inspector. The result corroborates the theory that the material acted upon is heated at the place of contact to the fusing point and then brushed away. The high temperature appears to be confined very narrowly to the point of contact, so that a thin gash is cut. The temperature of the revolving disc does not rise so high because of the large surface area of the disc. The part of the disc in contact is continually changing, while the frictional energy is concentrated on a very small area of the material subjected to its action.

Direct-acting steam pumps, both single and duplex, are extravagant in the consumption of fuel even under the best of conditions, and are liable to great additional losses from the use of leaky steam valves and pistons. Careful tests, under favourable conditions, and the data obtained from actual practice, shows the following consumption of steam or fuel per horse power per hour; Triplex power pumps require $1\frac{1}{2}$ to 5 lb. of coal per horse power per hour; small steam pumps 25 lb.; large steam pumps, compounded, 13 lb.; pulsometer pumps, 60 to 70 lb.; injectors and inspirators, 100 lb. per horsepower per hour.

A little consideration would probably satisfy any person that the principle of discovery properly worked out, is the most satisfactory rule yet discovered for the development of the mining industry, and for the proper protection of the prospectors in it. It is one of the oldest principles in mining law, it is a device suggested by miners themselves, and seems to be the best regulation to insure the keeping open of mineral lands for the prospector to work in, and obtain for him the result of his labour.

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RECIPROCITY.

The following extracts from a letter to the Montreal Star should be carefully considered by the Free Coal League. It was suggested some time ago that this one man machine was worked solely in the interests of the railways, and that any seeming interest taken in the general coal consuming public, was merely a sort of side show. According to the Star writer the railways are the last people who should cry for cheap and free coal. So they are. They have got a great deal out of the people of Canada. It is the way of corporations to be like the man in the story who having had his own debt cancelled, went out and furiously demanded payment from a few unlucky souls who unfortunately owed him. The more they get the more they want and the less they give:—

"Apart from any question as to the wisdom of removing the tariff protection from our coal industries at the invitation of our republican neighbors; aside from the consideration of imperilling an industry which is the chief source of government revenue in Nova Scotia; without discussing the advisability of giving up the development of Canadian coal fields, can Canada afford to lose the revenue? The coal duties now amount to nearly three and three-quarter million of dollars and could easily be made five millions, if the duty on anthracite (the removal of which has proved of no benefit to the consumer) were restored. We have no certainty that the removal of the duty on soft coal would lessen the price to the people of Canada, or do other than substitute United States fuel for the Canadian in the St. Lawrence trade. Who are now the principal payers of the coal duty in Canada? The railways.

Can it be truthfully said that the railways are unable to afford to pay this contribution to the national revenue, and need further sacrifice at the hands of the Canadian people? They are now aided beyond all other enterprises. They have received generous assistance from municipalities, provinces and the federal treasury. They have been given magnificent donations from the public domain. They have prospered during the past quarter of a century beyond the dreams of the most sanguine. If they were relieved of the coal duty, would they reduce their rates, or would the amount saved find its way into the pockets of the shareholders who already receive a splendid return on their investments? Will not the already

overtaxed public have to make up the loss of revenue by paying increased duties on other commodities?

Canada has given generous treatment to its two great transcontinental railways and needs every dollar of her present revenue to meet the consequent liabilities incurred. This is a further reason why the invitation of our American neighbors, should be given very careful consideration before we put coal on the free list. We must be careful not to permit parliament to have forced upon it, for the benefit of the few, a charge which would give an added burden to the many who have already contributed too heavily for the benefit of our railways."

The RECORD is pleased to notice that the Government introduced a bill toward the close of the session, to give them power to assist cross cutting in gold mines as well as in the sinking of shafts. In doing this the Government is doing well, and following, though in the wake of other countries. Nova Scotia is beginning to wake up, and some day soon it is to be hoped will be as wide awake as some other countries. We have not yet advanced, so far as assistance to mineral development goes, to the point New Zealand has, as will be seen from the following, taken from a British paper:

"Special attention is being devoted by the Government to developing the mineral resources of the Dominion. Under the direction of Dr Bell the Dominion Geologist, who came from Canada a comprehensive survey is being made of the whole country. An elaborate and illustrated report is being prepared of each section, giving not only an account of the geological features and indications as to what minerals may be sought for with advantage, but also a description of the flora, vegetation, and general physiography. When completed these reports will form a valuable account of the physical geography of the Dominion. The Government are now following up this work in a practical way by sending out small parties of experienced miners to prospect thoroughly localities indicated by the geologist as likely goldfields. The object is to discover new goldfields, and to prospect districts where gold has already been found.

The following is from the Coal Trade Journal. Mr. Finn perhaps exaggerates just a little when he says that the suggested increase on duty on slack would place a burden of several hundred thousand dollars a year on New England consumers. It might increase their burdens by two hundred thousand dollars, which no doubt is an item:

"George H. Finn vice-president of the New England Gas & Coke Co., speaking of the proposition to place a duty of 45 cents a ton on imports of slack, as a recompense for lowering the present duty on coarse Bituminous coal to that figure, is quoted as saying that the charge would place an additional burden of several hundred thousand dollars a year upon New England consumers using Nova Scotia slack. He stated further that a reciprocal clause would probably never be availed of, because there is little likelihood of the Canadian Government removing its duty on coal imports from this country."

- Rubs by Rambler.

Our old friend 'Probus' of the Herald, who has not been with us for many months, having gone into more lucrative employment than that of journalism, is once again to the fore. This time he calls upon the workmen not to nominate candidates from among themselves etc, but to step in and oust the capitalists. Splendid idea. I, like Probus, go heartily in for the abolition of the workingman, and like him would transpose or transfer, him into a capitalist. The idea seems new to 'Probus' whereas I have been an advocate of such a plan for over a quarter of a century. Why should our workmen not become capitalists? It may be that all cannot accumulate capital, but fifty per cent. of them could if so minded. I thought Probus was a socialist, I am glad to think he is not an 'out and outer.' Socialists of this class do not desire to see the workmen accumulate capital by the exercise of thrift etc. The occupation of the talkers among them, they surmise, will be gone the day the workmen make resolve to make a nest egg and add to it. We have socialists of this kind at Sydney Mines, at Glace Bay, and Springhill; great talkers, little doers. These are the Pharisees of the workmen. They put on long faces, use long words, make broad their phylacteries, all on behalf of the workmen, while they will not, if they could, give him a five dollar note to help him out of a hole. They are a miserable lot. 'Probus' however is not one of them for he advocates workmen becoming capitalists. This they can only do by fostering habits of thrift, and thrift is scouted by socialists of the Sydney Mines order. But still Probus has not the full root of the matter in him. He is opposed in a way to the 'assisting' of new industries. His panacea is co-operation. Co-operative societies as a rule are not producers. There is of course an exception to the rule in Britain, where the wholesale co-operative societies are producers and are doing well. What after all is co-operation. In order to form a co-operative society it is necessary to have a number of capitalists, small capitalists it may be yet nevertheless to be called by that name. Is Probus of the opinion that all workmen have sufficient capital to become co-operators. That is not so. If it is not so will Probus be good enough to say what is to be done with the remainder, the vast, I fear, majority. Will not still industries old and new be required in order to give these employment. I believe in co-operation, but I do not believe that it is a panacea that will work a miracle, or that will render unnecessary a continuance of the system under which large industries are carried on.

The Nova Scotia Technical College will, it is expected, be ready for occupancy in August. A prospectus giving information as to the courses to be taught and the fees to be charged has been issued. The college will have a central power

house which will furnish a good plant for efficiency tests in mechanical and electrical engineering. There will be a machine shop, and a number of, not less than five, laboratories. The college is in affiliation with Acadia, Dalhousie, Kings, Mt. Allison, and St. Francis Xavier's universities. It will grant Bachelor of Science degrees, and also certificates to those who show proficiency in one or more classes, who have not taken the full course. The tuition for instruction in any regular department of engineering shall be \$75.00. To those attending special classes the fee for a single course for a half year shall be \$7.50 and for a year \$12.00. There is a free scholarship of the value of \$75.00 for each of the eighteen counties of Nova Scotia except the counties of Halifax and Cape Breton, for which there are two free scholarships each. The college should be a success.

I think it is safe to say that the majority of the people of the province are satisfied with the findings of the majority in the Conciliation Board called for the purpose of determining points at issue between the Dominion Coal Company and certain of their employees who joined a foreign society. The main point in the Board's finding is that which justifies the Coal company in refusing to recognize the alien society. The Board evidently is of opinion, though it does not say so in so many words, that the less Nova Scotia workmen have to do with a society, having its headquarters in a foreign land, and whose officers are clothed with arbitrary powers, the better for the workmen, for their employers, and for the province generally. Of late things have been going in the way of the P. W. A., and if the officers of that society display vigilance, tact and courage, there is no reason why the U. M. W. should not, in a short time, cease to be a menace.

The minority report signed by D. McDougall, the mens representative, holds that there was the most violent sort of discrimination on the part of the Coal company, a discrimination wholly unjustified. Mr. McDougall in his report lays emphasis on one or two points. He asserts that the U. M. W. is not a foreign but an international union. No doubt the U. M. W. would like to be held as such. The point is easy of settlement. The question I would ask is: "What is the society's name?" It is not merely the United Mine Workers but the United Mine Workers of America, and that word 'America' fixes the point that it is metropolitan and not cosmopolitan. As well say that the Sons of Scotland or Sons of England are international in their aims. They are not for they cater only to men of one nation or their descendants. The International Peace Congress would have no meaning if it was termed the International Peace Congress of Germany or of England. The moment it set itself down as claiming to be national it forfeited all claim to being international. And so with the U. M. Ws'. So long as that society is 'of America' so long is it ludicrous for it to put forth the claim to be international.

The head of one of the larger collieries in Nova Scotia wonders if it can be really true that Mr. Dick, before the Conciliation Board really said

what he is credited by Mr. McDougall with saying. According to Mr. McDougall, Mr. Dick in his evidence said he "always sold more coal than the collieries can ship in the open season." The operator referred to thinks this is a rather curious statement, and asks: "If more coal is sold than can be delivered in the open season how is it with the buyers. Presumably they can only secure coal, economically in the open season and if they do not get it then what becomes of them?" And: 'Do the disappointed buyers still keep giving orders to his company,' And: 'What is the object in selling more.' The main question of the operator is: 'If more is being sold than can be supplied, how is it that all the time still more is attempted to be sold; what necessity to enter fields already occupied.' Our reply is that Mr. McDougall has not properly interpreted Mr. Dick's remarks. The probable explanation is that Mr. Dick said he could, not that he did, sell more coal than the collieries could supply in the open season. At this time we wish it could be said that all the collieries could sell as much as they can produce. The fact is that up to this moment more than one company is perturbed about its summer shipments. The companies in Cape Breton County may be at ease; those in the other counties have considerable misgivings. It is to be hoped that prospects will brighten a bit before the open season begins.

I did not notice that it was pleaded, before the Conciliation Board, by the Dominion Coal Co., that the U. M. W's., not being recognized by the operators in the Anthracite regions of the United States, could scarcely expect to be recognized in Nova Scotia, which is not their home. At the late conference between the Anthracite mine owners and Mine Workers, the latter headed by President Lewis withdrew their original demands one by one until only one was left, namely that the U. M. W. leaders be permitted to sign the contracts as officials of the Union. They were willing to surrender anything and everything if only the employers would recognize them. And this the operators would not do, insisting that Mr. Lewis and his colleagues would be recognized as delegates only authorized to negotiate by a considerable number of the mine workers. And yet while the U. M. W's. are not recognized in the Anthracite districts of the U. S., the leaders of the U. M. W's. in Nova Scotia are making a terrible outcry because Gen'l. Manager Duggan will not do what the U. S. operators refused to do. It would be certainly a matter for surprise if not for ridicule if the Dominion Coal Co. would recognize a foreign order which is not recognized in its very own home. Does the U. M. W. think that the Dom. Coal Co. has a softer back bone than the companies in Pa. Does it think that while it cannot bluff in its own birthplace, it can do so in Nova Scotia. Folks will be surprised if it can.

Mr. Bonsfield, of the U. M. W., is telling the C. B. papers that he is not there to create any trouble or discord between the Coal Company and their men, but wishes rather to avoid any trouble, if possible. Well, it is quite possible for Mr. Bonsfield to avoid making trouble. There is an easy

way out. Let him go back whence he came and take that alleged \$20,000 which he put in the bank with him. Mr. Bonsfield is not to be believed when he makes the statement that he is not here to make trouble. Why, that is the one and the only purpose of his visit.

The Sydney Post is holding special services, over the Dominion Coal Co. and the U. M. W. The main petition in its prayer is that the two parties come together again and patch up a peace. The Post says surely in this twentieth century labor and capital can come together. Our contemporary wholly misses the point. The company is not antagonistic to labor. It has recognized labor for years, and that after a big hearted and broad minded way not common to other countries. It has recognized the P. W. A. to the extent of collecting the dues from its members. That surely is a broad recognition. In the U. S. the companies wont recognize the U. M. W. not to speak of collecting the dues. The point is "Shall the Dom. Coal Co. be forced to recognize two unions of the same classes of workmen." Should it be obliged to do so, would it not be of a surety between the devil and the deep sea. Would it not be exposing itself to perpetual and perplexing demands. If the U. M. W. should demand and secure some concession for its members, then the P. W. A., in duty bound, would have to go one better, in order to maintain its prestige, and ask for something bigger than had been granted its opponents And so it would go on. The company durst not recognize two such unions as the P. W. A. and the U. M. W. The company is justified in refusing recognition even if the result be a strike. The company may as well face the music and have it out now, as at any other time. Better a decisive engagement than harassing, indecisive, guerrilla warfare.

An argument in favor of a state owned and operated coal mine in Nova Scotia is that in countries where there are state owned mines the price of coal is cheap. There are no state owned mines in the United States and yet coal is fifty per cent. cheaper in that country than in any other country where the state tries its hand at mining. We are told that the action of the New Zealand government greatly reduced the cost of coal to the consumer. The effect of the operation of the coal mines in that country was not appreciable. Other causes tended to cheapen coal of late years. In their experimental stages most articles cost more to produce than when plans are mastered and systemed perfected. There are no state operated iron ore mines or blast furnaces in the United States, and State competition forcing to a reduction in prices, and yet to day iron rails are about a sixth of the price they yet to day in the experimental stages. So recently as 1851 rails cost \$61.00 per ton in the U. S. now the price is \$28.00. As regards the price of coal Nova Scotia stands in a most favorable position. The only other country in the world where coal is sold at as reasonable rates is the United States. Nova Scotia ought to become a great manufacturing province. We have cheaper coal than in Germany, which of late years has shot to the front, and taken a leading place in manufactures.

THE LABOR PARTY SPLIT.

As for the Independent Labor party, it forms the principal wing of the Labor party, but has a separate organization. It was established at Bradford in 1893, and its first president was Mr. Keir Hardie, who is still its most conspicuous member. The Independent Labor party consists entirely of Socialists, but in conjunction with the Fabians and the chief trade union organizations it helped in 1900 to form the Labor Representation Committee, now known as the Labor party. Of this larger organization it is the distinct driving force. It made attempts on several occasions to have included in the constitution of the Labor party a definite statement of Socialist aim, but was invariably defeated on grounds of policy until the Eighth Annual Conference at Hull in January, last year. At that Conference, however, the following resolution was carried by 514,000 to 469,000 votes:—"That in the opinion of this conference the time has now arrived when the Labor party should have as a definite object the Socialization of the means of production, distribution, and exchange, to be controlled by a Democratic state in the interest of the entire community; and the complete emancipation of labor from the domination of capitalism and landlordism, with the establishment of social and economic equality between the sexes." Following this in October of last year, the British Labor party became affiliated with the International Socialist Congress. This surrender of the trades union movement to Socialism might have been expected to bring all parties more into harmony with the Socialistic theorists. It seems on the contrary to have aroused the organized labor leaders to a declaration of revolt against any supposed intellectual tutelage.

A committee of the U. M. W. recently waited upon the management of the Nova Scotia Steel & Coal Co. in regard to the closed lamp question, and were informed that the P. W. A. had taken this question up with the company, and that in due course that body would be notified of the company's decision in the matter. The company will not consider recognition of more than the one union. It is generally understood that the labor department at Ottawa have been notified simultaneously with the application for a board of conciliation, that negotiations are pending between the P. W. A. and the company respecting the lamp difficulty, and that it is scarcely probable that the department of labor will cede to the request for a conciliation board to deal alone with the question of recognition.

Mining is a dangerous occupation. Accidents at mines will always occur and the number will be in direct proportion to the care taken to prevent them, not only on the part of the employers but of the employees as well. The Mining Act has been enacted with the purpose of lessening accidents or at least minimizing the dangers of their occurrence, and of thus protecting employers as well as the men; and while the Act may have its defects, yet on the whole the advantages of its provisions will depend upon the earnestness of the spirit of the Act rather than of the letter.

The application for a board of conciliation to adjust some matters of a local nature between the United Mine Workers' employees of the Nova Scotia Steel & Coal Company at Sydney Mines and the company is being forwarded to the department of labor at Ottawa to-day. The application is signed by Joseph Heshaw and James Knowles on behalf of the employees.

The application is made on the grounds, first, that an increase of wages be given the contract men, or those paid by the ton, for being compelled to work with safety lamps, which the men claim lessen their earning capacity; second, that the men employed in No. 3 colliery are not afforded all the privileges accorded other workmen, presumably because they are members of the United Mine workers. They cannot have their local grievances adjusted, by a local committee, as the company refuses to recognize their union, or to do business with them as an organization.

The application also states that failing an adjustment, a strike has been authorized by the union, this being one of the requisites of an application for a Board—Glouce Bay Gazette.

Reductions of miners wages are the rule and not the exception in Britain at the present time. In some parts the wages for miners are as low as five shillings a day. Within the past fifteen months the reductions in the North of England amount to nearly twenty per cent. During that time there has been no reduction at the collieries in Nova Scotia for which we should be thankful. But are we. Some people would like to make trouble not knowing when they are well off.

Take off the American and Canadian duties on coal, and then Nova Scotia will have in the New England States a market, so we are told, for millions upon millions of tons. How credulous some people are, or how deceitful. At the present time West Virginia coal is selling f. o. b. Boston, at \$2.30 a ton and in cars at \$3.00. How much money would there be in the New England trade for the Nova Scotia operators at that price. They could not look at it. West Virginia coal, for the time being at any rate, has forced Pennsylvania and Ohio coal out of the Boston market. If West Virginia can drive two neighboring states to the wall, so far as coal shipments are concerned, is it likely she would stand by and allow Nova Scotia to enter and hold the field. It is not to be imagined.

The Board finds that they are justified under the special conditions prevailing in Nova Scotia, in not formally recognizing the U. M. W., inasmuch as it is a foreign organization, having its headquarters and chief executive in Indianapolis, and having in its constitution a clause empowering its executive to proclaim a sympathetic strike, whereby all members of its union in Nova Scotia must stop work, even when there would be no grievance on their part. The Board points out the menace such a power would be in view of the fact that serious inroads are being made into the St. Lawrence market by American operators and this market is the chief market for the Dominion Coal Co.

AROUND THE COLLIERIES.

There are rumors of a change in the staff of the Port Hood Coal Co., but they lack confirmation.

During the first three months of the year on only 76,000 tons of Nova Scotia coal were received at Boston, against 142,000 for the corresponding period last year.

The labor differences at Port Hood have been adjusted to the satisfaction of all parties. The colliery is expected to be run to its full capacity during the ensuing season.

What would have happened had arbitrator McDougall, president of the District U. M. W. not sent in a minority report. Would his ordinary every day occupation have been gone?

Up till the middle of the month the Inverness Ry. & Coal Co. had only engaged one large steamer for the Quebec trade. With the aid of the smaller steamers the company will still have shipping for 30,000 tons a month.

It is said that the Burrell Johnson Co. of Yarmouth, who at the time of the fire were building a steamer for the Federal Government, contemplate, when rebuilding, to make arrangements for carrying on shipbuilding on a large scale.

Over 125,000 tons of bituminous coal and dust were imported from the United States to Quebec in the five months Oct.—Feb., inclusive. The quantity imported in the five months into the lower provinces, anthracite and bituminous was 437,000 tons.

The city of Boston asked bids for some 30,000 tons of bituminous coal. Two lots of Pocohontas of 10,000 tons each were offered at \$3.22 and at \$3.28 delivered in the bins. And this is the market that the Free Coal League thinks should lure Nova Scotia operators.

Examinations of candidates for mine managers, underground managers, overmen, and engineers will be held at Mabou, Sydney, Stellarton, and Springhill on the 1st of June next. Testimonials are to be forwarded to the Deputy Commissioner by the 2nd. May. Candidates will require to hustle.

The U. M. W.'s are great bluffers. It is hinted that Patterson & Bonfield have deposited \$20,000 in the bank for strike purposes. It is not said whether it was in American eagles or greenbacks or whether the two gentlemen brought it in belts, fastened round their wastes, or had it in their stockings.

There are reports of more finds of tungstein. A party searching among the old dump of a gold mine found specimens of the valuable metal which leads to the belief that the metal has frequently been met with and being unrecognized as of value dumped on the heap. It is said the metal has been found in regular vein in Antigonish County.

One of the best written and well informed articles on the Nova Scotia Coal trade, which we have read for a long time, appeared in the London Times from the pen of Mr. Willison of the Toronto News. The article was lucid, calm, and dispassionate, and, to those not familiar with conditions here, informative.

The government estimate to get a royalty from mineral this year of \$640,000. The first six months of the fiscal year are past; the second six months are entered upon with a very big handicap.

The Joggins is working fairly steady. As will be seen from advertisement the Maritime Coal Ry. & Power Co. is calling for more miners. It is said fair wages are now being made at the Joggins.

Mr. F. W. Gray's—of the Dom. Coal Co. staff—articles on the Dom. Coal Co. have been reprinted and put in book form. The book contains 128 pages, there are numerous illustrations, and the letter press is clear. The booklet should prove of interest to coal miners.

The Dominion (gold) Mining Co. Tangier are evidently bent on doing a big business shortly. Some eighty tons of machinery were shipped to their mine recently, which looks as if big development work is to be done. The company has decided to install an electrical plant. It is fully expected that in a short time the mine will be a large producer. The shaft at the mine is 400 feet deep.

One signing himself "Farmer" (?) writing on "coal prices" etc. in the Halifax Herald, concludes his latest, and his latest, epistle by stating that having "the great family and religious journal, "The Farm and Home" and the "Home Companion," he has all the reading that matter he can attend to. This is certainly frank, but the telling was scarcely necessary, as any one taking the trouble to read his letters would at once conclude from the simplicity they displayed that his reading was neither varied nor virile.

A writer in the Herald makes the laughable statement that the two state owned mines in New Zealand were the means of reducing the price of coal by half. The freight of coal to Boston from Nova Scotia is a third of what it was a few years ago. Did the government have a hand in reducing the rate? Transportation rates in New Zealand as in all other countries have undergone wonderful changes.

Notwithstanding the appeals of sundry correspondents of the Halifax Herald it is not thought that the local government contemplate, at any early date, trying its hand at coal mining. It believes there is more profit in quietly drawing a royalty than there is in going into the hazardous occupation of mining. No figures have been forthcoming to warrant entering upon mining with the certainty of financial success.

Alarmist stories of a strike at the Dominion Coal Coy's collieries, have been current for the past ten days. It is possible that some hot headed of the U. M. W. may come out, but if the P. W. A. members continue at work, and they will do so if they are made of anything like the real stuff, there will be no strike. The public have no correct means of judging the relative strength of the two orders in Cape Breton. If Mr. Moffatt hints the P. W. A. has in its lodges nearly 5000 members, there is no possibility of a successful strike on the part of the U. M. W.'s.

AROUND THE COLLIERIES.

Work is fair at the Drummond Colliery and the prospects are not at all discouraging. The steamer chartered by the company to take coal to Montreal is expected to load this week. The Intercolonial will send a little more coal to Montreal this year than last.

The Maritime Exploration Co., a new concern with head quarters in New Glasgow, may supply a long felt want. The company it is understood will do development work on properties where 'finds' of minerals have been made, and act as intermediaries in the sale of such if exploration turns out satisfactory.

The United States coal mines are, comparatively, shallow, and on that account, for one reason, are more cheaply worked. There are only two mines approaching a depth of a thousand feet. In Nova Scotia the depth of the Drummond, the perpendicular depth, is 2000 feet, the Allan Shafts are over 1200, and the mines at Springhill are about 1500, if not over.

The Legislative Council has wisely amended Chapter 104, Revised Statutes, 1900 "Of the payment of medical attendance by employees for companies." This Act has undergone several amendments to satisfy the whims of certain folks with small axes to grind. As the law stood any practitioner could demand from the employers a list of the names of all their employees. This of course was never intended. The Act as introduced in, and passed by the House of Assembly made matters worse. The Legislative Council made an almost new bill and gives the right to demand a list to a medical practitioner who has been accepted by the workmen or portion of them, and the list is not to be of all the employees but only of those signing for him.

The following is a portion of the letter sent by Gen'l Manager Duggan to the warden of Cape Breton Co., ready for a strike:—

"Referring to the recent award of the board of conciliation, called at the instance of the United Mine Workers of America, and the threatened strike of our workmen belonging to the order, certain persons from the United States are now in the town of Glace Bay. It with them a considerable amount of money (\$20,000) of their intention to support the men in the event of a strike, and they, together with local officers of the United Mine Workers of America, are apparently endeavoring to persuade the men to disregard the award of the board and to strike. Should they be successful in declaring a strike, it is the intention of this company to endeavor to work its mines and to demand from the civil authorities protection for its property and for the men willing to continue work. The lodges of the association known as the Provincial Workmen's association have passed resolutions announcing their intention of continuing work, and a large number of workmen, not members of any association, have also stated that they will be willing to work if afforded proper protection."

Some two or three years ago at the request of the N. S. Mining Society the government got an expert named Ricard to examine and report on the gold fields of N. S. The report was never published. Objection was taken to the report on the ground that Mr. Ricard could not intelligently report on ground which he had covered with a hop step and jump. It has come to Mr. Ricard's ears that someones have been finding fault with his report and so he writes to a Canadian paper defending it. Mr. Ricard's report, in short, is not to bank on big gold mining operations in N. S. Time will tell whether Mr. Ricard is right or wrong. There will be something known definitely as to what Nova Scotia can show within the next three years.

At this date the Nova Scotia Steel and Coal Co'y. have at least 120,000 tons of coal banked at its several collieries, and this quantity is ample to supply of its steel plant for fully eighteen months so that in the event of the miners being called out at these collieries the steel plant can still be operated to its full capacity for a year and a half. Should a strike not materialize at present and the U. M. W. campaign be for the next few months confined to peaceful methods, the company can quite readily fill its St. Lawrence contracts from its daily outputs and maintain its banked coal in case of emergency, or for the use of its steel plant should a strike be called at any time during the season. The future can alone determine what effect the condition at Sydney Mines will have on the general situation in the Cape Breton coal district.—Sydney Post, April 26.

Two cases were tried last week in Sydney before Justice Longley. One was at the instance of a member of the U. M. W. named Sutherland, who sought to have it declared that the Grand Council P. W. A. meeting held at Halifax, last fall, was illegal. The judge took the case 'avizandum.' The other was by the officers of the P. W. A. against an Irishman, named Gallagher, who happened to be Secretary or Secy-Treasurer or Treasurer of Drummond Lodge at Sydney Mines, during the fracas between the P. W. A. men and the U. M. W's. Gallagher was a perfervid lover of the foreign order and in his zeal on its behalf held the books of the lodge and refused to give them up. The U. M. W's with that sagacity which characterizes their actions in financial affairs wished to disrupt the P. W. A. and 'divvy up' the fund. Before they could do so they were restrained. And now by the order of the judge the books and all other belongings of Drummond Lodge have to be restored to their rightful owners, the P. W. A. Those conversant with well managed societies, and their affairs, never looked for any other decision than that given. In some parts of Britain or Ireland where unions are not subject to law, members of trades union societies, may, when the notion strikes them, kick up high jinks with the funds and paraphernalia, generally, of the unions. These strangers will learn by and bye that they cannot do these things in Nova Scotia without being called to account.

At a meeting of Unity Lodge, P. W. A. held at Reserve on Saturday night the following resolution was passed:—"Whereas, the members of Unity Lodge have entered into an agreement with the Dominion Coal Co. through the conciliation board for a period of two years from January, 1908. "And Whereas, current reports from the U. M. W. tend to cease the impression of a strike. Be it hereby resolved that Unity Lodge remains true to its obligation and counsels its members to faithfully and honorably carry out said agreement with Dominion Coal." Signed by Malcolm McNeil Secretary. Similar resolutions were passed by Ironside Lodge at No. 2, and Island Lodge at Bridgeport.—Sydney Record.

The U. M. W. followers in Cape Breton use freely the press as a medium for conveying what may be their thoughts and impressions, but which certainly are not facts though they wish the public to accept them as such. For instance it is stated in the press that Messrs Bonsfield and Patterson had left C. B. to visit the Lodges in Westville and Stellarton. It is not known to the residents in either of these towns that the U. M. W. has obtained a footing. There was a report that a lodge had been formed, but there was nothing to it. It is now reported that the gentlemen naming to it. In a now reported that the gentlemen naming to it. It is now reported that the gentlemen naming to it. In a now reported that the gentlemen naming to it.

WANTED.

Fifty Hand Pick Miners.

APPLY TO

Maritime Coal Railway & Power Co.
LIMITED.
JOGGINS, N. S.

PROVINCIAL MINING AND MECHANICAL EXAMINATIONS.

EXAMINATION of Candidates for Mine Managers', Underground Managers', and Overmen's Certificates, and Examination of Candidates for Engineers' Certificates, will be held at Sydney, Maleb, Stellarton, and Springhill—commencing June 1st, 1909, at 10 a. m. All testimonials from Candidates for examination should be forwarded to the office of the Deputy Commissioner of Works and Mines not later than May 2nd, next.

HIRAM DONKIN,

Deputy Commissioner Public Works and Mines.
Halifax, N. S., April 24th, 1909.

Coal Shipments March, 1909 —DOMINION COAL COMPANY, LTD.—

—Output and Shipments for March, 1909—	
	—Shipments—
Dominion No. 1	51 355
Dominion No. 2	47 347
Dominion No. 3	16 754
Dominion No. 4	29 685
Dominion No. 5	50 779
Dominion No. 6	199
Dominion No. 7	11 464
Dominion No. 8	17 463
Dominion No. 9	24 338
	128 937

Shipments Mar.	249 388	128 937
Decrease " 1909	.....	205 027
Shipments 3 mos. 1909	.....	368 713
" " 3 " 1908	.....	598 961
Decrease 3 " 1909	.....	230 248

INVERNESS RAILWAY & COAL CO.

Shipments March 1909	.....	7 021
" " 1908	.....	11 583
Decrease " 1909	.....	4 562
Shipments 3 mos. 1909	.....	26 412
" " 3 " 1908	.....	45 674
Decrease 3 " 1909	.....	19 262

CUMBERLAND RAILWAY AND COAL CO.

Shipments March 1909	.....	35 435
" " 1908	.....	38 650
Decrease " 1909	.....	3 221
Shipments 3 mos. 1909	.....	80 920
" " 3 " 1908	.....	110 071
Decrease 3 " 1909	.....	20 151

NOVA SCOTIA STEEL & COAL CO.

Shipments March 1909	.....	21 474
" " 1908	.....	28 757
Decrease " 1909	.....	7 283
Shipments 3 mos. 1909	.....	81 247
" " 3 " 1908	.....	117 737
Decrease 3 " 1909	.....	36 490

ACADIA COAL CO.

Shipments March 1909	.....	14 828
" " 1908	.....	26 279
Decrease " 1909	.....	11 451
Shipments 3 mos. 1909	.....	57 867
" " 3 " 1908	.....	79 887
Decrease 3 " 1909	.....	22 020

INTERCOLONIAL COAL CO.

Shipments March 1909	.....	22 848
" " 1908	.....	22 790
Increase " 1909	58
Shipments 3 mos. 1909	60 911
" " 3 " 1908	68 125
Decrease 3 " 1909	7 214

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Mohairs
— and —
Lustres

Have Excellent
Wearing Qualities,

WILL NOT COOKE
:: WITH RAIN ::

Best for —
SPRING AND SUMM
SHIRT WAIST SUITS.

All Ladies who wish to look well
wear Priestleys Dress Goods.
Greenshields Limited, Sole Agents.
Montreal, Canada

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BULL DOG TOBACCO,

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

TRY IT!

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—Montreal.—
—W. B. Reynolds, Halifax Representative—

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The Westellar Terra Cotta Company
having taken over the business of the Stellarton,
Brick and Tile Co'y, and having installed more
powerful and modern machinery, WILL BE
PLEASED TO HAVE ENQUIRIES AS TO
PRICE AND QUALITY.

Works —SYLVESTER Head Office—STELLARTON,
GEO. E. MUNRO, Sec'y, WESTVILLE, N. S.

BRATTICE CLOTH
TARRED AIRPROOF
ALSO
FIRE-PROOF.

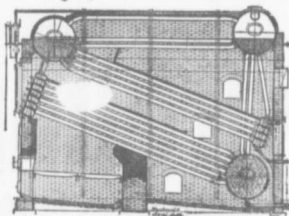
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PERFECT WATER CIRCULATION.
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AMHERST, N. S.

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A. L. Lieben 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 Nova Scotia Steel & Coal Co., Ltd., who use our Ropes largely, write that one of our Haulage Ropes at Wabana Mines **has been in service for over 5 years**, drawing over 1,700,000 tons in that time and is still good for further considerable service.

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GREENING WIRE ROPE,
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 Extra Tensile Strength for Heavy Wo k.
 Use Greening's Rope Grease for Lubrication.

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CANADA FOR THE CANADIANS!
WIRE "DOMINION" ROPE
 For Everybody.
 —PATRONIZE HOME INDUSTRY—
 The DOMINION **WIRE ROPE** CO., Ltd., Montreal

INVERNESS IMPERIAL COAL

INVERNESS RAILWAY and COAL COY.
Inverness, Cape Breton.

Miners and Shippers of INVERNESS (BROAD COVE)

Screened, Run-of-Mine Slack.

—First Class both for Domestic and Steam Purposes.—

BUNKER COAL Shipping facilities of the most modern type at Port Hastings, C. B. for prompt loading of all classes and sizes of Steamers and sailing vessels.

Apply to Inverness Railway and Coal Company, Inverness, Cape Breton; Wm. Petrie, Agent, Port Hasting, C. B.

INVERNESS RY. & COAL CO'Y
 Time Table No. 26, Taking effect at 1 a. m. OCT 11TH., 1908.

EASTBOUND		STATIONS.	WESTBOUND	
Read Down	No. 52 No. 54		Read Up	No. 51 No. 53
A. M.	P. M.		A. M.	P. M.
L 10 45	L 3 20	P TUPPER JUNCTION	A 10 35	A 3 25
S 10 51	S 3 25	PORT HAWKESBURY	S 10 27	S 3 27
A 11 10	A 4 00	PORT HASTINGS	L 10 07	L 3 10
	L 4 15		A 10 02	
	F 4 30	TROY	F 9 52	
	S 4 35	CRENSHAW	S 9 39	
	F 4 50	JUDIQUE	F 9 22	
	S 5 05	CRAIGMOIR	S 9 05	
	F 5 20	ATHERINES FORD	F 8 48	
	A 5 35		L 8 32	
	S 5 50	PORT HOOD	A 8 27	
	S 6 10		S 8 10	
	S 6 25	GLENCOE	S 7 45	
	S 6 40	MABOU	S 7 20	
	S 6 55	GLENDYVE	S 7 05	
	S 7 10	BLACK RIVER	F 7 15	
	S 7 25	STRATHLORE	S 7 05	
	A 7 15	INVERNESS	L 6 48	
	P. M.		A. M.	

Trains make close connections at Pt. Tupper Jet. with I. C. R. passenger trains, excepting the Maritime Express.

MABOU & GULF COAL COMPANY, L'T'D.

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MABOU DIAMOND COAL.

Burns and Works like Bituminous;

Looks and Lasts Like Anthracite;

IT HAS NO EQUAL.

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 and General Offices

MABOU. CAPE BRETON.

North Atlantic Collieries, LIMITED.

Mines and Loading Piers, Port Morien, C. B.
Miners and Shippers of **Cow Bay Basin Coals.**

EXCELLENT FUEL FOR
Domestic, Steamship
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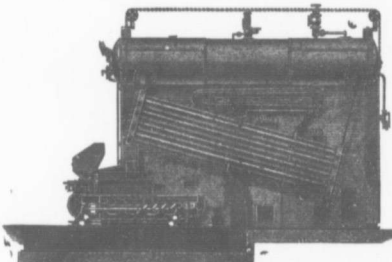
Recent analysis of the coals in several of the seams in this Basin—which will be persistently developed—show them to be remarkably low in ash and sulphur.

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SUPERHEATER AND IMPROVED MECHANICAL STOKER.

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Coal Handling Machinery
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"EVERYTHING IN AIR MACHINERY."**

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ALL LOSS OR DAMAGE TO PROPERTY
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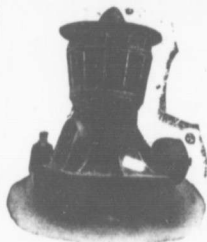
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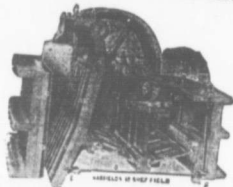
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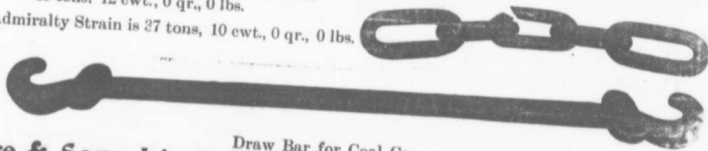
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Gas Coal and Coal for Household Use

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12 Collieries
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OUTPUT:
3,500,000 tons Yearly

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

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NOS 1, 2 AND 3.

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FRESH MINED SPRINGHILL COAL

... ANALYSIS ...

	NO 1	NO 2	NO 3
Moisture.....	2.02 %	1.41 %	2.71 %
Volatile combustible matter	18.94 %	27.93 %	28.41 %
Fixed Carbon.....	75.29 %	67.47 %	64.69 %
Ash.....	3.75 %	3.19 %	4.19 %
	100.00	100.00	100.00
Sulphur.....	1.15 %	58 %	.79 %

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BEST COAL FOR
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BEST COAL FOR
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IN Lots To Suit Purchasers.

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