

MARITIME
MINING RECORD
 AND
COAL AND METAL TRADES JOURNAL
 Dr. R. Bell
 Genl. Mgr. & Dept.

Cumberland. * Pictou. * Cape Breton. * Inverness

New Series Vol. 11 No. 14 JANUARY 27th. 1909 STELLARTON, N. S.

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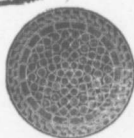
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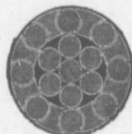
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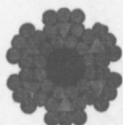
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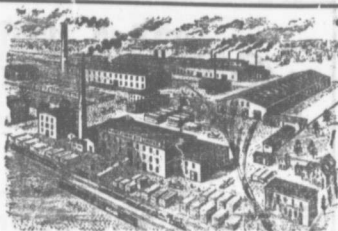
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55 Mixed from New Glasgow	10.05
79 Mixed from Pictou	10.45
56 Mixed from Miramichi	12.35
12 Express from Halifax and St. John's	13.00
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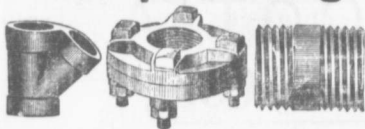
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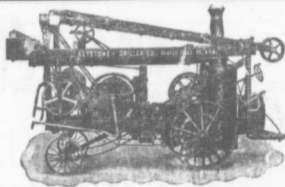
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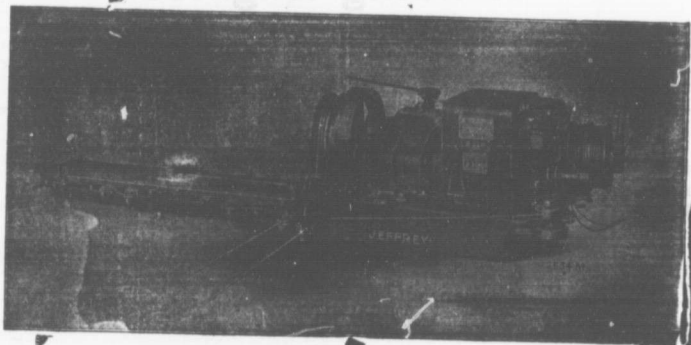
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To No. ...

MARITIME MINING RECORD

Vol. 11, No. 14. Stellarton, N. S., Jan. 27th. 1908. New Series

"We have had serious disputes with the P. W. A., but we have always found that organization loyal to any agreement and we must be equally loyal to our contract with it."

SELECTED QUESTIONS AND ANSWERS.

PRACTICAL WORKING.

Q.—What precautions would you take to ensure the greatest amount of safety in (a) long wall working; (b) pillar and stall?

A.—There are various items which require careful attention to produce the maximum amount of safety under either of the above conditions.

In (A) long wall, these may be classed:—

1.—Nature and condition of roof. This should be noted, and the method of timbering adopted to suit the circumstances.

2.—A plentiful supply of suitable timber should be kept at a reasonable distance from the face, ready for use when required.

3.—The timber should be withdrawn from the waste in a systematic manner, and dog and chain or other suitable appliances provided for that purpose.

4.—Specified distances should be worked to in the setting of timber, according to circumstances. Chocks should be set at regular intervals. Packs should also be built between the gateways, as well as the gate packs, in the advancing method.

5.—The ventilation should be examined, and all airways, doors, brattice-sheets, stoppings, overcasts, etc. The air should be carefully tested for fire-damp.

6.—If any shots have to be fired this should be done in accordance with the Mines Act on the use of Explosives in Mines.

7.—If the workings are known to be approaching any abandoned workings the C. M. R. A. should be consulted in its reference to such.

8.—Many other small items require attention to produce safety for all persons employed. These are haulage arrangements, man holes, safety appliances for run-away tubs, signals, and electric cables, if any.

(B) Pillar and Stall.—The items which will require attention other than those mentioned for (A) are:—

1.—That the pillars left to support the superiacumbent strata are not too small, for if too small they will be greatly crushed, and the roads take a lot of maintaining.

2.—Special attention must be paid to the work at the face when removing the pillars. The timbering should have careful attention, and the withdrawing of the timber from where the coal has been extracted.

3.—The ventilating of the pillars when being removed

should be carefully attended to, as the ventilation in this class of work is more complicated than in long wall. Under either of the conditions I would use safety lamps, selecting a good type. Where circumstances are favorable for the coal cutter being used I should adopt it, especially in long wall work, where it is a special favourite. By using the coal-cutting machine a systematic method of timbering has to be adopted, which has the effect of producing:—

1.—More safety in removing the coal thus undermined.

2.—A greater output per man is produced.

WINDING ARRANGEMENTS.

Q.—What arrangements are required for safety in winding and landing minerals from a deep shaft?

A.—The arrangements that are necessary for safety in winding and landing minerals from a deep shaft are as follows:

A good pair of reliable engines with equally good steam generating plant. So much of the working parts of these engines as is practically possible should be visible to the engineman working the same, so that, being directly under his observation he will be able to detect any fault or failure in any such part should this occur at any time.

The engineman should be steady, sober, sound and physically fit for his work; should know his duties and all signals as used in his department. He should make the inspections carefully as required by the General and Special Rules, and attend to and see that all the General and Special Rules applying to his department are strictly observed. He should be a trustworthy person, and not less than 22 years of age.

Machinery.—The drum should be provided with a flange to prevent the rope from slipping and should also be provided with a powerful and reliable foot brake. There should be a good and reliable indicator to indicate to the engineman the position of the cages in the shaft, also to ring a warning bell when the ascending cage is 20 yards from the surface, and this indicator should be directly in view of the engineman. The ropes should be of the best quality and strength, examined at least once every shift, tested, re-capped, and renewed as deemed necessary according to fitness and the work done.

In addition to the foot brake above mentioned, I also recommend the visor which works automatically from

the drum shaft. This is really a steam brake which comes into action if the engine runs away, and when the drum is 10 to 15 revolutions from the end of its wind, or if the engine start the wrong way the cage, on being raised two or three yards above its usual height (according to setting) catches a projecting lever which, by a wire rope connection, brings the same steam brake into action.

A good and reliable safety hook such as Ormerod's should be fixed between the rope capping and the bridge chain in case other appliances fail, which are scarcely expected to do. The pulleys should be sufficiently large in diameter and have a groove large and even to allow the rope to lie evenly and prevent grinding.

Signals.—Two good methods of signalling should be provided for every important winding shaft,

- 1.—The electric signal, which is quicker and handiest, with a signal stroke bell at each end.
- 2.—In case of failure through excessive dampness, accident, or repairs, the ordinary wire rope and rafter signal.

Each of the above methods should give clear, definite, and distinct signals. A good code of signals should be employed, printed, and posted at the bottom and top of the shaft, also in the engine house, and should be thoroughly understood by the hookers-on, banksman and minder.

Guides.—To facilitate quick winding the wire rope guides are preferable, as by their use less friction is produced than by other methods. Six ropes in all, two on the outside of each cage and two hanging between the cages to prevent the striking when passing.

Banking.—I do not consider it necessary in every case to employ keeps for the cage to rest upon when banking, as this depends upon the load, and the number of decks employed, but if a very heavy load is raised and only one deck, then I would advise keeps.

Cages.—Each cage should be provided with a good reliable form of catch, one at each end to keep the tubs in during transit, and when winding persons; a cover overhead, a hand-rail, and some form of fence at each end to prevent men or boys falling out.

These suggestions, along with careful attendants, should ensure safety in winding from a deep shaft.

PRACTICAL MINING.

Q.—How can a level be driven in fiery measures without the use of explosives?

A.—The above question is undoubtedly based on the dangers resulting from the use of explosives in fiery measures, such as stated in the above question. As to the question of driving a level without the use of explosives there is one particular method generally adopted. This is in the form of an improved method of wedging, known as 'mechanical wedges' or multiple wedges.

In this method a number of holes are drilled into the measures ready for the fixing of the multiple wedge. When the requisite number of holes have been drilled the most suitable part to start wedging is selected, and the 'plug' inserted in the hole ready for the driving in of the 'feathers'. I may say that the 'liners' and 'feathers' are the only appliances in the system along with the machine for drilling. They are both made of steel, the liner being made with a lip edge, so as to fit tight against the measures. The end nearest the lip is of a less thickness than that placed at the back of the hole, and this allows for the entrance

of the 'feathers.' The 'feathers' are made in a wedge like fashion, being much larger than the ordinary wedge. After the liner has been inserted, two 'feathers' are placed in the hole and driven as far as possible. If the desired effect is not obtained a third one is inserted and driven until the above effect is obtained.

When a level is being driven by the above method several sets of multiple wedges should be provided, to allow sets of men to be working at a time breaking into the measures. The above method has certain advantages and disadvantages.

Advantages: 1.—No danger from the ignition of gas or coal dust by shot-firing, as the latter is done away with.

2.—No accidents from shot-firing, such as attend the ordinary course of shot-firing.

Disadvantages: 1.—Increased expense in driving level, due to less ground being got out in the same time, even with more men.

2.—The time taken to drive the level is much longer, and if it is necessary to finish the work at an early date this is of considerable importance.

3.—More labor has to be expended with much less results than done by the use of some of the permitted explosives.

It has been suggested by some that the use of explosives be prohibited in mines, but to my mind this would greatly cripple the coal mining industry, for we find that where explosives are used the seams are worked cheaper than if no explosive were allowed to be used. We have, of course, the fact to face that a great many of the largest of the explosions that have taken place in this country have been due to shot-firing in conjunction with 'coal dust'. But even with this, if explosives were entirely done away with in coal mines many mines would be prevented from using them which could be considered to have suitable conditions for allowing the use of explosives if the C. M. R. A. and Special Rules are carried out, provided that all shot-firing is prohibited on main haulage roads, or other roads containing accumulations of coal dust; or former to be entirely prohibited, and in the latter case subject to specified conditions.

Take as an example a drift driven in hard rock for several hundred yards, and the conditions are such that no coal dust is present at the entrance, and it is free from gas. Of course, as regards the latter it may make its appearance when little expected, but in the case of coal dust we are aware that none is present at the entrance of the level, and none will be produced in driving the level. Even if some coal dust was present in the stone dust would bring about a neutralising effect, so that under such conditions it is only reasonable to suppose that it would be safe to use a 'permitted' explosive, combined with the proper carrying out of the Explosives Order, etc.

GAS TESTING.

Q.—Describe the Pieler and Clowes methods of testing for gas.

A.—Owing to the inability of the modern safety lamps to detect minute quantities of fire-damp, several this difficulty, and it is claimed for some that they can detect as little as 1% of gas.

In 1882 Herr Pieler invented a lamp for burning

alcohol, and it may be termed a large Davy lamp, being somewhat similar to the Davy in construction.

The air is admitted to the lamp through a tube which is protected by wire gauze discs placed in the alcohol vessel in a vertical position.

Over the burner is placed a short chimney, by which the length of flame is fixed before testing for the fire-damp. The lamp is taken into pure air and the flame adjusted till it is level with the top of the chimney, it is then taken into the atmosphere to be tested, and if gas be present the flame rises higher than the top of the chimney, according to the percentage of gas present; even when $\frac{1}{2}$ per cent. of gas is present the flame rises over one inch above the chimney.

This lamp is probably the best gas tester yet invented, but for colliery work is not very suitable. Its disadvantages are:

1.—When the alcohol vessel becomes slightly heated, either by radiation of heat from the flame or by the high temperature of the mine, the alcohol takes the form of a vapour; this latter is highly explosive when mixed with air.

2.—It is a very sensitive lamp, and is easily extinguished if not used very carefully.

In the invention of Dr. Clowes hydrogen gas is used to provide a flame.

For the purpose of testing for fire-damp an ordinary safety lamp may be used, providing it has a hole through the oil vessel. Through this hole a steel tube is inserted, the latter being connected to a steel cylinder on the outside of the lamp, the steel tube coming on a level with the oil flame. Inside the steel cylinder compressed hydrogen is kept, and is regulated by a screw valve. Inside the lamp a scale is fixed by which the height of the flame is ascertained. When about to test for gas the hydrogen is turned on and becomes ignited by the oil flame; the latter is then turned out, and the height of the hydrogen flame regulated by regulating the flow of hydrogen by the valve. The height of the 'cap' produced is then read off on the scale, and the percentage of fire-damp then ascertained.

The oil wick can then be turned up and ignited by the hydrogen flame, the latter then being extinguished by cutting off the supply of hydrogen. The cylinder containing the latter can be taken off and carried in the pocket, and the lamp used for ordinary purposes.

LORD ROSEBERRY AND THRIFT.

Any subject that Lord Roseberry tackles he makes interesting. One might think that the subject of thrift was almost threadbare. A perusal of the following, part of a speech delivered lately at the annual meeting of the Edinburgh Savings Bank, affords proof that the last word has not been said:

"From the financial point of view, my definition of thrift shall be this—getting full value for your money and looking ahead. Of course the historical definition which has given so much comfort and encouragement to thousands is that of Mr. Micawber:—'Annual income £20; annual expenditure £19 19s. 6d.—result, happiness; annual income, £20; annual expenditure, £20 os. 6d.—result, misery.' (Laughter.) I suppose that is practically true. It means in reality, that a man who is befriended with the world, to however small a degree, occupies a very different position relatively to

the rest of the world from the man who is behindhand with it to however small an extent. Of course, from the financial point of view, we know very well that thrift is the foundation of all opulence, all prosperity, and even of those colossal fortunes we hear of in America but never realize in this country. There is, however, a particular distinction between thrift and avarice, Mr. Micawber expressly, as it seems to me, excludes avarice, because the accumulation of sixpence would certainly not satisfy any dream of avarice. Avarice is not generous, and, after all, it is thrifty people who are generous. All the great philanthropists and all the great financial benefactors of their species of whom we have record have been thrifty men. But I pass from the financial value of thrift to that which results in the formation of character. Many people when they read speeches about thrift say, 'How can the poor be thrifty seeing that they have nothing to be thrifty upon?' But the exact reverse of the case is the truth. Strangely enough, in your report there is a proof of this. From the experience of Edinburgh and Glasgow and Manchester it has been found that periods of stress, and not periods of prosperity, are the most favourable to thrift, as shown by the deposits in the savings banks. The eighteenth century was perhaps the time of Scotland's direst poverty and at any rate as compared with other countries in the world was the period of the greatest thrift. One hundred and twenty years ago there were probably no more than two or three hundred thousand pounds of current coin in the whole of Scotland, and when you compare that with fourteen millions of deposits in the two savings banks of Edinburgh and Glasgow you may arrive at some computation of what the difference of prosperity is between Scotland to-day, and Scotland of that day. In those days we read that the one great object of a Scottish peasant was thrift, not so much for the sake of a livelihood as for the sake of amassing enough money to obtain a decent funeral. These patient, self-denying people amassed enough for what, after all, is the most insignificant event in our lives. Only yesterday I lit upon an English caricature of the date 1780. It represents a Scotsman only half clad, with the shoes over one shoulder, and an essential part of his dress over the other, barefooted on his way to England. Underneath it is written this:—

Though Sawney's breeks are on his shoulders,

So plainly seen by all beholders;

Half-starved, half-naked, but one shoe,

Yet by and by he'll ride o'er you.

(Laughter.) Yes, our great-grandfathers did great things in those days on a mess of pottage. They helped to mould the Empire; they maintained their poor without legal compulsion. They sought nothing from external help, and they laid, in their nakedness and their barrenness, the foundations of the prosperity which reigns in Scotland at the present moment. (Hear, hear.) Some of the poorest in our country would shrink from the manner of life which was endured by some of the noblest in those days. We should not care to share their privations, but we should like to be convinced that we possess their independence, self-reliance, and self-respect. I regard that as the greatest blessing resulting out of thrift and independence of character. If I wanted to train up a child to be thrifty I should teach him to abhor waste. I do not mean waste of money. That cures itself, because very soon there is no money to waste. (Laughter.) But waste of material, waste of something that is useful though you cannot represent it in money value to the waster. . . . I do think it is wise that those who have the governance of our affairs should remember that great nations and great empires

"In my opinion the recognition of the U. M. W. would be prejudicial to the welfare of the community here." G. H. D.

only live as long as they are thrifty, and, though I do not pretend to preach thrift from an exalted standpoint, I do beg those who are present and those outside these walls whom my words may reach to remember that thrift is the surest and the strongest foundation of an empire, can long exist that disregards it. (Cheers.)

MINING DISASTERS.

When one reads of mine horror after mine horror following in steady succession in the United States, he is inclined while praising the work being done by the U. S. Geological Survey not to wonder that some such work was full account of the manner in which the experiments are being carried out. These accounts have been condensed as follows. We are indebted as we quote to the Montreal Witness:

"The ever recurring fatalities in coal mines caused by explosions, the origin of which has been not infrequently remote, emphasises the gravity of the recent report of some United States scientists employed by the Government, who assert that they have proved by experiment that most of the so-called safety explosives in the coal mines of the country are veritable men-killers. Every time, they say, a miner touches a match to a fuse he takes his life in his hands, and the records show that hundreds have been sacrificed by these supposed non-dangerous agents. Coal dust has been found to be nearly as explosive as dynamite, and many heretofore mysterious mine disasters are now laid to this apparently harmless material. These two important discoveries and others of almost equal value to coal miners have been made by a few men, who heroically risked their lives in experimenting. They carried on their experiments in a mammoth boiler-plate cylinder at Pittsburgh, reproducing the exact conditions existing in the lower levels of the coal mines in the great metal tube which is six feet in diameter and a hundred feet long. Already a great deal of information has been gained relating to the deadly fire damp, to gases, and the effects of various kinds of blasting powders. In a big glass encased, airtight room, adjoining the boiler plate tube, the geological survey men are making exhaustive experiments in rescue work. The room contains tubes, such as are found in a coal mine, and in these narrow ways are placed various obstructions, similar to those that are found in a mine after it has been wrecked by an explosion. Dummies, weighing 150 to 200 pounds, which are supposed to represent asphyxiated miners are placed at intervals along the tunnels, and the miniature mine is then filled with deadly gases and a rescue corps is sent in. The rescuers are provided with helmets carrying a supply of oxygen, and remain in the tunnels for intervals of two hours, removing obstructions, picking up the dummies and carrying them out on stretchers, and performing all the duties that ordinarily fall to the lot of a rescue party after a mine disaster.

Besides that, this make-believe rescue corps has gained practical experience, for the other day it was called upon to help real miners in genuine peril. One of the mines near Pittsburg caught fire and the geological survey men hurried to the scene. One miner was saved

from death. He was taken out of the tunnel in an unconscious condition by one of the helmeted rescuers, received oxygen treatment and recovered. One half of the large building in which the model coal mine is built is constructed as an auditorium, and several hundred miners and operators are able to watch the rescue drill through the big glass windows which separate them from the gas filled chambers. All this is most admirable work, but according to the New York 'Tribune', the matter which the scientists themselves consider the most important and far reaching, is the fact that they have been able definitely to show that coal dust is an explosive of equal danger with the deadly fire-damp. This has been a mooted question among mining engineers and miners alike, both insisting that it is impossible to explode coal dust unless there is gas present. That the coal dust will explode in a mine where there is no gas has been repeatedly shown to several hundred operators and miners at the testing station. The experts at the station are now bending their energies to discovering some method by which this dust can be prevented from being a serious menace to the miners. Experiments in wetting it have been going on for some time, but unless it is the fact that the coal dust does not ignite when there is a great amount of moisture in it. It is expected that these experiments will have the desired result, suits both of saving life and effecting a saving of the waste in mining coal. These are the true heroes of the modern life."

SPONTANEOUS FIRES

There is still much mystery in connection with spontaneous fires underground and on board ships. We are still in need of information as to what is the nature of the physical or chemical property of a particular coal which renders it liable to spontaneous combustion. The rapid raise of temperature which takes place where radiation is prevented can be simply shown by covering an electric light with material such as fine coal, when it will be found that in the course of an hour or so the heat is so great that the glass of the lamp melts and collapses. It was shown by Henry F. Hall, inspector of mines for Liverpool district, that timber will ignite in an atmosphere at a lower temperature than coal or cannel; that partially decayed timber such as old pit props, ignites most readily of all. It is possible that fires underground would not be so frequent if care were taken to clear out all old or used timber from seams where heating takes place.

Catalog 67 D of the Jeffrey Manufacturing Co. treats fully on all points of Rubber Belt Conveying Machinery.

The receipts of Nova Scotia coal at Boston for last year, according to figures in the Coal Trade Journal, were 370,709—presumably short tons—against 545,652 for 1907. That is, there was a decrease in N. S. shipments for 1908 of 175,000 tons, and yet they speak of the growing market in the New England States.

"THE AMERICANS ARE OFFERING THE VERY KEENEST COMPETITION IN OUR MONETREAL MARKET AND THE COMPANY ARE NOW HAVING DIFFICULTY IN MAKING SALES THAT THEY HAD NOT PREVIOUSLY EXPERIENCED." **G. H. DUGGAN**

MARITIME MINING RECORD.

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STELLARTON, N. S.

JAN. 27



- Rubs by Rambler.

Why should Canadian coal going into the United States pay a higher duty than U. S. coal coming into Canada. The Canadian duty on American bituminous coal is 53 cents a short ton. The American duty on Canadian coal is 67 cents a long ton. Why should Canada in the matter of coal duty give the Americans a discount of some eleven per cent. while we have to pay without any discount whatever. It is time for a change.

Again, why should the Canadian Customs officials be so generous to importers of American coals, in allowing coal that passed through a 14 or 14 inch screen to come in as dust at a minimum duty of fourteen cents. The tariff regulation bearing on dust is that it has passed through a half inch screen. The Customs officers have been blind to this provision and allowed better than 'Nuts' to come in as dust. This must be remedied at once.

A Cape Breton paper applies the term 'pirates' to the sympathisers with the U. M. W. who are trying to appropriate the property of the P. W. A. Some people think they were better styled 'sneak thieves'. The main object apparently of the U. M. W's. is not to promote the welfare of the colliery workers of C. B. but to rob and kill the P. W. A., a society that has done great things for our mine workers.

Mr. Rhodes, M. P. for Cumberland County, has written to a branch of the U. M. W. asking the member's pleasure in reference to the Lemieux Act. Do they want it wholly repealed or do they wish it amended. This is rather a novel way of doing business and knocks the referendum, and representative government, which were thought to be modern, out of shape. It strikes one, all the same, that Mr. Rhodes should have the least little bit of a mind of his own. If the Act is good let him support it, if bad, condemn it. It strikes one too, as a little peculiar that a Canadian M. P. should write to the members of a foreign society for their opinion on a purely Canadian statute.

I see some people talk as if, at the late session of the British parliament, an eight hour day bill had been passed. What the Miner's Federation wanted was an eight hour bank to bank bill, what they got was an eight hour, in the mine, bill, or say an nine hour day, bank to bank. As the bill left the commons at the end of five years, an eight hour day, bank to bank, was to come in force, but the Lords tore out this clause making provision for a further reduction in five years. The commons accepted this amendment rather, I suppose, than lose the bill.

Should much importance be attached to the communication of one, who in writing on labor matters, and what is for the good of the miners of Nova Scotia, has't any proper conception of the number of those engaged in coal mining. He gives the number of employees at the coal mines of the province, as nine thousand, and bases an argument on this number. There are five thousand employees on the Mainland collieries alone. The Post correspondent is out over 75 per cent. in his estimate of the number of employees. Of the total number of employees the Dom. Coal Co. has NOT a majority.

He who said, 'God is on the side of the strongest battalion' was considered, perhaps is yet, an authority. But he was not an infallible one. On what has hitherto been considered excellent authority it is said, 'Nor the battle to the strong.' It must never be forgotten that the justice of a cause stands for something. Were it not so 'labor' would be in a pitiable condition to-day. If strength alone was the guarantee of success, of any cause, then Scotland would not stand where she stands to-day, nor would the United States. The P. W. A. is certainly not so strong in numbers as the U. M. W., but then it has those things making for real strength, which the foreign order lacks. The battle is not always, by any means, to the strong. Labor is not 'strong', in the sense of having a majority in the ranks, and yet it is making wonderful progress—Why?

A so called leader of the U. M. W. in C. B. told the press, in reference to Mr. Duggan's statement that the company could only recognize the P. W. A., that the U. M. W's. would ask for nothing unreasonable but only a fair show. "If that was refused them then they depended upon public opinion to see that they got it, and he did'nt think the Coal company could refuse to bow before that force." If the C. B. miners had not a home organization, superior in every respect to the foreign, to which they could carry all their complaints and have real grievances remedied, it is possible the great public might have sympathy with them, no matter what the name of their organization. But the public, before they will back those who have joined a foreign order, must have far better reasons presented to them than have yet been offered. The public of Nova Scotia are patriotic and will not readily take to its bestowing its benedictions on a foreign order.

Some time ago I asserted that strangers, those who had spent but a short time in Nova Scotia, were attempting to dominate and rule the P. W. A. lodges at Sydney Mines. One of these, in the press, scouted the idea that a few strangers could lord it over so large a number. Well there are always a number easily led by glib speakers, are unthinking ones. The revolt against the P. W. A. at Sydney Mines is led by strangers, who know little and care less about the great good the provincial society has accomplished. The better and more intelligent element among the workers at Sydney Mines are strongly attached to the P. W. A. The weaker element, for the time have been led away by certain ill balanced minds, who draw their religion from Blatchford and their morals from Marx.

Shall the I. C. R. be transferred or leased to some one of the three great railway concerns, or shall it be run by a commission, are questions exciting a good deal of attention at the present time. The Upper Provinces' people might have no objection to a transference pure and simple, but in this case it is not what Ontario may think that should be given effect to, but what the people of Nova Scotia desire. I have long had an opinion as to what should be done. Take the I. C. R. out of politics if it is at all possible. The I. C. R. can never be made to pay as presently managed, but under strictly, uncontrolled business management it could be made if not to pay then to square accounts, and that without any increase in freight or passenger rates. So long as the I. C. R. is used as a sort of 'pension', so long as any one anxious for a job can get it, so long as a subordinate can cheek back to a boss and fulfil an order or not as he pleases, so long as a boss is powerless to enforce discipline, just so long it may not be expected to make of the I. C. R. a paying concern. Let it be the peoples railway and not the politicians and I think all will be well.

A correspondent of a C. B. paper, a checkweighman, I believe, and a strong sympathizer with the foreign U. M. W. says that there are good laws on the statute books—relating presumably to mining and mine workers—which are not enforced and the non-enforcement is laid to the doors of the P. W. A., and is due to the weakness of that Society. The statement is a bald one. Name the laws that are not enforced. I hold that the good laws are fairly well enforced, though I regret to say that on occasions they are evaded. And why? Not to any weakness in the P. W. A. but to the callousness and indifference of the workmen, or officials. Has the P. W. A. been too weak to enforce the law in reference to checkweighmen? I think not. My opinion is that at the present time these workmen's officials are better off than in any other English speaking country in the world. If this be questioned, I call upon the correspondent who signs himself, M. Mullins, weighmen from the British Coal Mines Regulation Act, and also those from the statutes of Ohio, Illinois, and Pa., and then I will side by side publish the Nova Scotia Regulations, and if these are not superior then I will make a full confession of lack of knowledge on some points.

When they wish to show up or expose statements, made by some one, which are not consistent, the newspapers have what they call the 'deadly parallel' column. Let me use this style of exposition for the occasion. Two exponents at New Aberdeen, C. B., of U. M. W. beliefs and doings are J. S. Sutherland and Michael Mullins. I place side by side a statement made by each, and ask if the one is reasonably reconcilable with the other:

Mr. J. S. Sutherland
". . . and does believe that this Association has failed 'completely' to carry out the objects for which it was organized."

"There is good legislation here by the P. W. A. Good legislation even if not enforced is a partial good, therefore the Association cannot have 'completely failed'."

Mr. Michael Mullins
". . . I reply to these gentlemen and say there is good legislation placed on our statute books but it is practically a 'dead letter' etc.

Referring to some remarks of Judge McGillivray in connection with the Moffatt persecution, a correspondent of a C. B. paper writes: ". . . the Judge considered the P. W. A. a very peaceful and law abiding Association. If so I would like to ask Judge McGillivray and the Mining Record (—on behalf of the M. R. many thanks—) Why did the government of our country on two occasions send out the militia against the P. W. A. strikers'?"

In answer—Judge McGillivray will excuse me for taking the job out of his hands—may I ask the correspondent to which government he refers, the municipal, provincial or federal? May I say of the correspondent's reference to these two incidents, what John Doull, ex Dominion Coal Co.'s clerk, presently, lawyer in larva, future Lafleur, said of some figures of mine, which went back to 1889, they are old, very old. The two occasions on which the military were called out, in connection with a strike at the mines in N. S., were in 1880 and in 1882, more than a quarter of a century ago. On the first occasion, for sure, and I think also on the second, the Conservatives held office at Halifax and Ottawa. I am not aware that any liberal workingman, or other, blamed either government. They had more sense. They knew the governments had nothing to do with it. The way it was done, in the first case, was something like this. The manager of the Drummond was afraid of something; the two gentlemen who pathized with his fears and signed a document. This document was carried to the county town, and looked upon as calling for action. A squad of raw recruits was sent to Westville. The 'boys' captured these allowing them to stay in Westville a few days on parole. It was grand sport for the boys. In the Lingan case I think Sydney magistrates did the trick. The boys in this case too captured the soldiers and had a jolly good time together. The strikers, and these are the ones who should have felt aggrieved if a wrong had been done, blamed no government. They looked upon the incidents as a splendid advertisement of the good behaviour and of the loyalty of the members of the P. W. A. If the correspondent of the C. B. paper knew a little more about the laws of his own land, he might have less longing to be subject to a foreign organization.

"THE WHOLE CAMPAIGN IS A DIRECT ATTACK ON THE CANADIAN COAL TRADE WHICH HAS ALWAYS BEEN REGARDED WITH JEALOUS EYES BY THE UNITED STATES OPERATORS." G. H. DUGGAN.

If a headline was in order then this paragraph would have as such "A most wonderful preamble," while as sub heading would follow "After the true American fashion". Any candid reader having mastered its meaning will echo the headline—after the fashion of the Irish echo which when bidden "Good morning" replied 'good morning 'Sir'—and say "Most wonderful indeed." It does not matter whether the resolution was put together by the man with the lowland Scottish name, or by he who descended from the kilts, the fact remains that the preamble is brimful of celtic humor. From first to last the 'resolution' is one great Irish 'bull'. Here it is as printed in the C. B. papers:

"Whereas, Ironsides Lodge, No. 56 is a subordinate lodge of the Provincial Workmen's Association; and

Whereas, such Association was organized for the purpose of securing shorter hours of labor, as high a rate of wages as the trade allows, to prevent all illegal stoppages at pay offices, to extend necessary support to all brothers forced out of employment by any unjust cause and in general to improve the conditions of workmen and to maintain the independence and prestige which workmen are justly entitled to; and

Whereas, this Association has been organized for 30 years, and to-day we find nothing but unrest, dissatisfaction, and in fact almost revolution within its ranks; and

Whereas, this subordinate lodge has time and again expressed its dissatisfaction, and does believe that this Association has failed completely to carry out the objects for which it was organized;

Therefore resolved that we, the members of Ironsides Lodge, assembled here in regular meeting held this 9th. day of January, 1909, do order our brother now acting as Guardian, to surrender to our Grand Master, Stephen B. McNeil, the Charter granted to us by the Provincial Workmen's Association, and thereby sever our connection with the said Association;

Therefore Resolved, providing this resolution be adopted that our secretary notify our manager of such action and also give notice to the public through the Sydney Daily Post and Daily Record. Being regularly moved and seconded, and put to vote, the vote was 101 for and 5 against; motion declared carried."

The best joke is in the latter part of the last "Whereas" . . . this subordinate lodge . . . does believe that this Association has failed completely to carry out the objects for which it was organized". Isn't it all wonderful.

Let us have a survey.

In 'whereas' No. 2 the objects of the Association—are but indifferently stated—to this I may refer later on, while there is given as an 'object' that which cannot be found in the constitution or bye laws. When the writer of the resolution says that an object of the P. W. A. is to 'maintain the independence and prestige which workmen are entitled to' he is talking through his nose in true

American fashion. The maintaining of prestige to which workmen are entitled may be one of the peculiar objects of the U. M. W., but the framers of the P. W. A. constitution were not American mules. The originators of the P. W. A. were not possessed with the idea that they could maintain the independence and prestige of workmen; they set out with the intention of making the miners of Nova Scotia, its members, more independent, and in this they have succeeded vastly beyond expectations. A new born babe has no 'prestige'. As it grows in stature it may secure prestige—a name and a place. The miners of Nova Scotia had no prestige in 1879, therefore none to maintain. The Association had no 'prestige' in 1879 to-day its influence is felt in hut and hall. And this prestige the P. W. A. is now striving to maintain, while the U. M. W.'s, are trying their best to make the name of miner a term of reproach as it almost was thirty years ago.

Summarized the objects of the P. W. A. are as follows: To improve the condition of workmen, 1, Materially; 2, Morally; 3, Mentally; 4, Socially; 5, Physically; 6, Shorter hours of labor; 7, Obtain remedial legislation; 8, Seeing to enforcement of laws; 9, Secure just weight; 10, Abolish illegal stoppages; 11, Compensation for injuries, and 12, To extend support to brothers.

These are the main objects of the P. W. A. and will any member or any ex-member of any renegade point out one object in the list in which it has been unsuccessful. It cannot be done.

1. Are workmen better off materially?

Yes, they are very much better housed, clothed and fed. Their surroundings,—environments—are vastly superior to those of the members of the U. M. W.'s. A visit to the U. S. mining hamlets makes this plain.

2. How do they stand morally?

Ask those who lived in mining districts thirty-five years ago. Nova Scotia miners stand to-day on a higher moral plane than the Slavs and the Huns, and the Poles, who constitute so large a proportion of the U. M. W. membership.

3. Have the minds of the workers been improved?

Witness the army of men from the ranks who are filling important positions, and the many ready to step into positions as they open, all of whom by application to study, have undergone rigid examinations and secured certificates of competency.

4. Have they risen socially?

Ask Mayor Wilson of Springhill; Hale of Westville; Mahoney of Stellarton; Stewart of Sydney Mines, and perhaps others, all former workers in mining districts. Thirty years ago a miner was looked upon as 'impossible' for a lower position, let alone the chief place in a synagogue. Who ever heard previous to the advent of the P. W. A. of a former miner as Stipendiary or of former miners as Gillies and Paul as M. P.'s. Will either of these say they would have been where they are but for the P. W. A. We have town clerks, deputy inspectors, and space fails to tell of

others who owe their advancement to the compelling, propelling, educational, stimulating influence of the P. W. A.

5. And physically?

Yes and physically too. Just place a hundred of our miners alongside of an equal number of any other class, and they will be found as clear of eye, as strong of arm, as stout of limb, as full in chest, and as broad of shoulder.

6. Have hours been shortened?

Yes, considerably. A majority of the members are perfectly satisfied with the present hours.

7. What about improved legislation?

The improvements and amendments to the old laws, and the new laws secured would fill a volume and will need a special article for their relation. Why, in the matter of beneficial legislation the P. W. A. is as far ahead of the U. M. W. as a Canadian, especially a Westerner, considers himself ahead of a heathen Chinese.

8, 9, and 10. Laws are fairly well enforced; miners get full weight; there are no illegal stoppages.

11. Compensation for injuries.

There is in Nova Scotia an Employers Liability Act, almost a copy of the British. Nova Scotia is in this respect 28 years and some months ahead of the U. M. W. and the United States. Let me quote from an article in this month's Atlantic Monthly—an American magazine. After giving a sketch of and favorably commenting upon the British Act of 1907 the writer says:

"We naturally enquire what has been done in the United States meantime. We must answer, practically nothing. It is quite within limit to say that in spite of much patchwork and piecemeal legislation, we have, as yet, hardly reached the level of the English Law of 1880, a law which statesmen of to-day unite in deeming practically worthless, or to say that in this regard we are far behind every civilized country in Europe, incomparably behind Germany. The United States stands alone among the civilized nations of the world in adhering to the law of negligence as a solution of the problem of industrial accidents. . . . In this country we are still dominated by the dogmas pronounced by Judge Shaw two generations ago."

And this is the sort of 'promised land' to which certain poor deluded miners of Nova Scotia are journeying, via. the U. M. W. And then what about the Mutual Relief Societies? Have they anything in Great Britain or Ireland, or in the United States of America, anything like approaching to them. Not in the slightest. In the matter of the Relief societies alone the P. W. A. has got more for its members than all that the U. M. W. ever got for its followers.

"Mr. Michael Mullins, U. M. W. solicitor, would like—through the Glace Bay Gazette—to ask Judge McGillivray 'at what time he became so favorably impressed with the P. W. A. Was it when this Association applied for an act of incorporation, or was it when he saw the miners of Nova Scotia were determined to form themselves in a more powerful union?' Begging the Judge's pardon for interfering in his private affairs, I make answer to Mr. Mullins, At neither period. His conversion from non union to union princip-

les occurred in the middle or later eighties, after his fears as to the intentions of the society had been allayed and when he was convinced that they were groundless. The question of Mr. Mullins seems innocent enough, but it carries with it does so from a sinister or unworthy motive. Parlor Car Conductor McRae, who used to run between Halifax and Sydney was asked by a lady: "Does this train stop at the Straits of Canco?" Came the reply sharp and clear, "God help us all if she does'nt," and God help labor if the majority don't stop, think, and turn from the opinions they formerly held regarding it. If Judge McGillivray has changed his views regarding labor organizations is it not a great triumph for the P. W. A. I do not know that I was ever more shocked than when I heard two clergymen say they would not support a certain man running for a petty office on the ground that at a time long ago he had 'gone over the hay'. Was I wrong, if forgetting the cloth, as I asked, not meekly: "You preach repentance and a new life, dont you,"

"Yes"

"Then you preach a lie, on your own confession" And so what are we to say of a processesed union man who sneers at one who now is favorable to unions where once he had his doubts. In the British Parliament last year there were several measures passed all favorable to labor. Did the labor members compel their passage? No. The government could have rejected all legislation favorable to labor, even if every Laborite, every Conservative and every Nationalist in the House were combined to secure its passage. And why were measures passed in 1908 which would have been summarily thrown out thirty years ago. Simply because mens opinions have undergone a change. When the P. W. A. came upon the stage a nigh thirty years ago a vast majority of the people looked upon it askance, and with shakings of the head. If labor is now catered to, it is because of an altered view point.

.. ..

A correspondent of the Sydney Post makes it perfectly clear that the chief object sought, by those favoring the U. M. W., is to be in a position to do battle with the Deminion Coal Co., should occasion arise. The correspondent imagines that industrial disputes, these days, are settled by the length of the purse of the contestants; the one with the longest winning. That is a mistaken idea. The great force to-day, in the settlement of labor disputes, is public opinion. There are some who delight in borrowing trouble from tomorrow, heedless of the hint that it is time enough to bid the devil good morning when you have managed wonderfully well in the past. It has procured for its members greater benefits than any organization in any English speaking country. The miners of Nova Scotia are better housed, better paid and more justly treated than those in the land across the line, and in proof of this I hope shortly to be able to produce figures gathered by one who is perhaps the foremost social reformer in our land.

AROUND THE COLLIERIES.

There are still some good men in Springhill who are glad that the star of the P. W. A. is still in the ascendant.

Springhill still keeps up its reputation for steady work, but absenteeism is still the thorn in the side of the management and a potent factor in lessening the output.

There is once again talk of development of coal areas at St. Rose, Inverness Co., and of the extension of the Inverness Railway. The Record hopes something is on foot.

The new Tunnel seam in No. 2 mine, Springhill, is fulfilling all expectations and is being rapidly opened out. The new seam is known as No. 1, and the coal is of just that quality.

At a meeting of the Scottish Federation of Miners held end of December, the chairman expressed the hope that in 1909 they would not have to fight for the minimum wage of six shillings per day.

The Record has it, on excellent authority that unsuccessful efforts were made by the Dominion Coal Co., to find cases of want among its workmen at the biggest colliery, near the biggest town in Cape Breton.

The Eight Hour Day Commission began its sittings in Truro Monday, To-day it proceeds to Glace Bay, and from thence to Sydney Mines, and thereafter to Inverness, dropping off at Port Hood on the return trip. After meeting in Pictou Co. the Commission will go to Cumberland, Yarmouth and other countries. Dr. McGill is Chairman.

The coming civic elections in Springhill are bringing out some queer talent—and other things—to the surface. The Socialists are out in force and have five men in the field, viz: Charles Perch, Edward Bradley, Calvin Ward, Thos. Blinkhorn, and Duncan Blue, all very decent fellows individually, but looked upon in the aggregate as Socialists they are not taken very seriously.

Ten days ago the larger coal operators had a conference with Premier Murray and several other members of the Executive Council on the matter of extended markets for coal so that the colliery workers would receive increased employment. The conference was a success, and before navigation opens it is likely that some steps will be taken in the direction indicated and desired.

It is understood that to the cool request of the U. M. W. lodge at Springhill for recognition the manager replied that he could not treat with them meantime as he understands the affairs of Pioneer Lodge are in law. The C. B. papers say the General Manager was waited upon by a committee of the U. M. W.'s. He kindly told them that John Moffatt he knew, and the P. W. A. he knew, but who the dickens was Mullins and who were the U. M. W. He of course recognized the union, the leading union in C. B. the P. W. A., which he understood was still carrying on business at the old stand, and was likely to continue to do so.

Open lights in the Nova Scotia mines are going out of fashion. The Maritime Coal Ry. & Power Co. have taken open lights out of their Chignecto colliery and substituted safety lamps, and thus the good work goes on surely if slowly.

The Cumb. Ry. & Coal Co. railway men have recently organized a lodge of the Canadian Union of Railway men. These men recognize the fact that there is brain and ability enough in Canada to look after Canadian interests.

It is said that 'papers' have been served on the men who, it is said, tried illegally to dispose of the P. W. A. property, with the intention of reconveying it to the U. M. W. officials. Certainly if there is any money in the business the Yankees will go for it. They may however be headed off in this instance. The property involved is a valuable corner lot, and buildings containing a commodious hall, assembly rooms, and large store, with \$2700 in cash, so it is said.

It is said a Local Assembly of the U. M. W. of America has been organized in Springhill, but there is considerable doubt as to the legality of the society as applied to Nova Scotia. Great dissatisfaction as to the proposed amount of the assessments per month; a strong feeling among the men that they have been fooled into joining a society that is actually unpopular, that will be of little avail though expensive; and a move, looked at from a National standpoint, unpatriotic and certainly UNCANADIAN.

It is wonderful. Passengers between Stellarton and Westville on the Tram line, on reaching the company's crossing at the Asphalt, are perhaps unaware that at this point if they could see down through the ground a distance of say 2,000 feet perpendicular they would find men busily employed at the face of the Drummond slopes. Just fancy the distance from the Drummond colliery to the Asphalt driven through coal all the way. Where is the slope going to end? Will it cross the river or what.

Anthracite coal is admitted free into Canada. There are no means of knowing the quantity of anthracite dust that came into the province of Quebec last year, but it is proposed that much more came in than is generally supposed. This coal is not of itself good enough for steam purposes. It needs a lighter, and as stated in last issue Nova Scotia coal is used for that purpose, in the proportion of one of Nova Scotia coal to three or four of anthracite dust. This means that thousands of tons of coal are being lost to the Nova Scotia operators. It was never intended that American anthracite dust should come into competition with Nova Scotia coal in the St. Lawrence market. It is quite possible that the government may be asked to prohibit the importation of anthracite dust, or asked to admit no coal of less than a certain size, prohibit coal that has passed through a screen of more than three quarter inch or perhaps an inch mesh.

AROUND THE COLLIERIES.

"IT IS THE DUTY OF EVERY PATRIOTIC CANADIAN TO USE HIS BEST ENDEAVOR TO PRESERVE TO THE PEOPLE OF CANADA THAT WHICH JUSTLY BELONGS TO THEM." **C. H. Duggan.**

The Sec'y. of a newly formed branch of the U. M. W.'s. in a review of the situation says: "It is reported that there are one or two traitors in the camp trying to make mischief. This no doubt refers to P. W. A. men who do not believe that the U. M. W. was or ever will be half as good as the P. W. A. for Nova Scotia miners. But instead of the 'one or two' who are holding aloof being traitors is it not really all the other way. Are not the one or two the real loyalists and all the others the traitors. That is what a majority of people in Nova Scotia would be inclined to say.

A great society altogether is the U. M. W. of America. Great in being greatly behind the times, far away in the wake of Nova Scotia. The delegates to the Ohio branch of the great U. M. W.'s, after, by resolution, declaring that the employment of impractical miners, chiefly foreigners, caused a larger per centage of mine explosions, raised the initiation fee of unskilled miners, not that rich? Why should the U. M. W. be accessories, assume responsibility for mine explosions to their ranks? Why not do as is done in Nova Scotia, keep them out of the mine? If there are any unskilled miners in Nova Scotia the blame lies wholly with the mens examiners, and not with any one else. The miners boards can and do all 'unskilled' miners out of the pits. What a great society the U. M. W. and what a paradise for our N. S. miners, Aint she.

The face of friend Floyd of the Drummond colliery is these days wearing a smile that the whole force of the Geological Department at Ottawa can't rub off; and the other officials, notably Malcolm Blue, are going about as jauntily as if great good fortune had befallen them. And so it has. Why should they not be proud of the realization of their hopes. Though the McCulloch Brook bogie was haunted in their faces, they still hop drummond lift driven in the already it and rejoice. Six months ago the famous, or infamous, fault was shifted back for the fifth time. This was to be the final shifting; the spot was definitely indicated where the fault would begin and the coal end. The 'fault' is still in hiding and the coal is still at the face. The slope is now down a distance of 7,870 feet far enough for another lift (the eighteenth) of say 500 feet. The coal at the face bears no look of disturbance. The is bright and clear, and of eleven feet in height. This is good news to the Intercolonial Coal Co's. shareholders, and especially good news to the citizens of Westville, as it means extended life to the Drummond mine.

The Dominion Coal Co. began banking at the Central station on the 4th. of January, ten days sooner than at first intended.

Some time ago the Free Lance, Westville, said of the MINING RECORD, that it should be in the hands of all the miners in Pictou County and now comes the lively Inverness News giving it as its opinion that every miner in Inverness should read the RECORD. It is very nice of our contemporaries to say so, as the RECORD did not go fishing for compliments.

On Sunday morning the 17th. it was discovered that a large flow of water was coming out No. 1 level, East side of the Mabou mine. Mr. McGilvray, who was employed by the government in keeping the mine free of water, pending some financial arrangement of the company, summoned Johnston on looking at a consultation. Mr. Johnston on looking at the flow of water, some 1000 to 1500 gallons a minute, concluded that the pumps were not big enough to cope with it. Indeed one of the pumps was at that time submerged. This level has been standing for over a year. At the time it was driven it was perfectly dry, and indeed was quite dry until this accident happened. The level is in about 520 feet from the slope; a balance is driven up 120 feet, but no borings were taken off. The distance from the mouth of the slope to the level is 1400 feet, and the cover is supposed to be 478 feet. Attempts were made to get in the level far enough to see where the water, which was salt as ocean water, was coming from. Owing to falls and to the rate the water was coming out this was rendered impossible. The opinion is that the water is coming through a fissure in the rock. Why it did not flow before this is the puzzle. This section of the mine had several falls the time the mine was in the hands of a receiver, and no attempt was made to clean it up and retimber it. Mr. Anderson from the Mines Office and Mr. A. McKay, agent for the company, came to Mabou the end of last week, when it was decided to save everything that could be saved and let the mine fill up. Mabou coal is, perhaps the best for metallurgical purposes in the province, and it is a great pity to see a valuable seam destroyed owing to incapable and extravagant management on the part of those at the head of affairs. Mabou is now closed at the head of will take a strong company to put life into it again. The property, however, may be worth the expenditure of a large sum,

AROUND THE COLLIERIES.

According to the national auditors the U. M. W. of America had a balance on hand 1st of December, 1908 of \$591,739. Some Cape Breton writers say that in event of a strike in Nova Scotia the strikers would be paid eight dollars per week. Let it be supposed that the U. M. W. secure 5,000 of the more than 15,000 employees at the mines, and pay them in event of a strike the sum mentioned. It would not take many months to wipe out the entire balance on hand. The P. W. A. has much more money proportionately to its numbers than the U. M. W.—if money is of any great consequence.

Judge Laurence's decision in the injunction taken by Grand Council restraining the officials of Equity Lodge from assigning or selling the property of the Lodge is as follows:

"Substantially this action is brought to determine the question whether a subordinate Lodge (incorporated) of the P. W. A. can dissolve itself and by resolution divide up its property among its individual members independently of the rights of the General Council or Provincial Lodges of the Order. This question I think may usefully at the present time be made the subject of a trial and in the meantime the property should be preserved in statu quo. The restraining order will therefore be continued until the term of the Supreme Court for trial of Civil Cases at Sydney in April next and until the trial of the action at that term, and the action is ordered to be then tried.

"The addition of other parties and amendment of the statement of claim may be necessary but this is for the parties of an independent appeal."

EFFECTS OF COMPRESSED AIR.

Dr. Leonard Hill, F. R. S., of the London Hospital Medical College, states that some interesting experiments are being made at the college in subjecting pigs to the effects of compressed air in a large steel chamber, such as is used in caissons for tunnelling work and in diving bells. The object is to find out the best method of decompressing safely the workmen who are exposed to compressed air in such caissons and diving bells. 'I may add' said Dr. Hill, 'that the pigs are being exposed in the same chamber, and at the same pressure, as I myself and Mr. Greenwood (of the Medical College) exposed ourselves in some experiments carried out a year ago. We are endeavoring to discover which is the right way of decompressing. If the decompression is carried out too rapidly the pig are killed by bubbles of air being set free in their blood, just as many divers and caisson workers have been killed in the past. It is of great importance that a safe rate of decompression for human beings should be found out. The pig is chosen because in size, weight, and length of body it resembles a man.'

Greater and better than Keir Hardie by a long way, is a Mr. A. Henderson, the leader of the British labor party. I commend the closing sentence in the following paragraph to those socialists in C. B. who think temperance should not be referred to in a trades union meetings:—"Mr. Arthur Henderson, M. P., chairman of the Labor Party, speaking at Barnsley, said that during the last few years there had been developed among all sections of the community a social consciousness absolutely unparalleled in history, and it was nowhere more apparent than among the working classes. That was a fact full of hope and encouragement, but men were exposed to the danger of supposing that social progress was always to be assisted from without. Workmen who used to complain of the churches that they were concerned more with preparing people for another world than with the whole programme of human life, were now imitating the fault of the churches in a different form, by centering their efforts upon change of environment, and ignoring the need for improvement of individual character. If they could create a democracy free from the demoralizing influences of intemperance and gambling, all other social evils would be easy of solution.

The British Miners Eight hour Bill, or at least what is left of the original Eight Hours Bill, has now been passed, and there is some jubilation on the part of some of the older miners and leaders, many of whom had given up hope that anything would be done for State regulation of miners' hours during their day. There was a lot of indignation against the House of Lords for deleting the clause which at the end of five years from the commencement of the Act would further limit the working hours by half or three quarters of an hour, by taking out one of the windings of the men. It should be remembered however, that it was in the House of Commons itself that some of the most objectionable clauses were inserted in the bill—clauses which even the coal-masters who were opposing the measure never expected to get in. The main features of the Act may be briefly put as follows:—

It takes effect in all counties outside of Durham and Northumberland on 1st July 1909. In those two counties it comes into operation in 1910.

It provides for eight hours winding of coal, excluding the time taken to lower and raise the workmen, it will not be an offence against the Act if the workmen are kept in the mine for more than eight hours in the event of their doing special work.

The manager of a mine may increase the hours by one hour per day for sixty days in the year.

In the event of war or any grave circumstances, the King may, for the time being, abrogate the Act.

It is admitted by the U. M. W. officials that W. Virginia, Alabama and Colorado are unorganized States. Well why are they unorganized. Are not these three States part of the United States. Why so solicitous to organize in Nova Scotia, so long as there is so big a field in the U. S. Why?

Where rotary tipplers are used, the coal should not be dumped from the car on to a screen without some means of preventing the coal being thrown forward. This practice of dashing the coal on the screen is not only detrimental to the coal itself, but lessens the efficiency of the screening. Instead of having the rotary tippler revolve toward the screen, it should be arranged to turn backward, a circular plate being provided to receive the coal. The tippler should also be provided with a hood which accurately fits close to the circular extension of the screen, so that the coal is first received in the hood and gradually discharged upon the screen. It is also most important that the tippler should turn as slowly as possible. Many tipplers revolve too quickly, with the result that they stand several seconds between each car; it is better to occupy more time in turning and thus insure less breakage. The best plan is to install an extra tippler rather than lower the selling price of the coal by having one tippler working at its maximum capacity and handling the coal roughly.—S. and A. of mining.

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Synopsis of Canadian North-West. Homestead Regulations.

ANY even numbered section of Dominion Lands in Manitoba or the Northwest Provinces, excepting 2 and 36, not reserved, may be homesteaded by any person the sole head of a family, or male over 18 years of age, to the extent of one-quarter section, of 160 acres, more or less. Application for entry must be made in person by the applicant at a Dominion Lands Agency or Sub-agency for the district in which the land is situated. Entry by proxy may, however, be made at an Agency on certain conditions by the father, mother, son, daughter, brother or sister of an intending homesteader.

An application for entry or cancellation made personally at any Sub-agency office may be wired to the Agent by the Sub-agent, at the expense of such application into have priority and the land will be held until the necessary papers to complete the transaction are received by mail.

In case of "pre-emption" or grant the applicant will forfeit all priority of claim or if entry has been granted it will be summarily cancelled. An application for cancellation must be made in person. The applicant must be received from an individual until that application has been disposed of.

When an entry is cancelled subsequent to institution of cancellation proceedings, the applicant for cancellation will be entitled to prior right of entry.

Applicant for cancellation must state in what particulars the homestead is in default. A homesteader whose entry is not the subject of cancellation proceedings may, subject to the approval of Department, relinquish it in favor of father, brother, daughter or sister, if eligible, but to no one else, on filing declaration of abandonment.

The homesteader is required to perform the homestead duties under one of the following plans:—

(1) At least six months' residence upon and cultivation of the land in each year during the term of three years.

(2) A homesteader may, if he so desires, perform the required residence duties by living on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of his homestead. Joint ownership in land will not meet this requirement.

(3) If the father (or mother, if the father is deceased) of a homesteader has permanent residence on farming land owned solely by him, not less than eighty (80) acres in extent, in the vicinity of the homestead or upon a homestead resident duties by living with the father (or mother).

(4) The term "vicinity" in the two preceding paragraphs is defined as meaning not more than nine miles in a direct line, exclusive of the width of road allowances crossed in the measurement.

(5) A homesteader intending to perform his resident duties in accordance with the above while living with parents or on farming land owned by himself must notify the Agent for the district of such intention.

Six months' notice in writing must be given to the Commissioner of Dominion Lands at Ottawa, of intention to apply for Patent.

Before making application for patent the settler must give six months' notice in writing to the Commissioner of Dominion Lands at Ottawa, of his intention to do so.

W. W. CORY,

SYNOPSIS OF CANADIAN NORTH-WEST MINING REGULATIONS.

COAL. Coal lands may be purchased at \$10 per acre for soft coal and \$20 for anthracite. Not more than 250 acres can be acquired by one individual or company. Royalty at the rate of ten cents per ton of 2600 pounds shall be collected on the gross output.

QUARTZ. A free miner's certificate is granted upon payment in advance of \$5 per annum for an individual, and from \$50 to \$100 per annum for a company according to capital.

A free-miner, having discovered mineral in place, may locate a claim 1500 x 1500 feet.

The fee for recording a claim is \$5.

At least \$100 must be expended on the claim each year or paid to the mining recorder in lieu thereof. When \$500 has been expended or paid, the miner may, upon having a survey made, and upon complying with other requirements, purchase the land at \$1 per acre.

The patent provides for the payment of a royalty of 2 1/2 per cent on the sales.

Placer mining claims generally are 100 feet square; entry fee \$5 renewable yearly.

A free miner may obtain two leases to dredge for gold of five miles each for a term of twenty years, renewable at the discretion of the Minister of the Interior.

The leases shall have a dredge in operation within one season from the date of the lease for each five miles. Rental \$10 per annum for each mile of river leased. Royalty at the rate of 2 1/2 per cent collected on the output after it exceeds \$10,000.

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

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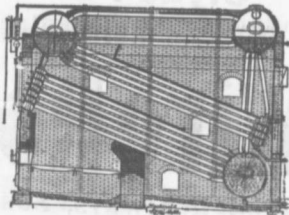
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a. m.	p. m.		a. m.	p. m.
L 10 45	L 8 50	F. TUPPER JUNCTION	A 10 35	A 8 35
S 10 41	S 8 46	PORT HAWKESBURY	S 10 37	S 8 37
A 11 10	A 9 05	PORT HASTINGS	L 10 07	L 8 10
	L 4 13		F 9 52	
	F 4 53	TROY	A 10 02	
	S 4 30	CROGNIBH	S 9 39	
	F 4 50	JUDIQUE	F 9 23	
	S 4 55	CHAIGNORE	S 9 08	
	A 5 23	CATHERINE'S POND	F 8 44	
	S 5 35		L 8 32	
	S 6 16	PORT HOOD	A 8 27	
	S 6 55	GLENCOE	S 8 10	
	S 6 46	MABOU	S 7 47	
	S 6 28	OLENDYRE	N 7 29	
	S 6 48	BLACK RIVER	F 7 14	
	S 7 02	STRATHLORE	S 7 09	
	A 7 35	INVERNESS	L 6 44	
	p. m.		a. m.	

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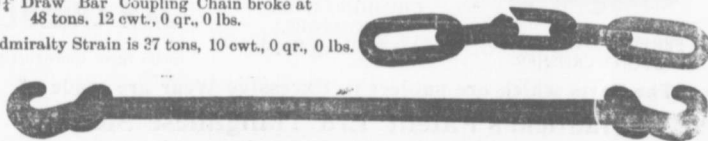
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NOS 1, 2 AND 3.

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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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