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MARITIME MINING RECORD AND COAL AND METAL TRADES JOURNAL

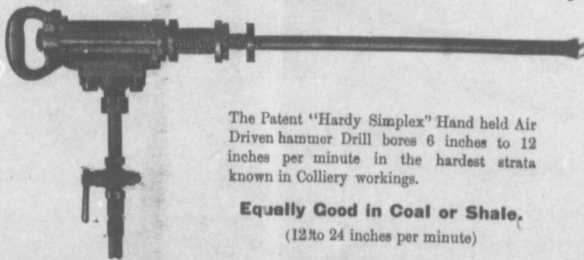
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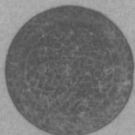
AGENT: **H. M. WYLDE,** P O Box, 529 **HALIFAX N. S.**

Patentees and Manufacturers of

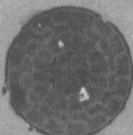
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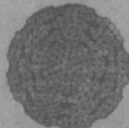
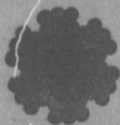
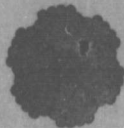
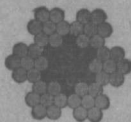
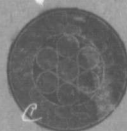
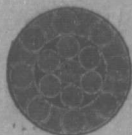
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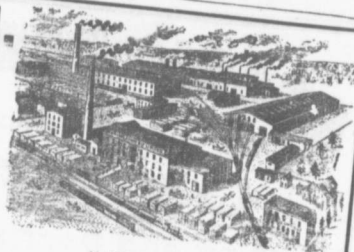
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On and after SUNDAY, JUNE 28th 1908 trains
 run daily, Sunday excepted, as follows:—

—TRAINS LEAVE STELLARTON—

| | |
|-------------------------------------|-------|
| No 144 Mixed for Hopewell | 5.50 |
| No 79 Mixed for Trenton | 6.20 |
| No 79 Mixed for Hopewell | 6.55 |
| 21 Express for Halifax and St. John | 7.40 |
| 21 Mixed for Pictou Landing | 7.40 |
| 22 Mixed for Pictou | 7.40 |
| 45 Mixed for Mulgrave | 7.48 |
| 19 Express for Sydney | 8.30 |
| 28 Mixed for Pictou | 11.00 |
| 80 Express for Trenton | 11.00 |
| 20 Express for St. John | 11.00 |
| 140 Mixed for Halifax and Montreal | 11.40 |
| 101 Mixed for Pictou Landing | 12.50 |
| 42 Mixed for Hopewell | 12.55 |
| 65 Mixed for New Glasgow | 12.55 |
| 65 Express for Halifax and St. John | 13.10 |
| 86 Express for New Glasgow | 13.40 |
| 17 Express for Pictou | 19.50 |
| 66 Express for Pictou | 21.15 |
| 66 Express for Pictou | 21.15 |

—TRAINS ARRIVE AT STELLARTON

| | |
|--------------------------------------|-------|
| 79 Mixed from Hopewell | 6.30 |
| 61 Express from Trenton | 6.55 |
| 18 Express from New Glasgow | 7.30 |
| 21 Mixed from Hopewell | 7.35 |
| 20 Mixed from Trenton | 7.35 |
| 50 Mixed from New Glasgow | 7.35 |
| 27 Mixed from Pictou | 8.50 |
| 56 Mixed from Mulgrave | 10.45 |
| 19 Express from Halifax and St. John | 10.45 |
| 139 Express from Pictou | 10.20 |
| 81 Express from Halifax and St. John | 12.15 |
| 20 Express from Sydney | 12.25 |
| 22 Mixed from Pictou Landing | 12.35 |
| 77 Mixed from Hopewell | 12.35 |
| 65 Mixed from Pictou | 12.35 |
| 86 Express from the Sydney | 12.40 |
| 60 Express from New Glasgow | 12.40 |
| 17 Express from St. John and Halifax | 21.10 |

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 O'clock is midnight. Montreal, N. B. June 28th 1908.
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 Dining cars on No. 20 and 29 trains between Halifax and
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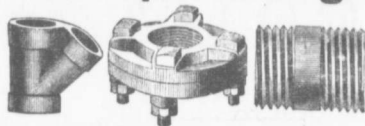
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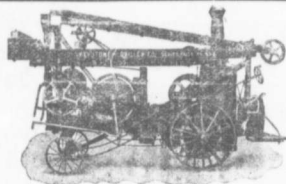
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ONE MAN'S VIEW. A well-known mining man recently finished an inspection of the ANTRACITE coal fields of Pennsylvania. When asked what impressed him most, he said :—

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Gold and Silver.

—LICENSES TO SEARCH—

over five square miles for eighteen months, cost \$50.00; leases for four renewable terms of twenty years each can be selected from them at a cost of \$50.00, and are subject to an annual rental of \$30.00

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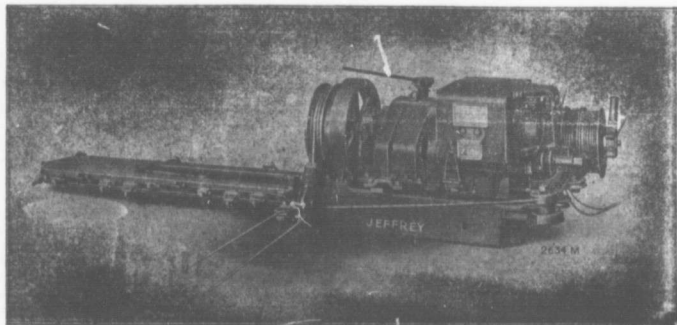
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Consumes less power per cubic inch of coal cut.

Occupies less space, permitting the props to be set closer to the face of the coal

Is more easily controlled, operated, and handled; Is simpler and has greater strength, motor power, and endurance than any other make of Side Cutting Machine. This machine is loaded, unloaded, moved to and from the coal face and in fact handled throughout by its own power. Fully described in Bulletin No. 14

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Under direct special arrangements with the Inventor, we are building the "Capell" Patent Mine Ventilating Fan, for the Canadian Coal Mining Trade. They are largely used in the Coal Mines in the United States and Canada, as well as in Great Britain and the Continent, probably exceeding in number any other high class fan in use to-day.

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The...

MARITIME MINING RECORD

Vol. 11, No. 5. Stellarton, N. S., Sept. 9th. 1908. New Series

SELECTED QUESTIONS AND ANSWERS.

HAULAGE.

Q.—What is your experience in underground haulage? State briefly under what circumstances you would apply the endless and tail rope systems.

A.—The successful working of a colliery depends to a very large extent upon the adoption of the most efficient and economical hauling arrangements.

The systems of haulage in which I have had experience are the following:

1. Direct haulage, or main rope haulage.
2. Main and tail rope haulage.
3. Endless rope haulage.
4. Haulage by horses, by self-acting inclines, and by endless rope inclines.

I will give a description of the methods of haulage as stated in Number 4.

Horses are generally employed in bringing the coal from the face to the collecting station or pass-by at the in-by end of the haulage plane, or to the top of a self-acting incline; that is to say when the roads are comparatively level.

Self-acting inclines are used when the coal is to be conveyed from a higher to a lower level, and the road is of an uniform gradient, and not less than about 1 in 8.

The following is a usual arrangement of a self-acting incline. The rope extends from the bottom to the top of the incline, and is coiled from 2 to 4 or 5 times round a drum fixed at the top. The full tubs are attached to the rope at the top, the empty tubs at the bottom, and the full tubs gravitate to the bottom and haul up the empty tubs. The speed is controlled by means of a brake on the drum. The tubs are attached to each end of the rope in sets or journeys of from 2 to 30 or more tubs.

When the seam is steep this system can be adopted to convey the tubs from the face to a lower bed. In the endless rope self-acting incline a double line of rails is required the full length of the incline, one for empties, the other for the full tubs. The rope is passed a few times round a pulley at the top, and the speed is controlled by means of a brake. A return wheel is fixed at the bottom of the incline, and the slack rope is taken up by means of a tension balance arrangement, also fixed at the bottom of the incline. Both full and empty tubs are attached to the rope at certain distances apart, and when the supply of tubs, either full or empty, falls short, the rope must be stopped.

The direct, or main rope system of haulage can be employed when the inclination of the road is in-by, or against the load. The inclination must be great enough to enable the empty tubs to gravitate in-by, and haul behind them the rope from the drum of the hauling engine. Branch roads cannot very easily be worked with this system of haulage, and the main advantage is that a single tramway only is required. Of course, double

tramways are laid at each end for pass-byes, and if a double road can be kept, and a large output is required, two drums can be used, and the full set be hauled out while the empty set is running in-by. With a single road one rope, the length of the plane, is attached to the drum of the hauling engine. The full set is drawn up the plane and the rope detached from the full set, and then attached to the back end of the empty tubs. The drum of the engine is thrown out of gear, and the empty set is gently lowered on to the rope. The set then gravitates to the bottom of the plane, and the speed is regulated by a brake on the drum.

Main and tail rope haulage can be applied where a single roadway only can be maintained, and where the roadways are slightly curved or undulating; but it will give better results where the road is of uniform gradient and straight. Of course this can be said of all systems of haulage.

The engines for driving the ropes can either be fixed at the surface, or be placed underground. Two drums are required, one for the main rope the other for the tail rope. These drums are connected to the engine by suitable shafting and spur gearing, are worked independently of each other, and can be thrown in and out of gear by clutch gearing. The tail rope is twice the length of the plane, and the main rope is the same length as the plane. As the tail rope has not such heavy work to perform a smaller rope can be adopted. The tail rope is carried either along the side or near the roof on pulleys, and it passes round a return wheel at the in-by end of the plane. It is attached to the in-by end of the full set of trams, and the main rope is coupled to the front of the set. When the full set has arrived at the shaft the tail rope is detached from the back of the full set, and is then attached to the first tub of the empty train while the main rope is coupled to the back, or last tub of the train. The main rope drum is thrown out of gear and the tail rope drum only worked from the engine. Brakes are fitted to each drum, so that when the set is running the brake can be lightly applied to the drum of the trailing rope to keep the couplings tight at all points of the journey. The number of tubs in a train varies from 20 to 100, and the speed from 6 to 12 miles per hour. Branch roads may be worked, and each branch must have its own, and a double length of tail rope. When the full set is at the shaft, shackles, fitted to both ropes, are opposite each branch road. These are uncoupled, and the two out-by ends of the main tail rope connected to the two ends of branch tail rope. The empty set is then taken into the branch road and the full set taken to the shaft. The ropes can then be changed back again, or another branch can change and so receive the empty set. Another method of working a branch road is to change the ropes when the set is in-by.

Endless rope haulage may be applied to almost any

conditions, and the rope can either be on the top or underneath the tubs. An engine is placed either at the surface or underground, and can be made to drive one or more haulage ropes. A double road is required for the empty the other for the full tubs. The rope is endless, and always travels in the same direction. The rope is passed a few times round the driving pulley, and turns by a large pulley. The slack rope is taken up by driving wheel, or at the in-by end. The movable pulley is kept tight by means of weights. The movable pulley is carried over the tops of the tubs, lashing chains, or rods of connecting the tubs to the rope. In under rope haulage the tubs can be attached by lashing chains, or by means of the various clips, the types of which are too numerous to mention. Branch roads can be worked by the same rope which works the main rope, but a better method is to employ the main haulage rope from the engine to drive a pulley on the shaft of which are fitted pulleys round which the branch road rope passes. These branch road pulleys can be thrown in and out of gear by suitable friction clutch gearing. This pulley should be fixed at the junction of the branch roads. All the trams have to be attached from the branch ropes at the junction, and attached again to the main rope.

I would apply the endless rope haulage system where a large output was required, and where the roof was good. From the standpoint of economy and safety the endless rope haulage is the best method to adopt. Where the roof was very bad, and a large number of branches were to be worked the main and tail rope system of haulage could be adopted with advantage, and bends form no serious objection to its working.

FIRST AID.

Q.—If a collier was badly injured, internally, in his working face, what steps would you take to ensure the best means of saving his life?

A.—There are so many forms of internal injury that the question as it reads seems rather complex and gives ample opportunity for a good lengthy answer, but my efforts shall be concentrated upon the main points to be observed in such a case, enumerating several forms of internal injury, and the treatment I would adopt under each special circumstance.

If called to such a case as the question implies, and in the absence of any member of the management, I should at once assume all responsibility, and act as follows:—I should make immediate examination of the patient for any outward signs of bleeding, and immediately suppress the same by direct or indirect compression, employing instrumental assistance if the nature of the wound or wounds warranted its adoption, taking care that my hands and utensils were as clean as existing circumstances would permit. I should immediately dispatch messengers to (1) acquaint the management with the accident and the nature of it, with instructions to obtain a doctor by telephone or speediest means available; and (2) to obtain stimulants, ambulance case for more efficient dressing of exterior wounds, (if any) and the necessary equipment for removal to the hospital or to the collier's home. I should attend to any case of fracture (other than those of complicated nature) on the spot, if there was no immediate danger in the vicinity of the accident. If

there was I should first remove patient to nearest place of safety.

The dressing case having arrived, I should apply proper dressing to all wounds and fractures, make the patient as comfortable as possible by keeping him warm, and giving him stimulants, such as water, tea, etc, if he were conscious. If he were unconscious I should treat the wounds and fractures, but give no stimulants by the mouth. Simply lay him on his back or in the position where breathing is most easy. Undo all tight clothing round the neck, chest and waist. Give patient purest air available, raise his head somewhat if face is flushed, and keep it low if face is pale.

As all cases of internal injury are of a complicated nature, the treatment of them is best left to medical science; but we have yet to remove the patient from the working face, and the services of a medical man may not be available for some considerable time. I should at once take steps for his removal. As any movement on the part of the patient, or the moving of the patient by those employed in his removal, may give rise to further complications, I should prevent this by bandaging the lower and upper extremities, avoiding any contact with the seat of the injury. I should not lift the patient upon the stretcher in the ordinary way, but should proceed as follows: Having first ascertained from the signs emanating from the patient that internal injury was the chief cause of complaint, I would remove him by placing a blanket in a line with his head, then proceed to pass the same under his head, very gently passing from the head behind the body and lower extremities until the blanket is placed entirely beneath the patient. This may be done most effectively by rolling a thin splint in the first end of the blanket and gently working it during its passage to the feet. Of course the blanket may be passed from the feet to the head if more convenient to do so. If a blanket is not available a sheet, plaid, or piece of canvas may be utilised. When this is done them in each side of the blanket. The patient may now be lifted by four persons (two on each side), laid on a stretcher, and carried to the pit bottom, from where he is drawn to the surface, and carried to the hospital or to his home. If ambulance men were easily obtainable I should have four or them to carry patient. If possible I should accompany him to his home, see that he was carried upstairs, head first, with stretcher nearly horizontal. lift him off stretcher in same manner as he was placed on, and lift him over foot of bed on to the bed. Remove all clothes by cutting from him, adjust clean linen, and gently withdraw blanket pending the arrival of the doctor.

During the above operations there are two possible contingencies to be carefully looked for, watched and guarded against, namely: (1) Internal hæmorrhage; and (2) collapse of patient from shock.

The condition of the patient should be carefully observed for signs of internal hæmorrhage, which are: Rapid loss of strength; pallor of the face and lips; coldness of the extremities; giddiness and faintness; the breathing becomes hurried and laboured, and is accompanied by yawning and sighing; the pulse fails gradually, and may altogether disappear at the wrist; the patient throws his arms about, tugs at the clothing

round his neck, and calls for air, and finally may become unconscious.

The treatment I would adopt if these signs were exhibited is to keep the patient flat, unloose all tight clothing round the neck; provide for best air available, fan him; sprinkle cold water on his face; apply smelling salts to the nostrils, if any were available; give him ice to suck, if obtainable, or cold water to drink, raise the feet a foot or two, and bandage the limbs firmly from the feet to the hips, and from the hands to the shoulders. Avoid stimulants in all cases of internal haemorrhage. I would leave that to the doctor.

The signs the collier would show if he were suffering from shock, or if collapse were impending, are:—Complains of feeling cold; face pale; skin cold and clammy; pulse is weak; breathing is scarcely perceptible; temperature of body falls below normal (98°4). If the patient has been severely crushed and the injuries are deep seated the temperature may fall to 94° deg., but if he gets so low his recovery is rendered doubtful. He may remain conscious but looks dazed. In some cases of shock the patient may keep quite quiet, but in other cases much restlessness prevails. He may become delirious owing to severe pain, loss of blood, or mental anxiety, or he may collapse entirely from extreme loss of blood, or the severity of the shock. I should do my best to relieve the patient and allay any fear of collapse by preventing his temperature falling by covering him with a coat, blanket or anything available, taking care to protect the injured part. Get him home, and into a warm room as soon as possible, and promote warmth by the application of hot flannels, hot bottles, etc. wrapping them up in a piece of flannel to prevent injury to the skin.

SHOT-FIRING.

Q.—State the precautions to be observed before firing a shot in a fiery or dusty mine.

A.—Before firing a shot in such a mine the following observations should be made:

1. See that the hole is not drilled into the fast, or a blown-out shot may occur. If it is drilled to a greater depth than the undercut, it should be tamped with clay to the required depth before the explosive is inserted.
2. An examination should be made for gas with a locked safety-lamp.
3. The dust for a radius of 20 yards around the shot-hole should be laid, either with water or some other suitable substance.
4. The direction of each shot should be taken and marked plainly on the roof, to minimise the danger of drifting into the charge in event of a miss-shot.
5. The charge must be placed in a properly drilled shot-hole, and tamped with clay or some substance that will not under any circumstances become ignited.
6. Persons working in the vicinity should be warned to keep a sufficient distance away from the shot, and not to let any other person pass in the direction of the shot till the shot-lighter announces all safe.
7. The battery should not be connected with the cable until all is in order for firing, and the cable run out to a safe distance.
8. The roof and timbering should be thoroughly examined before each shot.

The above is the routine which should be followed before firing a shot.

As regards the laying of the dust around the hole, not only that on the floor, but that on the roof and sides also should be laid.

If the above were carried out the risk of accidents would be greatly minimised.

CHURCH AND LABOR.

'Church and Labor' no longer suggest alienation, but opportunity, says the Rev. Charles Stelzie, a frequent writer on the subject of the relations of the Church and the workingman. As a matter of fact he further asserts, so changed has the attitude of workmen toward the Church become that 'there is no other class of men among whom there is this conspicuous movement toward the Church'. He does not assert that 'alienation of the working man from the Church' is not still to be found, but the facts of the opposite tendency are so many as to indicate the speedy relegation of the phrase to the realm of the obsolete. To prove this contention he cites first the fact that the 'greatest meeting' of the recent Presbyterian General Assembly held in Kansas City was that of the Church and Labor mass meeting. It was attended by twelve thousand persons, at least half of whom were workmen. Partly as a result of this meeting the writer continues 'the Presbyterian Department of Church and Labor has received invitations for similar meetings from trade unionist leaders in every part of the United States'. In an article in *The Outlook* he enumerates some further facts thus:—

"In over one hundred cities in the United States the ministers' associations and the central labor unions are exchanging fraternal delegates, the ministers and workmen regularly meeting with each other organizations and freely taking part in the discussions. This exchange of delegates is resulting in a more cordial relationship between the Church and labor. In many instances the ministers are elected to the office of chaplain, and the regular meetings of the union are opened with prayer.

"From many cities come reports of prominent trade unionists uniting with the Church on confession of faith, among them one of the most prominent officials of the Executive Council of the American Federation of Labor. No man in labor circles is more highly regarded by the men than he. Obviously, it is a delicate matter to be specific in enumerating these cases.

"At a recent conference of ministers who were discussing the question of attracting workmen to the Church, several of them who have been active in the work of dealing directly with artisans declared that the number of workmen in their congregations had grown from about 15 per cent. to figures varying from 40 to 60 per cent.

"The three hundred and fifty weekly and monthly labor papers of the United States print regularly a syndicated article which is usually strongly religious in character and always friendly to the Church, and which is written by a minister who invariably writes the title 'reverend' before his name, so that there is no masking his profession. Some of the labor editors insist on adding 'D. D.'

"It has been noted that the articles which are most pronounced in their religious tone and most fearless in dealing with the sins and shortcomings of labor are given the biggest headlines.

"The articles have now been printed regularly for about four years, and according to a prominent labor editor, their influence has been such as to change the attitude of the entire labor press toward the Church.

"Church and labor throughout the United States have, during the past three years, been observing 'Labor Sunday' by holding special services in the churches, which services have been attended by thousands of men who had not previously gone to church in many years.

"National conventions of labor, which heretofore have been closed to ministers of the Gospel, are now opened with prayer by local ministers, ministerial delegates are received, they are appointed upon important committees, and time is given to a discussion of the relation of the Church to labor, the addresses of the ministers being invariably received with enthusiasm."

FORRESTERS AND OLD AGE PENSIONS.

In his inaugural address at Northampton, of the Ancient Order of Forresters, the Chief Ranger among the other things said:

"Since the High Court last met in Northampton in 1881 the adult benefit members had increased from 53,909 to 726,680, and the funds had grown from \$3,050,425 to the magnificent total of £8,550,866. Measured by actuarial tests, the Order was never in a stronger position than it was to-day. The question of greatest general interest was undoubtedly that of old age pensions. They felt in the interests of the deserving poor among our aged people that they ought not to take up a position of hostility to the Government's proposals, but he must confess that the proceedings of the Government had caused considerable anxiety. Their greatest regret was that the Government did not, before they actually framed their proposals, invite experts in friendly society work to advise them upon the details of the measure. Practically the whole friendly society movement had asked that, in estimating the income of applicants for pensions, there should not be taken into account any benefits received from a friendly society in sick pay or pension. They looked forward to a time, not very far distant, when thrift should not be in any way penalized, and when all deserving citizens would be entitled to the recognition which a State pension implied. He urged them to press forward the proposal that friendly society benefits should be excluded in estimating income. The principle had already been conceded—not without hard fighting—in the Outdoor Relief Friendly Societies Act. The provision that membership of a friendly society would be taken as evidence that a man was not a loafer would save members from becoming participants in a kind of secular day of judgement as to their antecedents as workers. He approved of the proposal to compel future members of the Order to pay for an old age pension benefit.

CARBON THE MIGHTY ATOM.

There is one element in Nature on which the life of every living thing, whether plant or animal, depends; that element is carbon. The work we do, indeed every move we make, is the result of energy secret,

stored up in the organism, the energy being proportionate to the amount of carbon consumed. In its free state says T. F.'s Weekly' carbon forms charcoal, coke, coal, blacklead, and diamond. In its combined state it is a necessary part of flesh, blood, bone, and muscle; it is the main constituent of plants, the percentage of carbon in wood exceeding that of the other elements of which wood is built, and it is also the constant component of the atmosphere where it exists as carbonic acid gas. There is practically no limit to its sway. It is found in the stars, and in almost every sample of water. The earth's crust contains vast quantities of it as chalk, limestone, and marble. Such diverse substances as explosives, dyes, fuels, foods, liquors, cloths, drugs and printers' ink; the evil smells that arise from putrefaction, and the odours of the most fragrant perfumes are all compounds of carbon, the 'element of life.'

IMPROVEMENT IN INCANDESCENT LAMPS.

In most of the present high efficiency lamps filaments of tantalum or tungsten are being substituted for carbon. A further improvement has now been effected by using a substance which does not require the usual high pressure vacuum. Filaments of helion, as the new substance is called, can be used in bulbs without any exhaustion of the air. The exact composition of helion has not yet been determined, but it is thought to be some new allotropic form of silicon.

To prepare the filaments the ordinary carbonaceous threads are flashed in a mixture of gaseous carbon thereby coated with helion. The advantages claimed for the new filaments are first, that they will stand a higher temperature. They have been found to stand 3000 degrees Centigrade at atmospheric pressure. They are also more efficient by nearly one-half than ordinary carbon filaments. And they are especially recommended for use on battleships, as the lamps are not liable to break on the firing of the guns, as are the ordinary exhausted bulbs. It is said that during the Russo-Japanese war the first five minutes firing sufficed to break all the electric lamps.

The greatest electrical transmission line in the world, 293 miles in length, will be built for the people of Ontario by a company of which F. H. McGuigan is the head. For years his name has been familiar to Canadians as one of the really big men in the railway world. A genial, unostentatious Irishman is Mr. McGuigan, but beneath his good nature is an iron will that spells success. His wonderful executive ability has made him the envy of hundreds of railway men in America. Forty five years ago he was a water carrier for a construction gang on the Erie & Pennsylvania road. In 1880 he became a foreman of construction and divisional roadmaster on the Wabash. Promotion quickly followed to Superintendent of the western division. In 1896 Mr. McGuigan came to Canada as General Superintendent of the Grand Trunk. After he had demonstrated his ability in several positions, including the office of Fourth Vice President, on the Grand Trunk, the keen eyes of James J. Hill spotted him as the man for the Great Northern. He became Vice-President of that road in April of last year. He remained in the position only a few months. He resigned of his own volition, but the story is a railway

MARITIME MINING RECORD.

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

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STELLARTON. N. S.

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- Rubs by Rambler.

I was not allowed owing to lack of space in last issue to finish my answer to the question "What sort of religion, etc., was taught in Nova Scotia". I replied that the lack of morality was due to moral cowardice. We in small communities, and the bulk of the population live in these, are afraid to denounce wrong doing for fear our words should be carried to the wrong doers, and ill will follow, or for fear we lose a customer or a client. Why is it that good men in many ways will not seek evidence against illicit liquor sellers. For fear the trees in their gardens be hacked, bombs placed at their door steps, or their barns be burnt. And why should these things be feared, because they have occurred and punishment has not followed. Why is it that more than one judge has declared that it is impossible, in a certain County, to get a jury to convict. Is it not all owing, from first to last, to a reprehensible moral cowardice. As we have sown we are reaping. If we are afraid to criticise much less condemn the wrong, if we wink at wrongs, no great wonder that wrong is rampant. Some may hold that the loose notions of morality prevalent is due to the lack of religious instruction in our schools. There is nothing in that. Without going into details I think the statistics of this and other countries, show that religious instruction of the kind given in schools, is no great check on lawlessness. Public schools are not 'godless' schools even though no 'religious' instruction is given. The factory or the foundry that does not begin the work of the day with religious exercises may not be godless. If teaching is at fault then it is the teaching of the pulpit, or the prayer meeting or the Sabbath school. The teaching, too much of it, is of the goody goody, namely pamy kind. A Cynic has said that the Scottish mother has one of three great desires for her eldest born, and he put these ambitions in the following order:—First that he become a minister; second that he become a merchant, and third and last that he be a Man. Ah, she forges that a 'man' is much preferable to an unmanly minister or merchant and is it not the case that much of the teaching of the day religates manliness to the last place. Sins in general are denounced,

individual sins, and sins of the community are handed with, say, velvet gloves. Can morality be on a high plane when fathers laugh when told of their sons robbing orchards, when mothers do not question their daughters who dress far beyond their means; when magistrates are unwilling to punish a social or political acquaintance; when churches are afraid to purify the session rolls; when public men are almost applauded if they successfully draw their hands full from the public chest; and when communities acclaim a slayer of a fellow man as almost a hero? We are lacking in courage, in uprightness, and downright. The men who can call a spade a spade, are greatly in the minority, and that is perhaps a chief reason of a low morality and a high rascality.

Some considerable time since one of the comers from the other side who thought the P. W. A. could be improved upon, referred to the way they did things in Scotland and the big sum of money the miners union had on hand. There were few, if any strikes owing to the masterly manner in which the unions were conducted. Well times have changed surely, as witness the following from a Scottish paper of recent date:

"There are still a large number of miners idle in Lanarkshire, between those who are on strike and those out of work through the shutting down of collieries. The 'Block' system under which men were refused employment, because of a strike which might be going on in some part of the county, has been replaced by an even worse method of dealing with the men. At nearly all of the collieries connected with the Coalmasters' Association workmen are being refused employment unless they produce a line from their last employer, and all that a manager requires to do to ensure that a workman who may leave his employment will remain unemployed is to refuse him a line. Many men who have left collieries because they were unable to earn fair wages are now idle, being unable to produce a leaving line from their last employer, and as this is practically a boycott, it has become intolerable, and may lead to a general stoppage of the pits if persisted in. In connection with this matter the Miners' Federation of Great Britain has been approached, and the result is that a joint meeting will be held in Glasgow between representatives of that body and the Lanarkshire Coalmasters' Association, with a view to having the present restriction on employment removed."

I never greatly fancied Mr. Kier Hardie and I do not think with larger acquaintance there is any change in my affections. He has always been a droll chap, his besetting sin notoriety. He spoke in Montreal a fortnight ago and said a few inconsistent things. For instance he said that Trades Unionism and Socialism was the panacea for all the ills of present day humanity. He is not the first man who thought he had found a sure cure for these ills. Mr. Hardie is a Socialist. Socialists do not believe in armaments, therefore they cannot believe in war. And yet he applauds industrial war. He said: "A strike is war, and on the field of battle the man who deserts his comrades is a coward and a traitor." I wonder is this the Kier Hardie who spoke what was all

but treason in India? But is a strike war? Only in a metaphorical sense. In war, one or the other side is on the aggressive; in industrial war both sides is on the defensive; it is a trial of endurance without active hostilities. Mr. Hardie may be right in saying the one who deserts his comrades is a traitor, that may be or may not be so according to circumstances, but I say that in many cases the 'scab' is no coward. He knows he lays himself open to the contempt of his fellows, and perhaps to their everlasting ill will. He braves all that for his little ones, perhaps. It requires far less courage, in a meeting of workmen, to agitate for a strike, than to oppose it. There are certain restless and noisy spirits who are always ready for a strike and these men intimidate very many who, in their hearts, know that a strike will be disastrous. While I admit that it requires courage to carry on a strike, it also requires great courage to protest against it. Few right thinking men have any use for the professional strike breaker; few would have a good word for the strike breaker who deserted from purely selfish motives, but for the man who goes back to work simply because he cannot bear witnessing the sufferings of his fellows, sympathy may not be misplaced. In such a case let me tell Kier Hardie it requires far more courage to go against his comrades, than to go with them. Mr. Hardie should at times qualify his strong language.

The Record has on very many occasions asked the mine workers of Nova Scotia to profit by the saying "make hay while the sun shines." I am not by any means a pessimist, but I know what I am saying, or at the least I think I know when I advise the mine workers both on the land and the mainland to work every day they get the chance, pic-nics or no pic-nics. Unless all signs fail there will be not a few idle days coming winter. The I. C. R. is already days well stocked with coal, and will take comparatively little, unless there is a very marked revival in trade, during the winter months. There is perhaps more coal in Montreal than at any previous period at this time of the year. This means that little if any coal will require to be forwarded by rail during the winter months. And then I am thinking—that it is within the bounds of possibility that the big Steel Co. at Sydney will not this winter be so heavy a consumer of coal as in the past three or four years. I may be away off, but at the time of writing I am of the opinion that—unless something nigh miraculous inter-venes—there is going to be a break in the prosperity of the trade has experienced during the past and it may be of short duration, but long or short, or severe, it looks as if a break was coming, so, the more off days now the fewer hereafter. Don't let that idea possess you, The colliery where the men work most regularly now may be the one that will have the steadiest work in the future, for the reason that the owners, enabled to get their coal at a reasonable cost, owing to the regularity of their men, may be able to pick up an odd order occasionally, which the other owner owing to high costs occasioned by off days cannot secure. I wonder if those miners who

think nothing of losing three days in twelve, ever take time to consider that their absence from the mine adds to the cost of every ton of coal that comes out of it. It may not be a great deal in an individual case for one man, but it amounts to a very large sum when all the workers and all their off days are totalled up. Be that as it may, at this particular time I am not speaking for the employers but in the interests of the men, and my advice is do now what the Record has so often advised 'make hay while the sun shines.'

OIL FUEL IN THE NAVY.

The use of oil as fuel has engaged the attention of the British Admiralty for some time, and it has recently been decided to establish oil storage tanks in various parts of the United Kingdom to insure convenient sources of supply. The experiments conducted by the Admiralty during the past twelve years were not at first satisfactory, and two adverse reports were made prior to 1902. Since then the tests have been of such a character as to reverse the original judgement of the Admiralty, and it may now be said that the importance of oil fuel is recognized by that body, and that its use will be extended in the future as rapidly as possible. It is claimed that through the use of oil the number of men now required to do the stoking and trimming would be reduced by two-thirds, as the moving and stoking of the oil is automatically accomplished by steam pumps and pipes, instead of by stokers and trimmers as in the case of coal. While it is difficult with coal fires at full speed to maintain sufficient difficulty would be overcome, and that when the speed of the ship is reduced the boilers are under such perfect control that the safety valves do not lift. The oil it is suggested, could be stored in the double bottom, now taken up by the water ballast. In the case of the navy, one of the great advantages claimed for oil vessels are proceeding at great speed, and which serves to give information to the enemy. The evaporative value of oil is much greater than that of coal, so that while 45 cubic feet of bunker space is required for a ton of coal, only 33 cubic feet is needed for a ton of oil. It will readily be seen how significant this difference would be to the great ocean-going steamers, and how much space now set apart in them for the storage of coal would be released for cargo purposes and the accommodation of passengers. The British navy has in service oil-using torpedo boats with a capacity of 34 knots. One of the drawbacks at the present time to the extensive use of oil fuel at sea is the high cost and cost of oil in Great Britain has no doubt seriously interfered with its adoption for steamships and for a variety of industrial purposes. With a reduction in price the field for its employment would be greatly enlarged. The advantages of oil fuel briefly summarized are economy of space, absence of soot and cinders, elimination of the loss of time consumed in burning down and cleaning fires when coal is used, the ease with which oil can be bunkered, and the quickness with which a full head of steam can be generated.

"MY SOCIALISM."

Mr. H. G. Wells gives a most interesting exposition, under the title 'My Socialism,' in The Contemporary Review. He rejects the current forms of Socialism—the philanthropic administrative Socialism of the British ruling class equally with the class hatred Socialism of revolt, and still more emphatically 'that future Socialism of the specialist' found typically in the Fabian Society. Socialism is to him 'no more and no less than the awakening of a collective consciousness in humanity, a collective will and a collective mind, out of which finer individualities may arise for ever in a perpetual series of fresh endeavours and fresh achievements for the race.' So to Mr. Wells 'contributing to the development of the collective being of man is the individual's meaning and duty.' The duty of a man, his existence being secure, is to educate, and to educate chiefly himself. It is the duty of a man to make all he can of himself and his life, to make himself 'fine perceiving and expressive.' Mr. Wells elaborates his ideas in some detail, and incidentally cites the case of Messrs. Cadbury as an instance of how to act in the present imperfect condition of things in the business world. Mr. Wells commends the well known cocoa firm for keeping their business going, and at the same time seeking to better the lives of the natives in Portuguese East Africa. That was better, to Mr. Wells's mind, than simply retiring from that particular branch of the cocoa trade.

WORK AN AID TO LONG LIFE.

To attain a ripe old age it is necessary to work. This, at least, is the lesson to be drawn from the supplement to the annual report of the Registrar General of births, marriages, and deaths, a Blue-Book of absorbing interest which was issued on Tuesday of this week. Every important trade is dealt with, and the mortality rate among men of all occupations is shown. Undoubtedly one of the most interesting features of the report is a chart which, taking 1000 as the unit, shows the comparative mortality figure of males between the ages of twenty-five and sixty-five, occupied and retired, for the years 1900 and 1902. Clergymen and gardeners are proved to be the longest livers, while gamekeepers, farmers, railmen (strange to say), school masters, ironmongers, lawyers, civil servants, coal miners, bakers and domestic servants come next in order. Hotel servants, hawkers, and tin miners drop off very much sooner, while after making allowances for the differences in numbers engaged in each occupation, nearly five times as many general labourers as clergymen, it is computed, die between the ages of 25 and 65. "Among publicans," says Dr. Tatham, "the death rate exceeds the standard at every age; at the extremes of life the excess is only one fifth part of the standard, but at ages twenty-five to forty-five the mortality is more than double the average. Dr. Tatham also finds that the highest death-rate among women are in the trades of shirtmakers, seamstresses, and charwomen. Those who desire to become centenarians should either qualify for the church or become gardeners or gamekeepers. Work is good

for the health. The death-rate of occupied males between 25 and 45 is only 7.84 per 1,000; the death rate of unoccupied males is 36.31, against the average of 8.38 for all males. Consumption is a frequent cause of death among clerks, lead workers, cutlers, dock labourers, printers, tailors and tin miners; sweeps are subject to cancer, architects and artists to liver complaints, and commercial travellers are prone to suicide. Doctors have a higher mortality than lawyers at all stages of life.

NEW SUBSTITUTE FOR LEATHER.

A new compound or mixture intended as a substitute for leather and various other materials, and equally usable in a fluid, pliable, or hard state, is described by Consul Maxwell Blake, writing from Dundee, Scotland, to Daily Consular and Trade Reports. He gives credit for his data to recent Scottish newspapers, which state that the new composition is a mixture of seaweed, carpet-dust, goat's hair, Irish moss, and gums, together with some secret chemical ingredients or process. He goes on:

"It is admitted by the discoverer that his composition is not equal in quality to the best materials imitated; but he claims as to leather that it provides an excellent substitute for the manufacture of articles of the cheaper grades of goods. The product has already been made up into boots and shoes, and its durability successfully tested by policemen, postmen, and others whose duty involves a large amount of walking. Two or three thousand feet of belting in machine-shops is also in use at the present time, to which purpose it is said to be especially well adapted, as it is impervious to oils and acids, is non-inflammable, and does not shrink under the varying conditions of the atmosphere.

"In its hard state it is said to be a cheap and practical substitute for vulcanite, and can be purchased for less than one-fourth the price of the latter. Imitations of marble and wood are produced by hydraulic pressure, the seaweed suggesting the veins or grain. In its fluid state it can be applied to a floor, and when allowed to set it forms a perfect surface of linoleum. The sea-weed is obtained from Devonshire, and the more expensive varieties, for the manufacture of marbles, from Japan.

"As a factory for the manufacture of this unnamed product is now in the course of construction, it is likely to appear very soon as a marketable commodity."—(The Literary Digest.)

INTERCOLONIAL RAILWAY.

NOVA SCOTIA PROVINCIAL EXHIBITION

Halifax, Nova Scotia.

September 2nd. to 10th. Inclusive.

Return Tickets will be sold from all Stations in Nova Scotia at

FIRST CLASS ONE WAY FARE.

With 25 cents added for Admission Coupon.

Good Going September 1st. to 9th. inclusive.

Good for return until September 12th. 190

For Special Fares and Dates see small Bills.

AROUND THE COLLIERIES.

There will not be many houses erected at Dom. 14 this year.

A new house for Supt. McEachern is being erected at Dominion.

A miner fell down a shaft at Bridgeport a distance of 90 feet. He escaped with a broken leg.

Manager A. McDonald, Dom. No. 5, is on a visit to parts of Nova Scotia during his vacation.

The editor is off on his annual holiday. He is probably some south at this moment.

The permanent work at Dom. No. 12 is being rapidly pushed ahead. A new dam has taken the place of the temporary one.

Mr. P. Christianson, District Supt. of Mines, has been transferred to District No. 3 and is succeeded by Mr. A. McEachern in No. 1 district.

The steam shovel, which was filling in the heap at Dom. No. 8 has been taken away to Dom. 12, to fill the coal banked at that mine.

Manager Beaton is doing some hustling. Coal is needed to fill the Inverness contracts and Malcolm is trying to get it and will succeed.

The new colliery district of which Nos. 12 and 14 are the first collieries, will be developed more rapidly since the railway is completed.

A battery of Babcock boilers is being placed at Dom. 12, and in a short time another battery will be added to complete the steam plant at that colliery.

The Dominion collieries were all idle in their turn lately. It is stated that this is the beginning of slack times, and that there will be more of it as the winter sets in.

Eminent authorities, from Great Britain, has been examining the coal fields in Cape Breton of late, with a view to reporting on the best methods for extracting the coal from the submarine areas.

The Mines Department, of Halifax, is alive to its duties, as the most has been made of the visit of the submarine coal experts. These men visited Inverness Co. where nearly all the collieries are sub-marine.

The visiting Mining Engineers were surprised to find that the quality of coal at Dom. No. 6 was excellent, after hearing and reading so much about it being unsuitable for the D. I. & Steel Co.

On the occasion of the members of the North of England Institute of Mining Engineers, visiting Dom. 2 mine, it was observed that one of the party before entering the mine, asked for a drink; when a glass of water was handed to him he refused it, and through an interpreter explained, that in his country a glass of beer was always offered him on visiting a mine. The Canadian beverage is pure coal water.

Asst. underground manager, Mr. Dan. McLean, of Dom. No. 1, has taken charge of the Hub Mine as Underground manager, in place of Mr. M-Kay, who becomes manager in place of Mr. Wm. Wilson, who has resigned.

One of the steamers of the Nova Scotia Steel & Coal Co.—the "Wacousta" carrying coal to Montreal is a very fast sailor. On a late trip she made the run from Montreal to North Sydney in forty six hours.

Mr. P. Pendergrast has started on his duties as Underground Manager at Dom. No. 3. The haulage rope broke on Saturday last, and a new rope was put on; fortunately the break was discovered in time and little damage was done.

Mr. B. Connors is again back at Reserve, but this time as Manager, and Mr. R. Simpson is appointed manager of Emery. When the visiting Engineers were at Reserve, the general cleanliness and good order at the colliery was freely commented upon.

An unfortunate accident, occurred in Dom. No. 6 by which an old man, named Neil McPherson, was killed. Two full boxes broke away on one of the headways, and on reaching the bottom, struck the old man, who was cleaning roads, instantly killing him.

International has a new manager, succeeding Mr. Connors, namely Mr. Alex. S. McNeil, who formerly was Und. Manager at Dom. No. 3. A new underground manager, Mr. Neil A. McDonald, is taking up the duties of Mr. Pendergrast who went to No. 3.

Development at Dom. No. 12 & 13 mines is making good progress, as evidence of this fact the following may be advanced: There is already four colliery doctors in the field, and it is therefore reasonable to suppose that the physical well being of the people there will be attended to.

Twenty nine holes, each 15ft. deep, were bored into the face of a quarry in Scotland lately, and charged with 400 lbs. of blasting gelatine. The holes were all electrically and successfully fired at once and dislodged about 6000 tons of road metal.

The Nova Scotia Steel & Coal Co. are making excellent progress in driving to the submarine ore at Wabana. The slope is now down over 3100 feet leaving less than 900 feet yet to be driven. At the rate the slope is being driven it will not be very long before the company strike their own territory.

It is possible that the Intercolonial Coal Co., as soon as they can get the drill now in the service of the Acadia Coal Co, will put down one or more bore holes not far from the Record office, south Stellarton, in an effort to locate their main or other workable seams. A discovery of coal in the south end may lead to another big colliery for Stellarton.

HEALTH OF COAL MINERS.

We make the following extract from "Health":— There is a widespread belief that the coal mining industry is a particularly unhealthy one, while it certainly cannot be denied that it is a dangerous occupation. We learn on the authority of a member of the Mining Institute of Scotland that the health conditions of coal mining have greatly improved during the last forty years. Apart from this, however, it is interesting to study the question of the diseases which have the effect of shortening the life of the miner, and if these diseases, which are common to all, are aggravated by mining conditions to such an extent as to justify the statement that the coal miner is a short lived man. With, perhaps, one or two exceptions, there are no diseases peculiar to the miner's calling. These exceptions are an affection of the eyes termed "mpstagnus," and in a lesser degree that disease of the respiratory organs which usually goes by the name of "miner's asthma." It is found on inquiry that the death rate of coal miners from alcoholism is particularly low, which may, perhaps, be taken to show that the occasional drinking to excess indulged in by many of them is less deleterious in its effects than the more frequent tipping of men in other occupations. On the whole it has been found that there are good grounds regarding the occupation of the coal miner as one of the healthiest, as, even after including deaths from accidents, the mortality among coal miners is less than that of most manual occupations. Among the contributing causes towards this result the following may be mentioned:—The underground temperature is equable, and on the whole, not uncomfortably high. The bulk of the coal miners live in rural communities and have the benefit of fresh air. The coal miner's working day is a comparatively short one, and he seldom works every day in the week. It is a curious fact that as far back as 1641 an Act of the Scottish Parliament was passed ordaining colliers and other colliery workmen to work all six days in the week, the reason given being that they had been in the habit of taking frequent holidays, which they spent in "drinking and debauchery, to the great offence of God and prejudice of their masters."

PAPER FROM COTTON-STALKS.

A recently invented system for reducing cotton-stalks to a suitable form for the manufacture of paper is described in 'Farm and Ranch', Texas. According to this paper most of the difficulties which have hitherto prevented the accomplishment of this task appear now to have been solved. Says the writer:

"For many years experts have been engaged in devising some method for producing in a satisfactory manner paper from cotton-stalks. With the new invention, it is claimed, farmers in the South will have great use for the discarded cotton-stalks, which have hitherto been either thrown away or burned. It has been demonstrated that by the new process the hitherto waste product can be made into pulp and paper of a good commercial quality.

"It is contended that the fibre in the stalk and limb of the cotton-plant is considerably stronger than spruce-wood fibre, and that it is almost as strong as the fibre of the flax-plant, thus making it possible to produce from cotton-stalks a paper superior in strength and texture to that of ordin-

ary wood pulp paper, and nearly as strong as high grade linen paper.

"The stalks would cost little, the removal of the stalks from the plantation being of great advantage to the cotton-grower, who must spend a good sum every year in the removal of the stalks from the ground. With the raw material at hand and at a low price, a new industry can be established which will add many thousands of dollars to the products of the cotton plant. It is argued that in regions where the cotton-boll weevil has ruined the crop of marketable cotton, the cotton-stalk can be utilized in the making of paper, as it would help to destroy the pest, while wasting none of the reclaimable material."—(Lit. Digest.)

The miners' strike in Alabama was ended Aug. 31st, when the national executive committee of the U. M. W. issued an order directing the men to return to work. This action followed a visit by President Lewis to the scene of the trouble, where several days were spent in consulting with the local union officials and with Governor Comer, of Alabama. The latter was severely criticised by the labor leaders, in their letter to the men ordering a return to work, for his course in calling out the troops and otherwise exercising his authority to prevent disorder. The strike had lasted two months, during which time the coal output of the State was considerably curtailed.

Intercolonial Railway.

INTERNATIONAL EXHIBITION.

ST. JOHN, N. B.

SEPTEMBER 12th. to 19th., 1908.

Return Tickets will be sold from all Stations in Nova Scotia and Cape Breton at

FIRST CLASS ONE WAY FARE.

on September 11th, 14th, and 17th., Good for return September 21st., 1908.

For special rates and dates see small bills.

| | | |
|--------------------------------------|-------|--|
| <p>MONTREAL EXCURSION</p> | Going | <p>GOOD FOR RETURN Oct. 5th., on tickets issued Sep. 17th, 18th, and 19th. 28 Oct. 15th., on tickets issued Sep. 28th, 29th, and 30th., 1908.</p> |
| | SEPT. | |
| | 17 | |
| | 18 | |
| | 19 | |
| | 28 | |
| | 29 | |
| 30 | | |

Intercolonial Railway.

WILL SELL ROUND TRIP TICKETS FROM

STELLARTON
to
MONTREAL

\$13.50.

Proportionately low fares from all Stations, Campbellton and East.

Special Excursions—September 17th, 18th, and 19th. Good for return until October 5th. to Port Huron, Detroit, Saginaw, Bay City, Mich., Grand Rapids, Mich., Chicago, St. Paul and Minneapolis and Cleveland, Ohio.

Practically all mining operations in Wyoming were suspended on Monday of this week as a result of the failure of the miners and operators to agree on a new wage scale to succeed the old one, which expired on the 1st. The operators are holding out for a reduction in wages equivalent to ten to 15 cents a day in the case of most of the men.

It is possible that the Intercolonial Coal Co., as soon as they can get the drill now in the service of the Acadia Coal Co. will put down one or more bore holes not far from the Record office, south Stellarton, in an effort to locate their main or other workable seams. A discovery of coal in the south end may lead to another big colliery for Stellarton.

WANTED IMMEDIATELY.

100 Good Miners,

to work for the Inverness
Ry. and Coal Company.

— Apply at the colliery to —

M. S. BEATON,

Inverness, Aug. '08

Manager.

INTERCOLONIAL RAILWAY. CANADIAN NATIONAL EXHIBITION. TORONTO.

August 29th, to September 14th, 1908

Return tickets from all stations, Campbellton, and East, including the Prince Edward Island Railway.

FIRST CLASS ONE WAY FARE.

August 27, 29 and 31—Sept. 1, 2, 3, 8, 9, and 10.

SPECIAL EXCURSION
FARES TO TORONTO.

August 28th, and Sept. 4th

From STELLARTON \$21.25

All tickets good to return, leaving Toronto, September 16th, 1908.

MARITIME MINING RECORD.

ISSUED ON SECOND AND FOURTH WEDNESDAY MONTHLY.

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

It covers the entire field, and that adequately.

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

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

Advertising Rates are Moderate

AND FORWARDED ON APPLICATION.

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

Amatite B ROOFING



This advertisement will bring to your attention the *best and cheapest ready roofing* on the market. Here is how we prove it the best.

In the first place Amatite is made in one standard thickness, whereas other ready roofings range from a thin, flimsy half-ply to a three ply thickness.

The three-ply thickness (which by the way is only one sheet of felt) is the only kind that can be compared with Amatite.

But right here is the point. Amatite is better made, has better water proofing material, and weighs more per square foot than the three-ply grade of other makes, and *costs much less*.

These facts make Amatite the most desirable roofing made.

But in addition to its superiority in material and manufacture Amatite has one distinction which makes it stand out above all others. *It has a real mineral surface.*

It is hardly necessary to state the advantages of such a mineral surface, the freedom from painting or coating, the perfect protection against all kinds of weather, the great durability.

This mineral surface is embedded in a layer of Pitch, the *proven known waterproofing material*. Beneath this in turn are two layers of the best grade of wool felt—cemented together by more Pitch, making the whole a roofing that is *absolutely water-proof*.

No other ready roofing can compare with this mineral-surfaced, water-proof, durable roof. That's why we say—*'Don't buy your roofing until you have seen Amatite.'*

Free Sample & Booklet.

Send for Free Booklet and Sample to-day. It will pay you to get acquainted with Amatite. Address nearest office.

The CARRITTE - PATERSON M'FG C'O'Y., Ltd.
St. John, N. B., Halifax, N. S.

A firkin of butter two centuries old has been dug up by a farmer at Tyrone. The hoops and staves of the firkin collapsed on being lifted, but the butter is in a perfect state of preservation.

"FENERTY" SHOVELS

—FOR—
Miners, Contractors and
Heavy Work.

"GILMOUR" SHOVELS

—FOR—
General Purposes,

MANUFACTURED BY
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HALIFAX, N. S.

ALL GOODS GUARANTEED.
SPECIAL SIZES and SHAPES MADE TO ORDER.

BRATTICE CLOTH

TARRED AIRPROOF

ALSO
FIRE-PROOF.

—OOOO—
As Used by the Leading Scotch-English
and Welsh Collieries.

PROMPT DELIVERIES.

DRUMMOND, McCALL & CO.

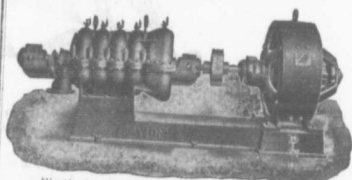
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Montreal and Toronto.

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Westinghouse Motor Driving Dayton Turbine Pump.

A Motor exactly suited to the conditions is essential in the correct solution of any power problem. A wide selection is afforded by the many types of Westinghouse Motors, among them you are assured of finding the motor to exactly meet your requirements.

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Have Excellent
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WILL NOT COOKLE
::: WITH RAIN :::

Best for
SPRING AND SUMMER
SHIRT WAIST SUITS.

All Ladies who wish to look well
wear **Priestlys Dress Goods.**
Greenshields Limited, Sole Agents.
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The TORNADO AIR POWER ROAL DRILL

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and Coal Co.,

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and others.

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Manufacturers of

H. & H. Coal Cutters & Tornado Coal Drills

Bellville, ILL., U. S. A.





Synopsis of Canadian North-West. Homestead Regulations.

ANY even numbered section of Dominion Lands in Manitoba or the Northwest Provinces, excepting 8 and 26, not reserved, may be homesteaded by any person the sole head of a family, or male over in 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 situate. 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-agent's office may be voided to the Agent by the Sub-agent, at the expense of the applicant, and if the land applied for is vacant on receipt of the telegram, 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-empt" or fraud 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 eligible for homesteading, and only one application for cancellation will 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, son, daughter, mother 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 desire, 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 entered for by him in the vicinity, such homesteader may perform his own 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, in 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 200 acres can be acquired by one individual or company. Royalty at the rate of ten cents per ton of 2000 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 ind. vidual, and from \$20 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 locator 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 \$25, 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 lessee 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 1 1/2 per cent collected on the output after it exceeds \$10,000.

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

Mine's Wanted To Chew BULL DOG TOBACCO,

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

TRY IT!

The St. Lawrence Tobacco Co., Ltd.
—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.

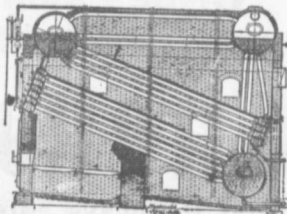
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FREE EXPANSION OF TUBES.

PERFECT WATER CIRCULATION.

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Manufacturers of all Descriptions of

...EXPLOSIVES...

BEST QUALITY ONLY.

Blasting Powder and Compressed Pellets, Dynamite,
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For use in Gaseous mines. Suitable for all Kinds of Work

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ALLAN, WHYTE & COY**Clyde Patent Wire Rope Works,**Cablegrams: "Ropyery Rutherglen"
Rutherglen, Glasgow, Scotland.Codes: A B C (4th & 5th Eds)
A. L. Lishers 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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Perforated Metal of Steel, Copper, Brass, Zinc, for all purposes.
Special attention given to Miners' Requirements.

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WIRE "DOMINION" ROPE
For Everybody.
—PATRONIZE HOME INDUSTRY—
The DOMINION **WIRE ROPE** CO., Ltd., Montreal

INVERNESS IMPERIAL COAL

INVERNESS RAILWAY and COAL COY.
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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
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sizes of Steamers and sailing vessels.

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

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Time Table No. 24, Taking effect at 1 a. m.
JUNE 28TH., 1928.

| EASTBOUND | | | STATIONS. | WESTBOUND | | |
|-----------|--------|--------|--------------------|-----------|--------|--------|
| Read Down | No. 52 | No. 54 | | Read Up | No. 51 | No. 53 |
| a. m. | p. m. | p. m. | | a. m. | p. m. | |
| L 11 15 | L 3 50 | | P. TUPPER JUNCTION | A 11 05 | A 3 25 | |
| S 11 25 | S 3 55 | | PORT HAWKESBURY | S 10 57 | S 3 37 | |
| A 11 40 | A 4 00 | | | L 10 57 | L 3 10 | |
| | L 4 15 | | PORT HASTINGS | A 10 51 | | |
| | F 4 30 | | TROY | F 10 25 | | |
| | S 4 38 | | CHERNOBI | S 10 00 | | |
| | F 4 50 | | JUDIQUE | F 9 35 | | |
| | S 5 05 | | CHARBONNE | S 9 22 | | |
| | F 5 18 | | CATHERINE'S FOND | F 9 12 | | |
| | A 5 25 | | PORT HOOD | L 9 02 | | |
| | S 5 35 | | GLENCOE | A 8 57 | | |
| | S 5 46 | | MADOT | S 8 51 | | |
| | S 5 58 | | GLENDYRE | F 8 45 | | |
| | S 6 05 | | BLACK RIVER | S 8 35 | | |
| | S 6 12 | | STRATHLEONE | L 8 15 | | |
| | A 7 15 | | INVERNESS | A 8 10 | | |
| | P 10 1 | | | | | |

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Miners of the
MABOU DIAMOND COAL.

Burns and Works like Bituminous;

Locks and Lasts Like Anthracite;

IT HAS NO EQUAL.

Mines, Piers
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MABOU, CAPE BRETON.

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

EXCELLENT FUEL FOR
**Domestic, Steamship
and Railway Use.**

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.
All modern appliances for Screening and picking, so that this coal can be shipped more than "reasonably free from stone and shale."

Loading Piers at Port Morien C. B. Quick Dispatch.
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Over 7,000,000 H. P. in use, Fired with all kinds of Fuel

Steam Superheaters, Feed Water Heaters, Mechanical
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*Best all round flour on the market,
Uniform in quality. Every barrel
can be depended upon. This flour can
only be had in Cape Breton at the stores
of the Dominion Coal Company.*

**Air Compressors, Rock Drills,
Imperial Pneumatic Tools,
Air Appliances, Coal Cutters,
"EVERYTHING IN AIR MACHINERY."**

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VICE-PRES.

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RUBBER HOSE for Air Drills Pneumatic
Tools, Steam, Suction, etc.

"REDSTONE SHEET PACKING,

For highest pressures with Steam, Hot or Cold Water and Air.
The most durable and satisfactory Packing on the Market.

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MARITIME COAL, RAILWAY & POWER CO., Ltd,

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The BROWN MACHINE COY.,

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Coal and Gold Mining Machinery a specialty

Endless Haulage Engines, Revolving Tipples, Picking Tables and Complete Screening Plants for the Cleaning and Picking of Coal. Rope Wheels, Pumps, Valves, Shafting, Belting Etc.

Complete equipments furnished for Coal or Gold mines.

Screening plants are now in operation at Sydney, Springhill, Broad Cove, Port Hood and Westville Mines

Estimates Cheerfully given

CORRESPONDENCE SOLICITED

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COAL

High Grade Fuel
for Steam, Domestic and General
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From Coal Washed by Latest Process,
Growing more popular daily—and considered
to give as good results for Foundry purposes
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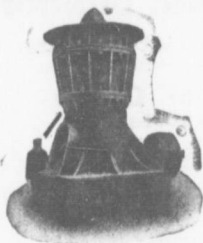
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Better than
Scotch seconds for
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HADFIELD'S STEEL Foundry Co., Limited. SHEFFIELD



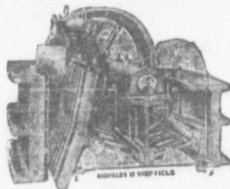
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STONE CRUSHER.



CAST STEEL
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WHEELS & AXLES

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The Parts which are subject to Excessive Wear are made of

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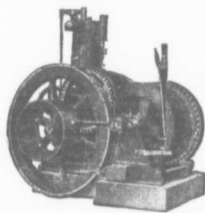
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FAIRBANKS-MORSE Gasoline Hoisting Engines

THE IDEAL MINE HOIST

The Cheapest and
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Can be started and stopped
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Consumes fuel in proportion to
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Cannot be Excelled for **HIGH CLASS QUALITY** and **WORKMANSHIP**
They are made of the very best brands of English Bar Iron and by Selected Workmen.

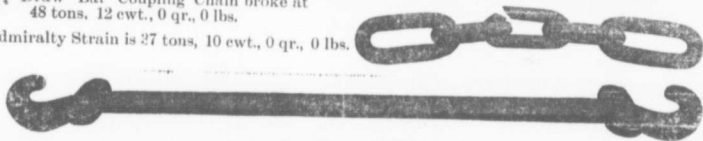
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For Mine Cars, A SPECIALTY.

This 1 1/2" Draw Bar Coupling Chain broke at
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The Admiralty Strain is 27 tons, 10 cwt., 0 qr., 0 lbs.



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OPERATING THREE
THICK SEAMS
NOS 1, 2 AND 3.

—Miners and Shippers of the Well Known—

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% |

BEST COAL FOR
LOCOMOTIVE USE.

Delivered By Rail or Water

BEST COAL FOR
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The year Round

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IN Lots To Suit Purchasers.

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Miners of

Bituminous Coals, the celebrated "Reserve" coal for household use, "International" Gas coal, and the best Steam coal from its collieries on the Phalen seam.

—Yearly output 3,500,000 tons.—

ANALYSES.

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| | STEAM COAL. | GAS COAL |
|---------------|-----------------|----------------|
| CARBON..... | 80 18 per cent. | 77 51 per cent |
| HYDROGEN..... | 5 11 " " | 5 22 " " |
| OXYGEN..... | 7 34 " " | 6 72 " " |
| NITROGEN..... | 1 16 " " | 1 22 " " |
| SULPHUR..... | 0 56 " " | 3 07 " " |
| ASH..... | 2 30 " " | 4 10 " " |
| WATER..... | 3 35 " " | 2 11 " " |
| | 100 00 | 100 00 |

Calorific Power of Steam Coal :—Pounds of Water evaporated from 212 per cent Fah, by one pound of the coal as determined in Thompson's Calorimeter,—14.8 lbs.

Shipping facilities at Sydney, and Louisburg,
G. B., of most modern type. Steamers, carrying
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Special attention given to quick loading of
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Ocean going Steamers with Dispatch. Special attention given to Prompt loading
Steamers of any Size are bunkered without detention.

By Improved screenings appliances lump coal for Domestic trade is supplied
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