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Maritime Miner Record

FEB. 9 1911

Dr. R. Bell
Geol. survey dept.

DOMINION COAL COMPANY, LIMITED.

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Gas Coal and Coal for Household Use
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12 Collieries
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OUTPUT:
3,500,000 tons Yearly

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

Shipping Piers equipped with modern machinery,
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-AT-

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7000 ton Steamers Loaded in 7 hours.



Special facilities for loading and prompt despatch given to sailing vessels and small craft. Box Car Loaders for shipments to inland points. Discharging Plants at Montreal, P. Q., Three Rivers, P. Q., Quebec, St. John, N. B. and Halifax, N. S., Capacity up to 1000 tons per Hour.



BUNKER COAL. The Dominion Coal Co. has unsurpassed facilities for Bunkering Ocean going steamers the year round. Steamers of any size promptly loaded and bunkered.

IMPROVED SCREENING FACILITIES at the Collieries for the production of Lump Coal of superior quality for Domestic trade and Household Use.

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171 Lower Water Street, Halifax, N. S.
Quebec, P. Q.

AND FROM THE FOLLOWING AGENTS:

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Harvey & Company, St. John's Nfld.
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G. H. Duggan,

2nd. Vice-President and Gen'l Manager.

Alexander Dick,

General Sales Agent.

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Telegraphic Address, Latch, Haymills

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(ESTABLISHED 1730)

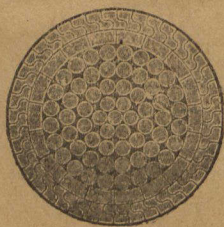
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AGENT: **H. M. WYLDE,** P O Box, 529 **HALIFAX N. S.**

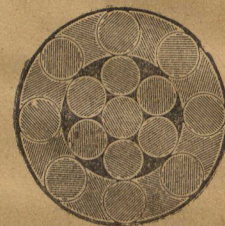
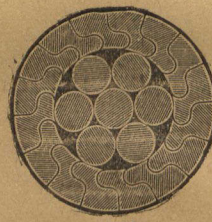
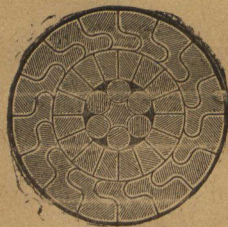
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Locked Coil and Flattened Strand **WIRE ROPES.**

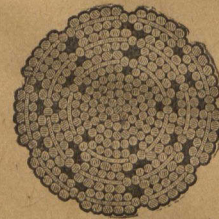
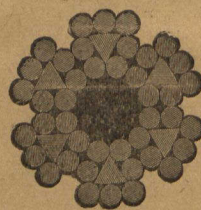
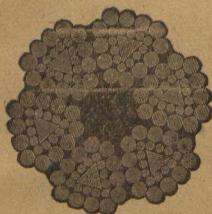
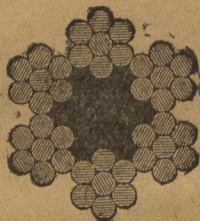
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Bridges, Cranes, Elevators, Transmission of
Power, Steam Ploughing and General
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Locked Coil Winding Cable.



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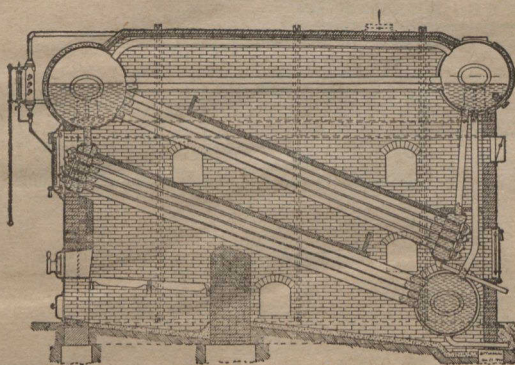
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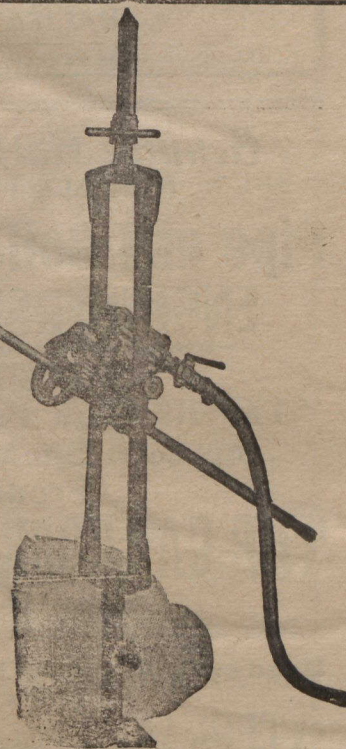
Half the usual number of handholes

ROBB ENGINEERING COMPANY, L't'd,

AMHERST, N. S.

The TORNADO AIR POWER COAL DRILL

is used extensively by the Dominion Coal Co Nova Scotia Steel and Coal Co., Inverness Ry. and Coal Co. and others.



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Manufacturers of
H. & H. Coal Cutters & Tornado Coal Drills
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Miners Wanted To Chew BULL DOG TOBACCO,

Because it is the only Tobacco
which does not excite **Thirst**
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TRY IT!

The St. Lawrence Tobacco Co., Ltd.
—Montreal.—

—W. B. Reynolds, Halifax Representative—

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our 'FENERTY' Brand

COOK'S PAN SHOVELS,

COAL TRIMMERS SHOVELS.

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The Largest Mines in Canada

MANUFACTURED BY

The HALIFAX SHOVEL Co.

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ALL GOODS GUARANTEED.

Genuine Garlock Parkings
FOR ALL PURPOSES.

**Pipe and Boiler Coverings,
ENGINEERS SUPPLIES.**

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"Tauril" High Pressure Jointing
the Best Sheet Packing yet
Produced.

THE GARKOCK PACKING CO.
HAMILTON, ONTARIO.

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'XTERRA' COLLIERY LAMP OIL

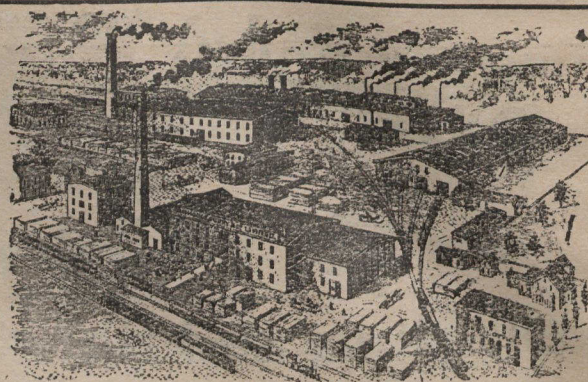
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LOW PRICE.

E. WOLASTON, Dutton St. MANGHESTE

Sole Representatives for Canada, AUSTEN BROS.,
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RAILWAY**

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HALIFAX and MONTREAL.

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Dinner \$1.00

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Steel Castings,
Forgings,
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We make a Specialty of

**Manganese Steel Castings for
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ESTABLISHED 1863.

Philips Mine & Mill Supply Co.

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Office 2227 Jane Street.

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Brass and Iron Valves, Steam, Water and Suction Hose,
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Mines of Gold, Silver, Coal,
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Titles direct from the Crown_____

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Licenses are issued for prospecting for Gold and Silver for a term of twelve months. They comprise areas 150 by 250 feet, and any number can be obtained, at a cost of 50 cents per area. Leases of any number of areas can be obtained, at a cost of \$2,00 per area, for a term of 40 years; subject to an annual rental of 50 cents per area.

Licenses are issued to quartz mills, which make returns and pay royalty on the gold at the rate of two per cent, on milled Gold valued at \$19.00 per oz.

Minerals other than_____ **Gold and Silver.**

—LICENSES TO SEARCH—

over five square miles for eighteen months, cost \$30,00; 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

All titles, transfers, etc., are recorded free of charge by the Department. The royalty on coal is 10 cents per long ton, and on other minerals in proportion.

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

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"VITITE"
COMPRESSED HIGH PRESSURE
STEAM PACKING

"Vitite" Packing is a Compressed Asbestos sheeting especially treated. It makes an ideal flange and manhole joint and a trial will be a revelation to you.

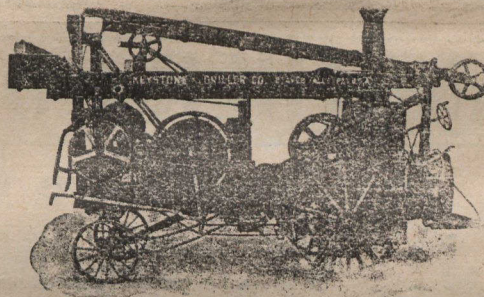
"Vitite" Packing resists highest steam pressure and superheated steam, and is unexcelled as a flange packing for Steam, Hydraulic, Gas Engine, Acid, Ammonia and other joints.

"Vitite" Packing insures greatest reliability against pressure and stretching and will not become hard in the joint.

"Vitite" Packing is supplied in sheets 48 inches square, 1-32, 1-16 and 1-8 inch thick.

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The KEYSTONE
Percussion Core Drill Attachment
is an economical appliance for
TETING COAL LANDS.

It can be used in connection with any good "churn" drill, but operates best on the long-stroke KEYSTONE, thus making the cheapest and quickest method of boring to be found.

In operation a hole is sunk to the coal with the ordinary Rock Bit. The Bit and Stem are then removed and the Coring Attachment put on in their place. It takes a 4 ft. core out of the Softest as well as the Hardest part of the vein. Avoids all delay and expense of "rods" water wash, diamonds, shot, and heavy operating mechanism.

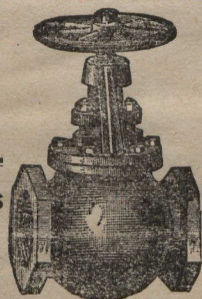
Price of Complete Attachment
\$200.00

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Mining & Mill Supplies.

Valves,
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Boiler
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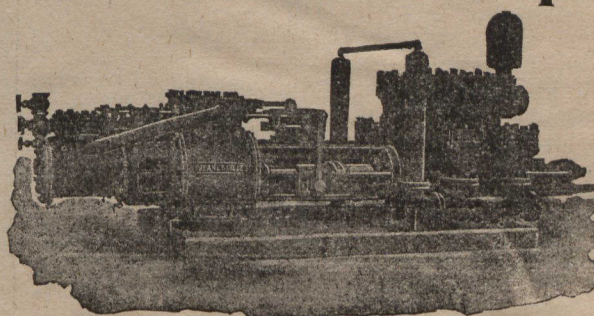
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Iron Pipe for
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MONTREAL, QUE.
 —Established 1852—

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A Reliable, Efficient, and Substantial,
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DIRECT ACTING and CRANK and FLY-WHEEL.
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Steam or Electrically Driven

Jeanesville Iron Works Co.,
 HAZLETON, PA., U. S. A.

ANOTHER GOLD MEDAL,

for excellence of display, awarded to
J. W. CUMMING & SON,
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—MAKER OF—

“Speedy” Coal Boring Machines, “Acme” Ratchet Rock Boring Machines, Miners’ Tools, Copper Headed Stemmers Copper Pointed Needles, Miners’ Picks, Chisels, Wedges, and other mining appliances.

Quality of material and Excellence of Workmanship
 —is the motto of the Firm.—

The firm a month or two ago secured an order from the Maritime Coal, Railway & Power Co., Ltd., 200 pit tubs. So highly satisfactory was the work that the first order was, after receipt of the tubs, duplicated.

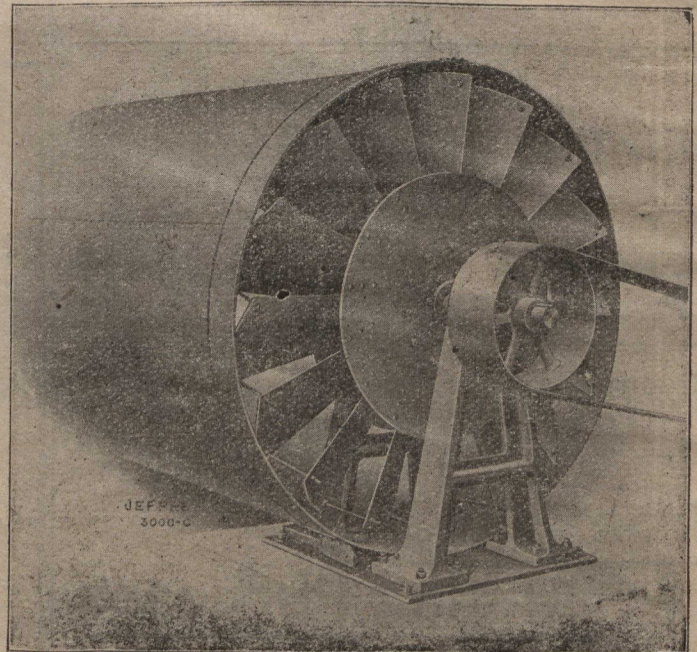
JEFFREY PROPELLER FAN for MINE VENTILATION.

This Fan is highly recommended wherever the development does not justify the installation of our centrifugal fan.

It has no equal for boosting along feeble currents in large operations.

A DISTINCT IMPROVEMENT over The Ordinary Disc Fan.

It is self contained, simple in operation and embodies many new features which are described in our Bulletin 1b 23, mailed on request.



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Knoxville,
 Denver, Toronto.

Peeton.
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the...

MARITIME MINING RECORD

Vol. 12, No. 15

Stellarton, N. S.,

FEB. 9 1910.

New Series

SELECTED QUESTIONS AND ANSWERS.

(Science and Art of Mining.)

Q.—Describe briefly the water-gauge and anemometer. Show how they are applied to determine the efficiency of ventilation.

A.—The water gauge and anemometer are two of the most valuable instruments used in connection with mining. By their application we can ascertain the quantity of air passing in a mine or a working place, and the pressure producing the ventilation; they are also used in connection with determining the efficiency of mechanical ventilators.

The Water-Gauge.—There are various types of water-gauges on the market, but all of them work on one fundamental principle, that is to determine the pressure producing the ventilating current. Of the various types the most popular is that constructed of a glass tube in the form of a letter U; the diameter of the bore of the tube varies with the size of the instrument. The tube is fixed vertically on a wooden frame fitted with a spirit level, and one leg of the gauge is covered with a metal cup and perforated to admit the pressure of the atmosphere. The aperture in the other leg is also covered with a metal cup fitted with a small branch pipe to facilitate the connection of the water-gauge between intake and return air currents by passing the pipe through a hole in a masonry stopping or door, or if as occasion requires it, by passing the branch pipe from the engine house into the fan drift. A scale divided into inches and tenths of an inch is filled between the vertical tubes and is manipulated by a thumb screw at the bottom of the wood frame so that the adjustment of the scale can be done with accuracy. One inch on the scale which is equal to one inch water-gauge represents a pressure of 5.2 per lb. square foot. This is obvious by taking a cubic foot of water which weighs 62.4 lb. and dividing it as it were into 12 slabs 1 inch high and 12 square inches area. Therefore if the weight of a cubic foot of water weighs 62.4 lb., $62.4 \div 12$ will equal 5.2 lb., the weight of one slab 1 inch high and 12 square inches area, or 1 inch water-gauge.

The water-gauge is both used as a stationary and portable instrument.

The Anemometer.—This instrument, like the water-gauge, is constructed by different makers in various forms, but whatever form it may be constructed in, it can only perform one function, that is recording the velocity of the flow of air in mines; some have been so constructed as to be self-timing. The anemometer is in itself a very delicately constructed fan, and consists of a series of vanes so set obliquely in the frame which encircles them that when the instrument is held square against the air current the velocity of the air causes the vanes to revolve. With the wind wheel revolving a pinion connected to the wheel spindle operates the delicately

constructed toothed mechanism which in turn actuates the pointers on the dial and so records the velocity of the flows of the air.

A modern type of anemometer is one that has a counting arrangement on a dial registering tens, hundreds, thousands, tens of thousands, hundreds of thousands and millions.

To show how the water-gauge may be used to determine the ventilating pressure let us assume that the instrument is connected to the intake and return air currents at a stopping. The water which is placed inside the tube is subject to the different pressures and densities of the two air currents. The result is that the water in the tube subject to the greater pressure is forced down and consequently rises in the other tube. This difference of level of the water in the two tubes is measured by the sliding scale, each inch of water-gauge representing 5.2 lb. pressure per square foot producing ventilation.

Suppose we have a difference of 2.5 inches, the ventilating will be $2.5 \times 5.2 = 13$ lb. pressure per square foot.

To show how the instruments may be used to determine the efficiency of the ventilation, let us find the horse-power of the ventilation, and then the horse-power of the machine producing that ventilation. To accomplish this we utilise the anemometer for measuring the velocity of the air passing in the mine, and knowing the area we can find the quantity flowing through the mine by rule.

[Note.—In this question we may read "efficiency" in two ways, namely, efficiency in producing an adequate amount of ventilation or efficiency in the horse-power of the ventilation as compared with the horse-power of other engines. It is this latter efficiency about which the two instruments mentioned can tell us something. As regards the former efficiency, the two instruments, in our opinion, can tell us nothing, except comparatively, that is to say, the anemometer for instance, may tell us that one day there is a quantity of 20,000 cubic feet per minute going in a district, and another day 25,000, but whether either amount is adequate or not the instrument cannot tell us. The same with the water-gauge. One mine may be, and probably is, better ventilated with a water-gauge of one inch than is another with one of three inches. Take two mines each passing 100,000 cubic feet per minute, the one with a three-inch water-gauge and the other with one of one inch. We could not possibly say that the former mine was more efficiently ventilated than the latter, but simply that the resistance of the former were three times as great as those of the latter, and that the horse-power required was three times as much. (This is not a mistake, as some may think at first sight, because we are speaking of two different mines, and we are speaking of the same quantity in each case). We have dwelt on this subject at some length because it is the custom with some managers to think that with a certain quan-

tity per life, with a certain water-gauge there is perfect safety, but in our opinion one mine may be better ventilated with 100 cubic feet per minute per life than is another with 300 cubic feet.

CONDENSING.

The principal underlying the action of the condenser is that the steam as it exhausts from the exhaust ports shall be exhausted into a closed vessel within which it is brought into contact with a flow or spray of water which condenses it, thereby producing a vacuum within such vessel. The production of this vacuum does away with the influence of the pressure of the atmosphere; that is the atmospheric pressure, which amounts to over 14.5lb. per square inch, is removed and as a result it does not act against or retard the motion of the piston. In practice it is found that the vacuum is not perfectly produced, and that a pressure varying from 2 to 4lb. per square inch exists within the condenser, consequently instead of the atmospheric pressure being entirely removed we find that there is a back pressure of from 2 to 4lb. acting against the piston. This reduces somewhat the efficiency of the condenser, and also that of the engine. Owing to the production of this partial vacuum, which amounts at its maximum to over 28 inches, we find that instead of 14.5lb. which is the pressure of the atmosphere pressing against the piston, we have what is equivalent to 12.5lb. pressure added to the pressure of the steam at the inlet end of the cylinder.

The best results of condensing are brought about when the vacuum produced by the condensation of steam by the water within the condenser is at its maximum; that is about 29 or 30 inches. Anything below 28 inches vacuum should be regarded as unsatisfactory. Mr. W. D. Horsnail asserts that 1 inch of vacuum means a saving of 1 per cent. in steam consumption; on this basis we find that for a 28-inch vacuum we have a saving of 28 per cent. in steam consumption, and for a 30 inch vacuum a saving of 30 per cent. The benefit of this saving is obvious, for we know that both the capital expenditure and running costs of the plant are favourably effected by it. As a result less boilers are required to generate steam, the engine cylinders and also the steam columns can be made smaller than those required for non-condensing engines; also for a given amount of power less coal will be consumed to produce it than would otherwise be the case.

ANOTHER NOTABLE CONVERSION.

The Herald at the penitent bench.

And now the Herald, like the Post, has repented of its evil ways.

One by one the friends of the strikers, never at any time a large number, are forsaking them. The latest to cast them off is the Halifax Herald. It may be that its repentance has come too late; all the harm possible has been done. The Herald asks what has happened since last August, and then rubs it into the strike leaders, the strikers, their abettors in the press,

and their advisors, in this honest fashion:

"What has happened since that time?"

"MEN—many of the best citizens of Glace Bay and the best miners in the world—have been living on strike allowances; their manhood impaired by eating bread that they did not earn.

"WOMEN and CHILDREN have had to leave comfortable homes and live in hastily constructed shacks and have experienced indescribable hardships in the winter weather.

"The savings of the workmen gone; business paralyzed; the credit of the mining towns impaired; the police courts busy with charges of intimidation, unlawful assembly, shooting, assaults, and an evident disrespect for law that has produced a painful impression in the public mind.

"The province is weary of having its most important industry carried on under the protection of the guns of the military and the batons of the police."

The Herald then proceeds to give what it considers the causes leading to the strike: "The U. M. W. discriminated against; refusal to remedy grievances, and refusal to recognize the U. M. W.," A Board of Conciliation said there was no discrimination. The real causes leading to the strike, the Herald better understood once for all, were: 'Refusal to recognize the U. M. W.; refusal to go to Sydney to confer with U. M. W. representatives, and third, refusal to receive officials of the U. M. W.,' or summed up the cause and the one cause of the strike was the demand of a foreign order for recognition.

The Herald seriously tells us that the demand for recognition was dropped months ago. How sweetly soft the Herald is. Why, recognition was and is the one demand of the strikers. Their leaders asserted in the press that if the U. M. W. was recognized the other grievances could go to pot. Is the Herald so weak as not to perceive that recognition of the representatives of the U. M. W., even though the Yankee agitators returned home, was simply a recognition of the U. M. W. The Herald says Mr. Plummer has signified his willingness to meet committees of the men and to remove grievances if possible, and asks 'What more do the men want?' This is base desertion. What do the men want?; Why, they are standing out for what they came out for. They want recognition, that is the 'more' they want. The other two points were never denied any of the workmen of the Dominion Coal Co. The Herald now thinks a continuance of the strike idiotic. We thought its start partook of that character. The Herald caps the climax when it says that President Plummer has positively pledged 'to remove ANY and EVERY grievance.' Before the RECORD will believe that we must have it under the hand and seal of the new president. Of course no such proofs will be forthcoming. To undertake to remedy any and every grievance of some 5,000 or more men, would entail a greater expenditure of nerve and brain power than the management of a half a score of mergers. The Herald is very emphatic; it does not say 'any and every grievance will be heard', no, but that any and every grievance will be remedied. O; You Herald; You gay deceiver. But its all right. You have at last taken a wise stand in advising the men to give up a hopeless fight.

MARITIME MINING RECORD.

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

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

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

Subscription \$1.00 a year. Single Copies 5 cents

R. DRUMMOND, PUBLISHER.

STELLARTON, N. S.

FEB. 9



THE COMBINES ACT.

McKenzie King's combines act introduced into parliament on the 18th. inst., may be divided into four parts: 1st., interpretation; 2nd., order for investigation; 3rd., inquiry and report, and 4th., punishment. A "combine" means any contract, agreement arrangement, or combination which has, or is designed to have, the effect of increasing or fixing the price or rental of any article of trade or commerce or the cost of the storage or transportation thereof, or of the restricting competition in or of controlling the production, manufacture, transportation, storage, sale or supply thereof, and includes the acquisition, leasing or otherwise taking over, or obtaining by any person to the end aforesaid, of any control over or interest in the business, or any portion of the business, of any other person, and also includes what is known as a trust, monopoly or merger."

And here is the punishment for offenders. Is there not something incongruous in the reference to duties. Does not protection in almost every case enhance the price to the consumers:

"Whenever it appears to the satisfaction of the Governor in Council that with regard to any article there exists any combine to promote unduly the advantage of the manufacturers or dealers at the expense of the consumers, and if it appears to the Governor in Council that such disadvantage to the consumer is facilitated by the duties of customs imposed on the article, or on any like article, the Governor in Council may direct either that such article be admitted into Canada free of duty or that the duty thereon be reduced to such amount or rate as will, in the opinion of the Governor in Council, give the public the benefit of reasonable competition."

"Any person reported by a Board to have been guilty of unduly limiting the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any article which may be a subject of trade or commerce; or of unduly restraining or injuring trade or commerce in relation to any such article; or of unduly preventing, limiting or lessening the manufacture or production of any such article; or of unreasonably enhancing the price thereof; or of unduly preventing or lessening competition in the production, manufacture, purchase, barter, sale, transportation, storage or supply of any such article, and who thereafter continues so to offend, is guilty of an indictable offence and shall be liable to a penal-

ty not exceeding one thousand dollars and costs for each day after the expiration of ten days from the date of the publication of the report of the Board in 'The Canada Gazette' during which such person so continues to offend."

Had the coal operators of Nova Scotia been tried under either of the preceding clauses, Mr. Stipendiary Fielding could have dismissed the case before it had well begun.

- Rubs by Rambler.

Is the United Mine Workers of America, as a society, responsible for the disorderly and disgraceful scenes which have been witnessed at the Southern Cape Breton collieries, at intervals during the past six or seven months. For the acts of individual members, or for those of a number of its members as individuals a society may not be responsible. It is, however, surely responsible when these acts are committed by individuals as members of a society. Because they were members of the U. M. W. a portion of the workmen struck; the acts of violence done by these strikers are chargeable to their connection with the foreign society, and therefore the society must be held responsible. It may be urged that acts of violence are against the implied wishes of the leaders. Too thin, too thin. Were the leaders opposed to violence they would take every opportunity of denouncing the rioters, they would express themselves as opposed to all such unruly proceedings as have been witnessed. But this they have not done; instead they have lain back, and by silence not only condoned but approved of the barbarous methods of intimidation that have been employed. Without doubt the society, that is the U. M. W. of America, must be held as abettors of, and responsible for, the discreditable acts of violence and disorder that have prevailed. And public opinion holds them as responsible, and therefore it is that the name, United Mine Workers, has become a byword and a reproach over the length and breadth of the land. It is said that the 'dole' received by the strikers is given contingent on their turning out regularly to do picket duty, that is to call scab and throw stones at decent men going to or returning from work. If the society was averse to unlawful acts, and knowing that its pickets daily commit these acts, it would at once withdraw them, but as we said, it won't do that; violence is the principal part in the strike programme of the U. M. W. as known in C. B. Are these acts to be permitted to continue. If they are then law and its enforcement in Nova Scotia are disgraced. The U. M. W. is not incorporated, therefore it cannot be sued, but surely individual members of it can be effectively dealt with. In Britain, if a union leader intimidates a workman, no matter how slight the intimidation, he is liable to three months with hard labor. British law should be made applicable to Nova Scotia. There can be no doubt that the officers of the several U. M. W. lodges participate in picketing. Being officers, they are leaders. If a few of the leaders in the several riotous districts were given three months with hard

labor, there is little doubt that the effect would be salutary. We are told that the new Attorney General is a smart young man. There is a splendid field open to him in his native county, to show the stuff he is made of. The Crown, and not private individuals or corporations, should assume the prosecution of law breakers, more especially in districts where breaches of the law are persistent and notorious. No one we suppose will deny that workmen should and must be protected in their right to work. The question is who is to protect them? To work is lawful, to intimidate is unlawful. Is it the workman who has to see that law shall be enforced? It is not, that is the duty of the community; in short, and in our opinion, in such circumstances as exist and have existed in C. B. for months, it is the duty of the Attorney General to act, regardless of the consequences. By consequences we mean, political effect.

When in Scotland, last summer, the writer witnessed some remarkable performances of a couple of girls in a large glass tank filled with water. The most remarkable feat was one entitled "praying and sleeping." The tallest of the girls sank gently to the bottom of the tank, stretched herself out at full length, gracefully rested her head on her hand, the arm bent at the elbow, and peacefully pretended to go to sleep. The time she lay under water astonished the onlookers. I could not understand it. I thought she lay still for five minutes, others declared that it was nearer ten, but probably five was nearer the mark. There was another thing remarkable about the feat and that was the ability to keep at the bottom of the tank the while the lungs were inflated with air. I have since solved the first part of the feat, the length of time under water. Until one tries he has no conception of the time he can retain his breath. Breathing exercises will do for a diver what training does for a runner. As hinted at in the following on 'breathing exercises,' it is possible that in mining disasters much could be done by men who know the secret of deep breathing. I went into the breathing business the other night on my own initiative. After two minutes violent injections and ejections of air, I held my breath and noted the time. When I was forced to give the final gasp on looking at the watch I was surprised to find how successful the experiment was, and had a notion to go into the water tank sleeping business. It is said one can hold his breath for four and a half minutes; if that is so I am still in a lower form, I can't go quite half that—as yet. The following on the subject is interesting:

"Breathing exercises are now a matter of faith with so many people that some experimenes on the effects of them which were made by Dr. D. F. Comstock cannot fail to strike a sympathetic chord somewhere. He found that enforced deep breathing over a period of four minutes had the curious effect of enabling the experimenter to 'hold his breath' for nearly three and a half minutes. The period varies in individuals; but, he adds gaily, 'I have seen some very amusing betting on how long it was possible to hold the breath, and have seen the cock sure better laid low by not knowing of this possible resource of his adversary.' Evidently this is a pleasant scientific game for the long winter evenings, but Dr. Comstock has some more serious observations to offer. The effect of deep breathing as a mental stimulant is," he declares, very pronounced. Fatigue may be postponed far beyond the

usual point by two minutes of rapid deep breathing at half hour intervals. The effect on muscular fatigue is also striking. Another curious effect which is perhaps worth mentioning is the rapid lapse of time during the latter half of a hard breathing period. This change in the time sense is very noticeable. As a mental stimulant, and as a means to increase the time during which the system can do without respiration, violent breathing might find considerable useful application, and daring rescues from suffocation are common enough to make a knowledge of this possible threefold endurance without air of no little value.

The one and the only reason advanced by the U. M. W. for encroaching upon ground broken and occupied by the Provincial Workingmens Association was that the latter was a very weak body financially, and therefore unable to cope with the powerful coal companies. And this argument, advanced by members of the foreign order, has been taken up by, and had the semi-endorsement of, a portion of the unthinking press, who, though they cared little in earnest for the workmen, thought they saw a chance to make party capital, out of the intrusion. People with grudges against the company and writers who wished to become stars, also put emphasis on the declaration that a society with big funds was necessary in the interest of the mine workers. More than once the RECORD has pointed out that big funds are not the one essential, not even a great essential. A union weak in funds, but managed in a common sense way may be most successful, where a rich union utterly fails. Some unions limited in their membership and limited as to means have been immeasurably more successful than a union with a million in its exchequer and four hundred thousand on its membership roll; and the P. W. A. is an instance in point. The other day Pres. Lewis, of the U. M. W. furnished proof of our assertion, that money does not always count, when he stated that the U. M. W. had spent no less a sum than three million dollars in trying to organize the miners in the State of Virginia, and that the expenditure of all this money and of time had been wholly in vain. When the P. W. A. set out to organize the miners in Nova Scotia, the money, all told, at its command was a hundred dollars. And why did the P. W. A. succeed? It took things quietly; made no boasts of its greatness and adopted common sense methods. Mr. Lewis told the convention that the three million spent in Virginia had been spent in vain; he forgot to tell them that the U. M. W. was spending money like water in Nova Scotia, and that after three million dollars had been spent they would in all human probability be no further ahead than when the expenditure first began. It will take more than three million dollars to establish the U. M. W's. in the good graces of the better thinking miners, and the people of Nova Scotia generally. Three millions will not wash out the stain made by their lawless and overbearing methods.

"Be not weary in well doing for in due season ye shall reap if you faint not." That is the injunction, and through weary months, though our task seemed hopeless, we kept at it and at last there is reward. By kindly advice tactfully tendered; by gentle remonstrance tenderly administered; by rebuke so mild that it might be called persuasion, we strove mightily to keep the feet of the Post in the narrow way. In spite

of all it would keep sliding and slipping from the straight course until the tension was so great that we had almost come to believe that the ties of friendship which knit us firmly to our Sydney brother must be broken, when all of a sudden the Post pulls itself up. A sort of instantaneous conversion. It is gratifying to the RECORD to know that the kindergarten methods it applied to the Post have been successful. Had we been harsh we might have failed.

P. S.—Since the foregoing was written, it has been cruelly suggested to us that the demand of the Post for speedy punishment on the law breaking strikers, and its support of law and order, was not brought about by our efforts. We are told the 'Merger' did it. Oh, well, we're not selfish; we're glad the Post sees the evil of its ways, no matter who or what opened its long closed eyes.

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The anthracite members of the U. M. W. do not feel highly flattered by being members of that order. They attend the union only when there is a prospect of an agitation for higher wages. The missionaries that are sent into the field cannot prevent hosts from backsliding. Pres. Lewis of the U. M. W. said in his annual report that of all the miners in the anthracite regions, only thirty thousand at present belonged to that great organization. He declared that this very low membership was due to the indifference of the men. Well he needn't have gone so far into details, it is equally true of every department in life, that if men are not enthusiastic in a cause, they are indifferent, and if indifferent they count for little or nothing. He said very many of the men refuse to pay their dues except when trouble is brewing. That too, is the way of the world; most people when they give something, hope for something in return. The members of the U. M. W. may be excused if they pay only when wage questions are on foot. The U. M. W's. consider wages the great and only question to be discussed in their lodge rooms. They do not take hold of other objects which would be of as much benefit to workingmen as an increase in pay. Other unions hold their members in peace times by the discussion of subjects of interest and benefit to them. The pretensions of the U. M. W. in posing as international union propagandists, the while they have so small a home membership, are rather laughable. For all the missionaries, organizers, and walking delegates at his disposal, Pres. Lewis has more work in the home field than he can overtake. It looks like a waste of energy to attempt to draw Nova Scotia into the U. M. W. net.

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Mr Chas. E. Tanner takes much delight in sending "open" letters to Premier Murray. The word 'open' when used in this connection has a meaning all its own. It means that the letters are not sent to the Premier but to the tory press. Now it is doubtful if Mr. Murray reads the tory papers; if he is a narrow minded grit he won't. Mr. Tanner's letters are not the most effective way of settling the differences of opinion between the two. Let Mr. Tanner arrange for a series of debates in all the towns and villiages, with a neutral chairman, the chief of police, for instance, as arbitrator. Mr. Tanner, physically, is rather a light man, but his letters run away to the other extreme. They are heavy reading. I notice in a late letter that Mr. Tanner charges

Mr. Murray with inconsistency. I am glad of that. I, too, have been what Tanner would call inconsistent, and it is nice to have a brother in such adverse case. Mr. Tanner says in an I-am-certain tone, that Murray went to C. B. in 1896 and advocated free coal; and that in 1897 he went to the same beloved spot, and waving his arms in that majestic way he has, shouted, 'Hands off the coal duty'. Now I'm glad that Murray did that, for I did something similar about that time myself. When the Dominion Coal Co. thought it could get the U. S. duty reduced, and under a reduced duty could send millions of tons into the United States, then I went in, like Murray, for free coal. When, however, it turned out that the U. S. forces were too strong for Whitney, and that the U. S. duty was maintained, I began to veer round to—to—let me say, protection. Mind you, protection on coal only. I may have been a little 'flier' than Murray and did not make an immediate somersault, took things easy and gradually got on the firm ground of 'no reciprocity' Tanner wants to know whether Murray was right in 1896 or 1897, Murray can do as he likes about answering the question, but I'm going to volunteer the opinion that there were those who were perfectly justified in being reciprocationists—have you got it—in 1896, and amply justified in being no intercourionists in 1897. Circumstances, Mr. Tanner ought to know by this time, alter cases.

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'Windermere' the London correspondent of the Montreal Star is far too much of a tory to be correspondent for a professedly independent paper, and the Star itself is too partizan to induce people to believe that it is in any sense independent in politics—at least in British politics. In very many cases it gives plain indication that its wish is father to its thought. For instance: After the tories had gained a seat in Scotland the Star oracularly declared that tariff reform was making inroads into the hitherto unbroken ranks of the Scots. Well the Scots at last election did very well for the liberals, but the ranks were not as a unit for liberalism. In the 1906 election there were fifty-nine liberals and thirteen unionists. What great inroads have been made into the ranks at this election? None. Why, it is all the other way. The liberals lost one seat in an out of the way county through landlordism, lost a second through local influence, and a third through a fool of a labor candidate. But then look at its gains, a half dozen or so. Instead of having thirteen from Scotland in this parliament, the unionists will have to be content with a little over half the number. Scotland did well; it is the mainstay of the liberal party. Hard headed scotsmen are not to be caught with the chaff of the peers, the fallacies of reform, or the bogie of German battleships. Well may Asquith shont 'Scotland for ever'—and a good word for sturdy little Wales at the same time. Bung or bishop, or baronet cannot swerve a scot or a welshman from the straight path of duty.

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Smillie, Small and Sullivan, three miners' leaders, or officials, in the West of Scotland, regardless of the harm their candidature might do to their friend, the liberal party, persisted in running, and we are glad to say their persistency was not rewarded. Notwithstanding the three

cornered fight, in the three divisions of Lanarkshire, the liberals won in each case. We are told, every now and again, that socialism is winning all along the line. Well, the British elections tell another tale. No pronounced militant socialist has been elected to the present parliament. Grayson, the revolutionist, and men like him, have been left at home. And labor, too, has lost in a way. Its success in 1906 up till 1909 made it a little too bumptious. Its leaders predicted that the force of labor members would be largely augmented, at the next, (the past) election. Instead it is fewer in numbers, and it is minus, at least, a couple of its most reliable men. Wm. Crooks failed to secure the necessary number of votes, and Bell, rather than swallow the socialist programme, resigned. Mr. Bell had done a great deal for the railway men, but all the benefits he had secured were forgotten, when he dared to assert his opinions. He was the right sort of a leader; he was conscientious, and rather than sacrifice his principles, at the demand of the noisy element in the ranks, he resigned. His resignation from the society of railway men was accomplished in a back handed way. A resolution was passed declaring that the head of the society had too much to attend to to sit in parliament. Here is an instance of the consistency of labor. It clamors for representation, and then when a labor man has been successful in obtaining the title M. P., it knocks him on the head, the first opportunity.

Blatchfords perversion was nearly, not quite, as rapid as some of those of the Herald. Last December the Herald was all for labor; by the middle of January it was all for the Lords. Last August Blatchford was death on the Lords, about the time of the Herald's perversion Blatchford perverted too and clinked glasses with their lordships. Here's what Blatchford said last August: "These same noblemen who have been fulminating patriotism, who have been demanding universal military service, and fleets of battleships, are now convulsed with rage over the prospect of a land tax of one halfpenny on the pound. Mind you it was Blatchford who said this; Blatchford the greatly beloved of Socialists, the same Blatchford, who in January urged conscription, a bigger navy and all sorts of military devices. In August he was a ranting socialist; six months later a raving jingoist. Further, last August, this same Mr. Blatchford said: "A few thousands of rich men own Britain. These same men want conscripts and Dreadnoughts for the defence of the country they own. But when it comes to paying they refuse to pay out of their abundance, and propose as an alternative, a tax upon commodities used largely by the poor. If the government yield an inch they deserve to be kicked out." Mr. Blatchford has therein decreed the punishment that should be meted out to him. If the government yielded they deserved to be kicked; well, they didn't, but Blatchford did. Blatchford then deserves to be kicked, that is his own judgement, and all the people shout, 'it is just, kick him.'

It goes very much against the grain of the Montreal Star to admit that the liberals made any gains in the late elections in Scotland. It tells us that the unionists made five gains and the lib-

erals four, leading people to infer that the liberals are now worse off than at the elections in 1906. The opposite is the case. In 1906 there were fifty nine liberals and thirteen unionists returned. Allowing that the two Scottish universities go unionist, and also the Orkneys, that will give eleven unionists and sixty-one liberals as against thirteen and fifty-nine in 1906. That does not look like much of a gain for the unionists. Then again the Star makes the gain of liberal votes only two thousand odd whereas it is more than twice that, and if we add the labor vote in three cornered constituencies, the liberal gain is well over ten thousand. Scotland is the gem in the liberal crown, and is the only division of the Kingdom which showed that it could not be drawn away from common sense by Blatchford or other bogies. In the great industrial districts like Partick, Govan, etc., the progressive party made wonderful gains, and went behind in little laird ridden districts such as Kircudbrightshire, Buteshire, and East Perth. Had it not been for a three cornered fight Glasgow would have now had six liberals. The unionists thought to gain twelve seats in Scotland, did they; that shows they don't know Scotland.

Russell, in one of his songs, so popular a long time ago, holds out the certainty that "theres a good time coming boys". If we are to believe that wizard Edison the time is approaching fast. And in view of the remarkable advances in all the sciences during the past quarter of a century, why should we not believe him. Here are some of Edison's views:

"Mr. T. A. Edison, (says the New York correspondent of the 'Daily Telegraph') has been expressing oracular views, reminiscent of Mother Shipton, and predicting that within two hundred years the world will witness wonders surpassing all imagination, when man, who will by means of science have learnt how to extract all the power he needs for the purposes of life from the earth, wind, and tide, and when living will be so cheap that an ordinary labourer will live just as well as a man of the present day with £40,000 annual income. Mr. Edison believes not only in the wonderful resources of radium, but even that steam volcanoes will be exploited for the uses of civilization. So far, he declares, we have only been groping in the dark, and this despite the many learned statements of many learned scientists. "How ignorant we are! We don't know what gravity is, neither do we know the nature of heat, light, and electricity, though we handle them a little. We are only animals. We are just coming out of the dog stage, and getting a glimpse of our environment. We don't know; we just suspect a few things, and it will take an enormous evolution of our brains to bring us anywhere. Our practice of shooting one another in war is a proof that we are still animals. The make-up of our society is hideous." Incidentally Mr. Edison declared that the clothes of the future will be so cheap that every young woman will be able to follow the fashions promptly. "Artificial silk that is superior to natural silk is now made of wood pulp. It shines better than silk, and I think that the silk worm barbarism will go in 50 years, just as the indigo of India went with the production of indigo in modern laboratories."

The German workman is a heavily taxed man, and yet his wages are low in comparison with his more fortunate British Brother. Germany has undoubtedly made big strides of late, and the references to German this and German that are innumerable, and yet when all is said the British workman under free trade is immeasurably better off, and in other respects than wages than the German. The following taken from official publications of the British Board of Trade will show how far in advance of the German the British workman is:

Average weekly wages in 15 skilled trades in chief cities	Britain	Germany
.....	£2 2 0	£1 4 0
In other cities and towns.....	1 16 0	1 2 6

The following figures show the average weekly wages in provincial towns in Great Britain and Germany:—

Masons	£1 19 2	£1 7 6
Carpenters and Joiners 1 18 3	1 1 8	
Patternmakers..... 1 17 0	1 1 0	
Plasterers	1 19 3	1 7 6
Turners.....	1 15 0	1 0 0
Fitters.....	1 15 0	1 0 0
Smiths	1 16 0	1 1 7
Compositors	1 12 3	1 3 1
Cabinet Makers.....	1 15 6	1 2 6
Upholsterers	1 16 0	1 7 11
Coopers.....	1 16 0	1 2 3

Though 'labor' is supposed to play a leading part in the Australian colonies, it gets justice meted out when it goes too far astray. The people were inclined to give way a good deal to labor, and so labor, like a spoiled child, played pranks. In the strike in Australia one of the union leaders has been sent to do hard work in prison for twelve months for obstructing operations at the mines. How comes it about that in Australia obstructionists and intimidators can be appropriately punished, while here in Nova Scotia they go scot free. Other of the strikers got eight months for a similar offence. A dose or two of this medicine would effectually stop obstruction at the South C. B. collieries. Why should it not be given. Patience has ceased to be a virtue.

A number of daily papers east and west have recently been devoting a great deal of space to discussion of the 'Cost of Living.' Most of the comments claim embarrassing increases in recent years in the price of various food stuffs and other necessities. It would seem, however, from comparisons made that Canada does not fare so badly in this respect as the United States. A recent comparison made between prices at Detroit, Michigan, and Windsor, Ontario, showed the following difference:

Commodity.	Windsor.	Detroit.
Butter, best bound	28c	36c
Eggs, dozen	34c	42c
Beef, cheapest cut, lb	6½c	10c
Pork, mess, lb	13c	20c
Bacon, breakfast, lb	19c	24c
Potatoes, bus.....	70c	60c
Turnips, bus	40c	60c
Carrots, bus.....	50c	60c
Beets, bus	25c	60c
Turkeys, dressed, lb	20c	25c
Chickens, dressed, lb	11c	15c
Milk, quart	7c	8.9c

It seems, however, according to statistics, that the world over prices on the necessities of life are much higher than a few years ago. According to most auth

orities dealing with this question the extravagance of the people, the increased gold production, and, in some countries, the failure of the agricultural output to keep pace with the growing requirements of an expanding population cause the increase.

A New York banker thinks that we have taken too large a percentage of our labour and energy away from the production and distribution of the necessities of life, and diverted them to the production of luxuries. If the land on this continent were properly tilled it would support a vast population in comfort. In their endeavor to stimulate intensive farming the agricultural colleges are doing a work of incalculable economic value.

One of Lloyd George's many pithy sayings:— "The land was made for the peasants, not for the partridges of England."

Bung and Bishop and Baronet did not succeed in their attempt to make the British Islands "the paradise of millionaires and the purgatory of millions." They forgot to take into account 'Scots wha hae.'

The two leading papers in Scotland, the Scotsman and the Glasgow Herald were strong for the Tories. The Scots have a way of deciding for themselves. Scotland still stands for freedom.

A British railway train is still, the "Railway Magazine" points out, the safest place on earth, as only one passenger in seventy million is killed, and one in 2,300,000 injured. This deduction is based upon a careful survey of the Board of Trade report on railway accidents during the year 1907. In 1908 the number of fires in trains amounted to 170, but it should be explained that many of these were of the most trifling description. It is a significant fact that of the number of fires reported not a single one occurred, either directly or indirectly, through a lightning flash. It would appear that for some reason railway trains are practically immune from the disastrous effects which usually mark the track of a violent thunderstorm. What is the explanation of this fact? In reply we are told first that the telegraph poles along-side the railway provide a measure of protection to passing trains. These poles are usually spaced three chains or sixty-six yards apart, and on each pole is stapled a thick galvanised iron wire, projecting about six inches above the pole roof and terminating five or six feet below ground. This earth wire, as it is technically known, tends primarily to prevent conduction between contiguous wires, but there can be no doubt that it also serves as a lightning conductor, and that, too, in a very efficient manner. Further, it is contended, explains the 'Westminster Gazette,' that the pieces of ironwork scattered over the roof of a train constitute a conductor, or act as a safeguard against the injurious effects of atmospheric electricity. They fulfil the function of a metal screen or cage, and it has long been known in scientific circles that a complete metallic enclosure will protect a railway train as effectually as a powder magazine. Sir Oliver Lodge has declared that "a wire netting all over a house, a good earth connection to it at several points, and all over the roof a plentiful supply of barbed wire, which serves so abominably well for fences, and you have an admirable system of defence against lightning." The similarity between the roof of a railway carriage and the conductor system is evident.

AROUND THE COLLIERIES.

Of the eleven fatal accidents in Canadian Mines in December, not one is set down, in the Official Gazette, as having occurred in Nova Scotia.

M. J. K. L. Ross is not now in connection with the Coal Company. Jack is optimistic as to the coal end of the Merger, and characteristic as to the Steel end.

Private advices from Indianapolis are to the effect that two gentlemen, well known around the Southern C. B. collieries, are having the time of their lives.

It is said that many of the old workmen in Springhill don't see much sense in the continuance of the strike. If a bold and courageous leader were to step to the front and declare for work, a mighty host would soon follow him. What is lacking is a leader.

Things are very quiet at Springhill. Neither side is letting its neighbor know what it is doing. The labor ticket did not make a clean sweep at the town election. Tom Pigott, a miner, or who was such up till the commencement of the strike, was elected as an opponent of the labor ticket, so hints the Halifax Herald, and in a matter like this, the Herald is not apt to lie.

Isn't it rather funny to hear the mayors and councillors of some of the towns complaining about the non-collection of taxes. There is not the slightest necessity for these to censure themselves; the public are doing that, in the back corners as well as at the corners of the streets. Instead of whining over delinquent taxpayers, why don't they see that the taxes are promptly collected; that's what they're there for, and it is easy, the law is behind them.

The Glace Bay Gazette says the strike could have been settled on Mr. McDougall's terms last October. With all due deference to the Gazette, we may state that the strike could not have been settled last October, unless on unconditional surrender of the men. Mr. Duggan saw his mistake in receiving a 'go between' in time. But had the agreements matured, things would have been worse than ever. The first committee of U. M. W. men received might mean a practical protest by the P. W. A. men. When the strike was declared it was declared to be a fight to a finish. The P. W. A. took up the challenge, and will see it through.

It is said that 600 voters were disfranchised at the late town elections in Springhill. This is due, no doubt, in great part, to the inability of the men on strike to pay their taxes. It is further said that nearly five hundred were disfranchised in Stellarton for non payment of taxes chiefly. Well, there was no strike in Stellarton. On the contrary we have the Chronicle's word for it that everything was booming in 1909, even to the post office. That being so there must be something very far amiss in the town's management. All deny responsibility; all the same all the people are not fools, and have placed the responsibility where it rightly belongs.

Sir George A. Drummond, among other things, one of the principal shareholders in the Cumberland Ry. & Coal Company, died in Montreal last week at a ripe old age.

Mr. Wanklyn, Vice President of the Dominion Coal Co. has been elected as a member of the Montreal Board of Control. He is the one 'English speaking' member of the Board.

The U. M. W. leaders at Springhill say that though they have spent a big sum on the strikes in Nova Scotia, they have not yet began to fight. Well, now, is't it about time they were doing things. So far there has been no display of skill or courage on their part. They have made big display of cowardly methods in C. B. rather than of generalship.

Attorney General McLean at the Dartmouth Board of Trade annual meeting said: "We should not oppose the expenditure of money in the West; . . . The West should be our market for manufactured goods. The Georgian Bay canal will help the maritime provinces by giving us a waterway into the gateway of the West.

Commissions are quite fashionable these days, and Professors, as best able to fill the bill, are in vogue. Even the Ottawa Labor Department, which has a big staff, had to have a commission to enquire into the working of the 8 hour law in other countries. If McKenzie King has not all the necessary information at his finger ends by this time, he has been taking things easy in the past years. There are some who hold that the Morning Chronicle's 'brilliant' young friend is more of an ornament than a utility, and the RECORD is not going to risk falling out with these by arguing to the contrary.

It is not probable that the U. M. W. will engage in any big strike in the U. S. the coming Spring. Their finances will scarcely permit of such a luxury. If a little strike like that they have been engineering in Nova Scotia caused so heavy a depletion of the funds that the balance on hand is less than it has been for years, a big strike would wipe the whole fund out. According to the auditors report the balance on hand is \$470,000. The U. M. W.'s, claim to have a membership of 300,000. They have at the present, cash on hand equal to a dollar and a half per member, not a big reserve of a surety.

The Montreal 'Witness' has been reorganized and revitalized in all its departments. Editorial and reportorial staffs have been augmented by the most experienced men to be procured. The Montreal 'Witness' is indeed an ideal family newspaper, maintaining at all times a high moral standard, its news reliable, well arranged, and its editorials acknowledged on all sides to be 'at once fair and forceful'. Most of our readers want a metropolitan paper as well as the indispensable local newspaper, and they cannot do better than take the 'Witness'.

AROUND THE COLIERIES.

The output of the Dominion Coal Co. for January was greater than the output in January of 1909. An output of over 212,000 tons does not indicate that the strikers are greatly, if at all, retarding output.

Succeeding the explosion in Colorado, comes the news of a big explosion in Kentucky, with the loss of a large number of lives. It is said this explosion was caused by a man going into an old working with a naked light. The U. S., sorry to say, is keeping up its reputation as to excess of fatal accidents in mines.

There is great excitement, all of a sudden, over the high cost of living. The peculiar thing is that the agitation was so long delayed. One reason is that the increases have been chiefly in the products of the farm. These have been going skyward for a long time. Flour during the last ten years has gone up \$2.00 a barrel, lard, 10 cents a pound, pork, twelve dollars a barrel of say 300 lbs., while coal has only gone up about a dollar a ton of 2,240 lbs. The orchardists seem to be the only reasonable people, next to the newspaper men. Newspapers have not gone up in price; currants, apples, oranges, raisins, etc., keep content at the old figure.

The stock of the Nova Scotia Steel & Coal Co. has been active of late, and has gone up in the market. A Halifax banker says he knows the dividend is to be increased to 5 per cent. How does he know? It seems some people are of his opinion. Mr. Forget is still buying, so he could not have secured the 20,000 shares he is after. Mr. Forget does not say a word about increased dividend. After surveying the situation he came to the conclusion that Scotia was a good investment for some of his accumulating cash. Some hint at a change in the directorate. Nothing is known down here about that. As to the increase in dividend, it will come, but its coming may be delayed for a little. The stockholders can afford to wait after the recent nice little plum they got.

A descriptive sketch of the geology and economic minerals of Canada, by G. A. Young, with an introduction by R. W. Brock, Director of Geological Survey, Ottawa, illustrated with eighty-two plates and two maps has been issued by the Geological Survey Branch of the Department of Mines. In the introduction it is stated that an attempt has been made in this publication to give merely a general idea of the conditions obtaining in the various geological provinces into with the more important minerals which are characteristic of, or which have been exploited in each.

The great development of the mineral industry in Canada is shown in the statement that in 1886 the mineral production of Canada did not reach \$10,250,000 in value, and was only \$2.23 per capita. In 1908, the production was over \$87,000,000 or \$12.57 per capita. The total production for the last twenty-three years amounts to \$926,516,579, of which gold represents \$267,700,000.

That delightful Canadian illustrated magazine, the 'Canadian Pictorial,' which is to Canada something of what the 'Illustrated News' or the 'Graphic' are to England, continues to improve with each year of its existence. While Canadian pictures generally predominate, plenty of illustrations are given of events and scenes the world over, so as to merit its claim to give 'News by Views'. Short complete stories, music, and well edited departments add to the interest. The 'Canadian Pictorial' is issued monthly by the 'Pictorial Publishing Company, 142 St. Peter St. (Witness Bldg.) Montreal, and the subscription rate is \$1.00 a year.

It is rather a new thing for Canadians to interest themselves in the development of coal lands in Pa. A Canadian company for that purpose is now being formed, and flaming prospectus, guaranteeing almost fabulous profit is being issued. We had thought Canadians had ample scope for investments at home. The RECORD does not look with favor on this new development. It is bad enough to have Americans as competitors for the Canadian coal trade, it will be worse when we have Canadians offering U. S. coal in competition to Canadian. The Free Coal League has now at its back, or will have soon, a big concern to whose interest it will be, to have free coal. It is time the Nova Scotia coal owners association was being formed.

There are few Canadian publications so well 'worth while' as the weekly review, issued from the office of John Dougall & Son, Montreal, under the title 'World Wide'. It is a weekly reprint of articles and cartoons from the leading journals and reviews reflecting the current thought of both hemispheres. Without wisdom of its own, 'World Wide' reflects the wisdom of the age—the day—the hour—the moment. Without opinions of its own, 'World Wide' beats to the tick of modern British and American thought. 'World Wide' finds a welcome place on the study table. Business men, preachers, teachers, writers, and thinkers generally hail it as a most delightful visitor. An effort is made to select the articles each week so that due proportion is given to the various fields of human interest to the shifting scenes of the world's great drama, to letters and science, and beautiful things. If you do not know 'World Wide' personally, the publishers will gladly send samples free of charge on application. 'World Wide' sells at five cents per copy, but the yearly subscription is only \$1.50 a year.

ANOTHER U. S. MINE HORROR

Fighting madly to escape through the narrow, partly choked air shaft, trampling over fallen comrades in their struggle for life, more than half of the 149 miners employed in the Primero mine of the Colorado Fuel and Iron Company, wrecked by an explosion Jan'y. 31st. were overcome by gas and fire. Their bodies were found in heaps

about the bottom of the air shaft, where they had fallen in the desperate struggle.

One hundred and forty-nine men are known to have been in the mine when the explosion occurred. It is said that seventy-nine are dead. One has been rescued alive, but dangerously injured. The bodies are torn and charred beyond recognition. It has been impossible to identify the dead.

The explosion occurred at 4.30 o'clock. With a roar and a belch of flame the main shaft crumpled, blocking the entrance to the mine. Both entrances with which the property is equipped were shattered, and it was not until three hours later that the fans were repaired and a rescue party, headed by General Superintendent J. F. Thompson, was able to descend the air shaft.

Dio Nardino, the one man rescued alive, was found beneath a mass of earth and timbers. He declared that he crawled over scores of bodies after the explosion, and saw no one who was not injured. The rescuers say that the entire mine is wrecked, and it is almost impossible that any of the entombed miners are still alive. The fire which followed the explosion was confined closely to the working near the main shaft, and soon burned itself out.

With the Cherry, Ills., disaster fresh in their minds, frantic women and children surged against the ropes drawn to keep them away from the shaft, and begged the rescuers to bring back their husbands and fathers. Some of the women attempted to join the workers below, and had to be restrained by force. As each body was brought to the surface, the women gathered about it with shrieks and prayers, but the bodies were so charred and disfigured that they could not be identified. Until the workings can be opened, the cause of the explosion will remain unknown. The officials of the company declare that safety lamps were used in every portion of the mine, and that every precaution was taken to prevent accidents. Officials of the company say the disaster is the worst in the history of western coal mining.

EIGHT MEN KILLED.

Fell more than 1,000 feet.—A mining accident, in which eight men lost their lives, occurred recently in a pit at Bellshill, Lanarkshire, Scotland. The scene of the disaster was the Hattonrigg Colliery, which is owned by Summerlee Coal and Iron Company. About three o'clock the day shift men were being brought to the surface, when, through some unknown cause, the cage, bearing eight men, overran the level of the pithead and crashed into the overhead beams of the framework, snapping the cable. The cage, thus severed from its bearings, was precipitated with its occupants to the bottom of shaft, a distance of over 180 fathoms. The day shift men, numbering 116, had been down at the lowest level from early morning, and had left the face to ascend to the surface. Of the total shift forty-eight men had been raised in safety when the cage made its fatal journey. The winding-wheel is about twenty feet above the level of the pithead. Immediately below the axle of the wheel are two stout wooden beams, which serve the double purpose of strengthening the frame and prevent-

ing the cage, in the event of accident, from being carried over the top of the wheel. In the present instance, however, instead of proving a means of safety, these beams were actually the intermediate cause of the disaster. With such force was the cage carried against them that the steel cable was unable to withstand the shock, and snapped at the "hose," where the four chains supporting the cage converge. With frightful velocity, and unchecked by any obstacle, the cage, weighing over 2½ tons, fell sheer down the shaft, landing in the "sump" with a tremendous impact. All the remainder of the shift were waiting their turn at the pit bottom to be raised to the surface, but, realising what the noise of the descending cage portended, they crowded back out of the region of danger. For a time they were almost dazed by the shock of the catastrophe, but presently they recovered their normal coolness and approached the wreckage. A sickening spectacle was then presented to their view. Six of the eight occupants were decapitated, and all were mutilated beyond recognition, no sign of life remaining. The position of the men at the bottom of the shaft was for the time being helpless, all communication from the surface being completely cut. The cages in mines are run in pairs, the one descending as the other ascends. The empty cage in this case, therefore, was already resting at the pit bottom before the impact occurred. At the pit-head meantime were a number of workers, who, seeing the snapping of the cable and the terrible fall of the cage, at once realised the frightful consequences. In accordance with regulations, the mine has two shafts, one of which serves in case of emergency. Unfortunately, the escape shaft was being used in connection with the working of the splint coal seam, which is some distance above the level of the seam at the bottom of the Drumgray shaft, and consequently the cable attached to the cage was not sufficiently long to reach to the deeper excavation. As quickly as possible, however, the cage was sent down to the full extent of the cable when it was attached, and a service cable added to give the necessary length. This operation occupied about an hour and a half, during which time the men at the bottom were anxiously waiting news from the outer world. With four men the cage was then sent down to the bottom of the shaft, which is twenty yards from the scene of the disaster.

A Cumberland County paper says: "The labor party have now a majority of the Council Board and there are rumors current that an effort will be made to increase the assessment on the property owned by the company." If the 'Labor party' attempt anything of the kind at this time it may not be for the health of the party. Mr Cowans has said that the strikers won't be taken back unless at a reduction of 15 per cent in wages. As a reason it is given that the mines do not pay. If the Labor party impose further burdens on the company then Mr. Cowans may be forced to issue a new edict, declaring that the reduction in wages will be twenty per cent. It might be wisdom on the part of the Labor party to tread softly.

Mr. W. D. Barclay, of the H. & S. W. and Inv. Ry & Coal Co has gone to Quebec. Mr. J. McGillivray, is now superintendent of the Inverness end.



Synopsis of Canadian North-West.

Homestead Regulations.

ANY even numbered section of Dominion Lands in Manitoba or the North-west Provinces, excepting 8 and 26, 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 100 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 wired 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 is to have priority and the land will be held until the necessary papers to complete the transaction are received by mail.

In case of "personation" 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 homestead entry, 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, mother, son, daughter, brother 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 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, 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 320 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 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 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 \$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 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 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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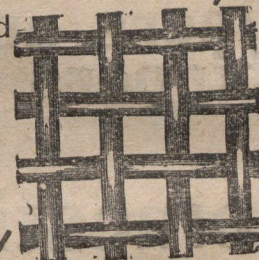
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53	51		54	52
P. M.	A. M.		P. M.	A. M.
3 20	10 30	P. TUPPER JUNCTION	3 35	10 54
3 15	10 24	INVERNESS JUCT.	3 40	10 51
3 07	10 19	PORT HAWKESBURY	3 45	11 01
2 40	10 02	PORT HASTINGS	3 58	11 20
P. M.	9 57	TROY	4 08	A. M.
	9 47	CREIGNISH	4 15	
	9 34	CRAIGMORE	4 28	
	9 17	JUDIQUE	4 40	
	8 58	CATHERINE'S POND	4 55	
	8 45	PORT HOOD	5 08	
	8 31	GLENCOE	5 23	
	8 25	MABOU	5 28	
	8 10	GLENDYRE	5 43	
	7 40	BLACK RIVER	6 06	
	7 30	STRATHLORNE	6 18	
	7 15	INVERNESS	6 38	
	7 02		6 50	
	6 45		7 00	
A. M.			P. M.	

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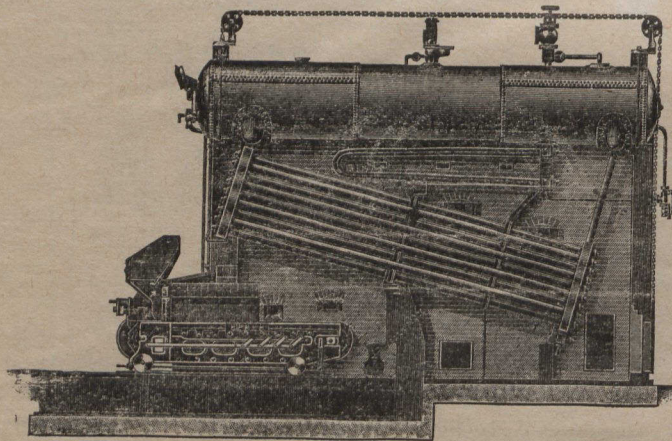
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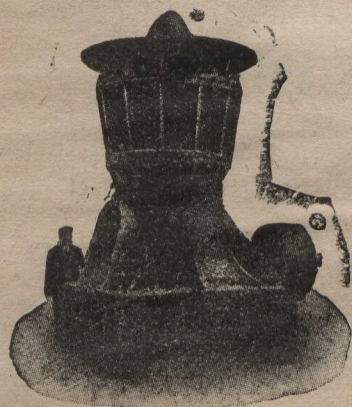
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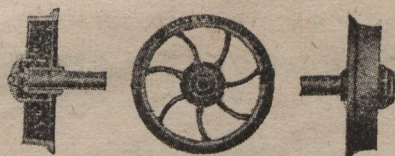
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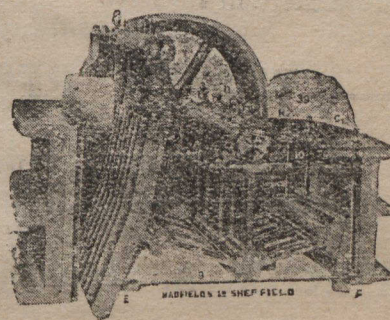
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Manufactured in their own Workshops by selected Workmen, under Strictest Supervision and every Link carefully Tested and Certificates Furnished.

Mine Cars, Drawbars and Hitchings a SPECIALTY.



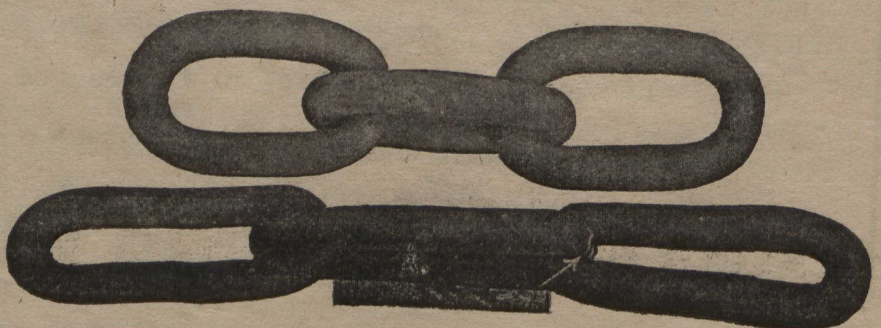
Forged from the Solid

X

The only weld taking place at X

Improved Type of Tram Hitching, consisting of Three Side-welded Links. The illustration shows one of these couplings before, and after, being tested on Lloyd's Public Machine. Made of $1\frac{1}{2}$ dia. Iron. The centre link narrower to prevent buckling.

Broke at $57\frac{1}{2}$ tons in the iron. The welds showed no sign of giving way.



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THICK SEAMS
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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SYDNEY MINES

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