RETURN

Of all Reports on the Coal Mines of the Crow's Nest Coal Company made by Mr. McGregor, Mine Inspector, and Mr. Dick, Mine Inspector, since the 9th day of November, 1898, and the correspondence appertaining thereto.

EDWD. GAWLER PRIOR,
Minister of Mines.

Department of Mines,
5th June, 1902.

Department of Mines,
Victoria, November 9th, 1898.

Sir,—I wired you to-day to strictly enforce the Inspection Act and to remain at Rossland until a letter reaches you, and in the meantime to inspect mines in the vicinity.

Until further notice you will remain in that section of the Province, travelling over the Boundary Creek, Rossland, Slocan, Nelson and East Kootenay Districts, including an inspection at Crow's Nest Coal Mines, a report of which I should like at your earliest convenience, making your headquarters in the most central locality, which I think would be at Nelson; and if this meets with your approval, all official letters can be addressed to you there, and you can instruct the Gold Commissioner where to forward, so that they may reach you in the shortest possible time.

See that all previous instructions given by you are carried out to the letter of the Act.

It seems to me that the "Sunset No. 2" have not got their ladder-ways properly constructed; this is something that you must give particular attention to. Make your reports regularly to this office. You might also give all foremen of mines instructions on no account to allow miners to enter shafts or tunnels when air is not being freely circulated.

I am, etc.,
(Signed) J. Fred Hume,
Minister of Mines.

James McGregor, Esq.,
Inspector of Metalliferous Mines, Rossland, B. C.

Department of Mines,
Victoria, B. C., 13th Dec., 1898.

Sir,—In case you should not be already supplied with the "Coal Mines Regulation Act," I am now sending you a copy, under separate cover, and I shall feel obliged if the attention of those in charge of the mines is drawn to the same, so that its provisions may be strictly carried out.

I am, etc.,
(Signed) J. Fred Hume,
Minister of Mines.

The Secretary,
Crow's Nest Pass Coal and Petroleum Co., Fernie, B. C.

ROSSLAND, BRITISH COLUMBIA,
December 16th, 1898.

SIR,—According to your order, I submit report of my examination of the Crow's Nest Pass Coal Mines, which I visited on December 6th.

These mines are situated on the west side of the Rocky Mountains, in the foot-hills. They are perforated by two tunnels, No. 1 and No. 2, each followed by a counter tunnel for ventilating purposes. I found the distance from surface of No. 1 tunnel 1,000 feet, and No. 2 1,500 feet.

The men employed underground in No. 2 tunnel are 52, and in No. 1, 30.

Number of horses in No. 2 tunnel 5, in No. 1, 3.

No. 2 tunnel is ventilated by a 4-foot diameter fan run by steam. I found the amount of ventilation, after careful measurement, to be 13,400 cubic feet per minute.

No. 1 tunnel is ventilated by furnace. The amount of air is 6,000 cubic feet per minute.

The size of air shafts are: No. 1 tunnel, 5 x 5½, and No. 2, 4 x 4. The output is 200 tons per diem. The system the mines are worked on is known as the "pillar and stall," but it is the intention of the present management to somewhat change the present system, to assist in increasing the output.

I found the air conducted from the main air-way to face of stall, or room, by canvas, owing to scarcity of lumber, and in my opinion this method is not safe, being liable to take fire and thereby endanger the lives of men. It is the intention of the management in the future to use lumber, since a saw-mill is now in operation within seven miles of the mines. They have also two Murphy fans ordered, which will greatly increase the ventilation.

I have, etc.

Hon. J. F. Hume,
Minister of Mines, Victoria, B. C.

(Signed) JAMES MCGREGOR,
Inspector of Mines.

DEPARTMENT OF MINES,
VICTORIA, July 8th, 1899.

SIR,—I beg to acknowledge the receipt of your letter of the 4th inst., reporting on the accident which occurred in the War Eagle, Sunset No. 2 and Velvet Mines.

I think it is advisable that the Crow's Nest Pass Collieries should be inspected, and I now authorise you to proceed to that District and report to me as to the condition they are in.

I am, etc.,

Jas. McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

(Signed) J. FRED HUME,
Minister of Mines.

ROSSLAND, B. C., July 21st, 1899.

SIR,—In compliance with instructions received from you, I at once proceeded to the Coal Creek Coal Mines, in the Crow's Nest Pass, and made a careful inspection of them.

I found a marked improvement, especially in the ventilation.

All the suggestions I made to the management had been carried out. In No. 2 Tunnel, where the bulk of the output is coming from, I found 66,000 cubic feet of air per minute.

In No. 1 Tunnel I found 11,000 cubic feet per minute. There is only one drift working in this tunnel at present, which is rising to the upper seam, and, owing to the cramped condition, is giving off some gas. A few days ago, one man was burned, but not dangerously.

It is the intention of the management to sink an air shaft at once, which will greatly increase the ventilation.

The out-put is 400 tons per diem, the men employed about 150. At present there are 115 coke ovens in operation, and 100 under construction.

I have, etc.,

Hon. J. Fred Hume,
Minister of Mines, Victoria, B. C.

(Signed) JAMES MCGREGOR,
Inspector of Mines.

DEPARTMENT OF MINES,
VICTORIA, August 9th, 1899.

SIR,—I beg to call your attention to sub-section 2 of section 69 of the "Coal Mines Regulation Act," and section 3 of chapter 47, 1899, the Act amending the same, which gives you full power to deal with any person who, in your opinion, is not able to read or does not understand the Special Rules made under authority of the "Coal Mines Regulation Act."

It is the desire of the Government that the provisions of the said Act should be strictly enforced for the safety of those employed underground in the coal mines.

I am, etc.

James McGregor, Esq., (Signed) J. FRED HUME,
Inspector of Coal Mines, Nelson, B. C. *Minister of Mines.*

DEPARTMENT OF MINES,
VICTORIA, Feb. 13th, 1900.

Proceed to Crow's Nest Coal Mines and report to me condition of mine; also if an accident from gas occurred last week, with full particulars.

(Signed) J. FRED HUME,
James McGregor, Inspector of Mines, *Minister of Mines.*
Greenwood, B. C.

FERNIE, Feb. 21st, 1900.

SIR,—I beg to submit report to you, according to your instructions received by wire re the gas explosion, also the condition of the mines here.

The gas explosion, which slightly injured Mr. Elias Rodgers, of Toronto, who is one of the directors of the company.

He was in company with the manager, Mr. Fisher, also Mr. Smith, the surveyor, in No. 1 tunnel, about 400 feet from the surface, and examining the coal, immediately above what is known as the big seam, which some time ago was prospected by driving a drift about 60 feet, and the management decided to abandon it for the present. Before doing so they filled it up with waste dirt, intending to leave no space for gas to accumulate, and started work on the seam above. In developing, some water was met with which ran down into the excavation which had been filled and caused the filling to settle, leaving a few inches space between the filling and the roof, which filled with gas, and was ignited by Mr. Rodgers, burning him slightly about the hands and face. The others escaped.

Since then a shaft has been sunk connecting the place with the main air-way and renders it harmless. I examined the place carefully and am satisfied it is now safe.

RE CONDITION OF THE MINES.

I beg to state I am not satisfied entirely with the existing condition, especially in No. 1 drift, which is dry and dusty and gives off gas freely. The ventilation I measured and found 15,360 feet per minute for 34 men and six horses. In my opinion it is insufficient. The fan for ventilating is only a four feet diameter one. I intend to inform the management that a greater amount of ventilation must be procured with little delay.

I also feel it my duty to object to the canvas brattice now in use, as it is a danger to life and property, being dry and easily set on fire. Already several small fires have taken place by some one passing under it with a naked light.

If allowed to remain and used in such quantities, the result might be a serious fire, with danger of loss of life.

I will also acquaint the management with my opinion on the matter.

NO. 2 TUNNEL.

This is where the greater amount of coal is taken out.

I found the ventilation very good, being 48,673 cubic feet per minute, and produced by an 8-foot diameter Murphy fan.

Little canvas is used, as the pillars are small and connections are easily made.

I only found gas in one place, but in looking over the firemen's reports I notice in small quantities gas is often found.

Trusting that this will be satisfactory. I leave to-morrow for Sparwood Coal Mines, 40 miles east of here.

I have, etc.,
(Signed) JAMES MCGREGOR,
Inspector of Mines.

Hon. Fred Hume,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, February 27th 1900.

SIR,—I beg to acknowledge the receipt of your letter of the 21st instant, reporting on the accident which occurred in the Crow's Nest Pass Coal Mines, and the steps which have been taken to render the tunnel in question safe in the future.

I note, also, your further report as to the general condition of these mines.

I am, etc.,
(Signed) J. FRED HUME,
Minister of Mines.

James McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

DEPARTMENT OF MINES,
VICTORIA, July 13th, 1900.

Inspect, immediately, Fernie Coal Mine and forward report. Am writing.

RICHARD MCBRIDE,
Minister of Mines.

James McGregor,
Inspector of Mines, Rossland, B. C.:

DEPARTMENT OF MINES,
VICTORIA, July 17th, 1900.

SIR,—In connection with my telegram of the 13th instant, I beg to inform you that I have received reliable information at the instance of Mr. Ralph Smith, of the dangerous state of the Fernie Coal Mines, and I trust that on receipt of my telegram you took immediate steps to proceed to these mines with a view to reporting to me on their condition.

It is of the greatest importance, in cases like this, that I should communicate with you at once, and in order to avoid any possible delay, I must impress upon you the necessity of reporting to me at least once a week any change in your movements and the address at which a telegram will find you.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

James McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

FERNIE, July 27th, 1900.

SIR,—In compliance with your orders, I beg to offer a short report of the condition in which I found the mines here.

The first mine I inspected was what is known as No. 2. I found it in a very dangerous condition. In fact, in what is known as the deep, it was in almost an explosive condition. I at once ordered the men out, and had men placed at the entrance to prevent anyone from entering that portion of the mine. Since then some improvement has been made in the ventilation. I consider it my duty to remain here a few days longer and insist upon the suggestions I made being carried out, in the interest of life and property.

I again wish to say that, in my opinion, too much canvas is used for brattice, which the Act does not allow me to deal with.

I will send a more detailed report in a few days, after I make a fuller examination of the situation, and as I find it I will explain to you, trusting this will be acceptable.

I have, etc.,

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

(Signed) James McGregor,
Inspector of Mines.

Department of Mines,
Victoria, July 31st, 1900.

Sir,—I beg to acknowledge the receipt of your letter of the 27th inst., informing me of the result of your inspection of the coal mines at Fernie.

I note the orders you have given for the discontinuance of all work in No. 2 mine until the ventilation is improved to your satisfaction, and I beg you will on no account allow men to enter the mine until your suggestions have been carried out to your entire satisfaction.

I am, etc.,

James McGregor, Esq.,
Inspector of Mines, Fernie, B. C.

(Signed) Richard McBride,
Minister of Mines.

Rossland, August 11th, 1900.

Sir,—Enclosed please find copy of letter written to the management of the Coal Creek Coal Mines at Fernie

I beg to have your opinion of the same.

I consider it my duty to again visit them in the near future, as they require careful watching.

My private report to you as Minister of Mines will be forwarded to-morrow.

Sincerely yours,

(Signed) James McGregor,
Inspector of Mines.

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

Rossland, August 11th, 1900.

Sir,—After visiting the mines of Coal Creek, I wish to draw your attention in the first place to what is known as No. 2 mine, as the Meline or the Cuddy Brae, which is being driven contrary to the Act, being advanced without a counter for ventilation, which the Act especially mentions should not be more than twenty yards without a cross-cut between them and the air ways, and as it is now beyond a prospect, I beg to advise you not to proceed further until connections are made.

I wish also to draw your attention to the stoppings used by the main air-ways going to the deeps, which are only canvas and allow a large quantity of air to escape. I consider it necessary that more substantial stoppings should be used, and would ask you to attend to them as soon as possible.

I would also ask you to consider the method of timbering, which I consider unsafe, as what is known as horns or stringers are too small and are little support in case of meeting with hose or heavy ground.

In No. 1 mine I find very little gas, and ventilation fairly good, and am satisfied you can increase it at any moment.

Trusting that you will look into all the matters mentioned.

I have, etc.,

(Signed) James McGregor,
Inspector of Mines.

Frank B. Smith, Esq.,
Manager Coal Creek Coal Mines, Fernie, B. C.

DEPARTMENT OF MINES,
VICTORIA, August 15th, 1900.

SIR,—I beg to acknowledge the receipt of your letter of the 11th inst., enclosing a copy of a letter you have written to the Manager of the Crow's Nest Pass Coal Mines at Fernie, drawing his attention to several matters in connection with the Coal Creek Coal Mines at Fernie which require his immediate attention.

If, on a second visit, you do not find your directions have been implicitly carried out, I beg you will report the same to me at once and I will take the necessary steps to enforce immediate compliance with your instructions.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

James McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

ROSSLAND, August 12th 1900.

SIR,—I beg to submit to you a report of the conditions of the mines at Fernie, known as the Coal Creek Mines. I cannot but again refer to the great amount of canvas used for brattice, as it allows a large quantity of air to escape. Heretofore it was a great source of danger by fire as the mines are dusty, but lately the management has procured a non-inflammable canvas which materially lessens the danger in that direction.

The amount of ventilation is ample at each mine at the intake if conducted by proper stoppings in the main air-ways.

There is every evidence of a creep especially in No. 2. In No. 1 it could be detected at night, as that is the time I noticed it most, when everything was still. There is no immediate danger as it is gradually moving from the surface owing to the soft nature of the coal and the smallness of the pillars.

Since my last inspection and before I left some improvements had been made in the ventilation in the place where I encountered so much gas, but yet it is not as it ought to be, owing to the creep opening up the floor at times large quantities of gas is given off and it requires a large amount of ventilation to render it harmless.

I will at all times keep you advised as to the conditions of affairs.

I have, etc.,
(Signed) JAMES MCGREGOR,
Inspector of Mines.

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, August 18th, 1900.

SIR,—I beg to acknowledge the receipt of your letter of the 12th inst., submitting a report of your inspection of the coal mines at Fernie.

I gather from the above that although you are able to report some improvement in the condition of these mines, yet still they are not in as satisfactory a condition as they might be.

I would, therefore, again impress upon you the necessity of exercising every vigilance to insure all sources of possible danger being remedied.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

James McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

ROSSLAND, August 21st, 1900.

SIR,—According to your instructions, I beg to report that I am in and around Rossland and should remain until about the first of the month, when I consider I should again visit Fernie. I enclose Manager F. B. Smith's letter to me in reply to mine to him, also tracing of portion of No. 2 mine.

Please notice crosses and black line showing distance driven without a counter, and although after that there is a counter tunnel, the whole ventilation is conducted to there by a canvas brattice.

I cannot give consent until I hear from you, as the Act does not give me the power to do so, but, in my opinion, with careful watching a connection could be made without incurring any great expense.

Kindly return tracing and letter with your reply.

I have, etc.,
(Signed) JAMES MCGREGOR,
Inspector of Mines.

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, September 1, 1900.

SIR,—I beg to acknowledge the receipt of your communication of the 21st ult., enclosing a letter from Mr. Smith, manager of the Crow's Nest Pass Coal Mines, applying for permission to make a cross-cut from the low level to the high level, and so continue the low level as indicated in the plan attached.

In view of your report that this connection can be made without incurring any danger, provided every care and precaution is exercised, I have no objection to your authorising Mr. Smith to proceed with the same.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

James McGregor, Esq.,
Inspector of Mines, Fernie, B. C.

ROSSLAND, September 15, 1900.

SIR,—On reaching Fernie I received your letter of permission to connect according to plans submitted, *re* connecting upper and lower levels, which permission I gave the management.

With reference to the condition of the mines as I found them, I beg to submit a short report. They are at present out-putting about 800 tons per day.

No 1 mine I found in fair condition, only seeing gas in two places and only small amounts. The amount of ventilation is 21,070 cubic feet per minute.

The timbering has been much improved, and in the aggregate I saw a marked improvement in this mine.

No. 2 mine I found in a very peculiar condition. To the right-hand side of what is known as the back deeps, gas was plainly visible in the safety lamp on the main haulage road. I removed all the workmen until more ventilation was carried in. I might explain, in my opinion, the cause of the sudden influx of gas in that portion of the mine. It is owing to the creep opening up the pavement and allowing the gas to escape from the seam below.

The amount of ventilation in this mine is 41,700 cubic feet per minute. They are not using any inflammable canvas, only what was there before, and intend to use nothing but non-inflammable canvas in future.

In conclusion, I beg to say, in my opinion, these mines need careful watching.

I have, etc.,
(Signed) JAMES MCGREGOR,
Inspector of Mines.

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, September 24, 1900.

SIR,—I beg to acknowledge the receipt of your letter of the 15th inst., again reporting on the condition in which you found the Fernie coal mines on the occasion of your second visit.

It is with considerable anxiety that I note your opinion that these mines still require careful watching, and I must beg of you to inform me what additional steps you would suggest should be taken to insure any cause of danger being removed as far as possible, and the most constant vigilance being exercised.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

Jas. McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

ROSSLAND, September 27, 1900.

SIR,—Your letter of the 24th inst., received, *re* my report Fernie coal mines.

In reply, I beg to state that I officially notified the management to increase the quantity of air in certain portions of the mines where I found it dry and dusty, also making a large quantity of gas.

I will endeavour to be firm, and insist upon my suggestions being carried out, and will report to you on each visit.

With reference to your letter *re* telegrams, I left word and always do at Rossland to have all wires forwarded to me, which was done without delay, but in future will notify the Gold Commissioner as requested.

I have, etc.,

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

(Signed) JAMES MCGREGOR,
Inspector of Mines.

ROSSLAND, November 12th, 1900.

DEAR SIR,—In compliance with your request, I beg to submit a report of the condition of the coal mines at Fernie as I found them.

The first mine I visited is known as No. 1. This tunnel is now in from the surface about 1,500 feet, and is employing about 165 men on each working shift. The mining is done on the pillar and stall system. The majority of the workings are to the dip, the coal is hauled by horses to the electric motor and from there to the surface. It is ventilated by a 14 x 4 fan, which produces 23,200 cubic feet per minute. So far no great accumulation of gas has been discovered, but in looking over the firemen's reports I notice gas is frequently reported in small quantities in the different stalls.

This mine shows plainly that a creep is taking place in the greater part of it.

The timbering has of late been down about 500 feet, to connect with an electrical hoist which hauls from all below that point. Greatly improved by using larger and better timber.

No. 3 SLOPE.

This slope is driven down to the dip about 600 feet. The object is to cut off the deep workings of No. 2. The ventilation is natural; at present the presence of gas is rarely seen. The coal is hoisted by a rope attached to the motor. Very little work will be done until connections are made with No. 2 Mine.

No. 2 TUNNEL.

This is the largest mine of the three. The tunnel is about 1,500 long, with working to the rise, also to the deep. At present the rise workings are abandoned, owing to the grade being too heavy for a horse to operate, especially coming down the grade, as the cars carry $1\frac{1}{2}$ tons of coal, the weight being (of the car) $\frac{1}{2}$ ton.

The principal mining is being done in what is known as the main deep, which is down from the main tunnel about 1,200 feet; the grade being easy, the motor runs down about 500 feet to connect with an electrical hoist, which hauls from all below that point.

This mine is ventilated by a Murphy fan, 8 x $2\frac{1}{2}$, which produces 43,700 feet per minute, which is ample if properly conveyed through the workings.

I am pleased to be able to state a marked improvement has been made of late by using stone stoppings instead of canvas and wood. In the principal places the timber used in this, as in the others, is of a much better quality. I also noticed a greater amount of timber used for brattice in this particular mine, which greatly helps the increase of air in the mine workings. This mine shows plainly that a great creep is taking place, and the management has decided to leave 100-foot pillars instead of 60-foot, as before, which might possibly check the creep in the deeps and mine workings.

All these mines are dusty, which is, in my opinion, a great source of danger and requires careful watching in that direction.

On my last visit I requested another fireman—necessary to look over the old workings at night,—as I found it was too much for one to attend to and pronounce on places after being out two or three hours, although clear when he left. This (No. 2) mine gives off large

quantities of gas at times, especially in the neighbourhood of where the creep is most conspicuous. In my opinion, it is coming from the seam below, as openings are made by the pillars crushing and causing the floor to open by the great weight on them.

Trusting this will prove satisfactory,

I have, etc.,
(Signed) James McGregor,
Inspector of Mines.

W. F. Robertson, Esq.,
Provincial Mineralogist, Victoria, B. C.

Department of Mines,
Victoria, 19th November, 1900.

Dear Sir,—I beg to acknowledge receipt of your favour of the 12th inst., and report of affairs at Fernie, for which I am much obliged. I am glad to see you are able to report a marked improvement in the condition of the mine; even yet (if I can read between the lines in your report) there is much to be desired in the management of this colliery. Keep at them and do not be afraid to insist on what is necessary for the safety of the men, and on this point do not hesitate at the letter of the law; keep things safe, and if you have not law enough you will get it; but be sure you are right, and keep your notes up in good shape in case of a dispute.

As you may have heard, Mr. Dick has been appointed an Inspector again, and as the examination for colliery managers has been set down for December 12th, at Fernie, I have recommended that Mr. Dick go on there with you to hold such examinations.

At that time I would suggest that you have Mr. Dick go over the colliery with you very carefully, and that he make a special report. This will "back you up," and in case you have to use harsh methods with the company will lift much responsibility off your shoulders.

Mr. McBride will shortly be in Rossland, and I would suggest that you show him around and you can talk matters over with him in a way you might not care to write.

It very often happens that telegrams or notices of accidents are addressed to you at this office, stating your whereabouts was unknown. I should advise that you arrange a permanent address at Rossland, either at your house or with the Gold Commissioner, and when you are absent arrange to have these messages forwarded to you; it is somewhat embarrassing for us here not to know where to catch you. Let all the mines and telegraph offices, as well as ourselves, know this permanent address.

I am, etc.,
(Signed) Wm. F. Robertson,
Provincial Mineralogist.

James McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

Rossland, Dec. 1, 1900.

Sir,—In compliance with your request, I beg to submit the following, *re* a change to the Coast, as I have now been up here nearly three years in the mountains, and last winter was unfortunate enough to contract pneumonia in the Boundary country, from which I have not yet recovered, and I have been advised a change would be most beneficial.

Again referring to the condition of the Fernie Coal Mines, I would ask you to carefully consider all the reports sent to your Department of late, and at once give your opinion as to the proper course to pursue, as you are aware it might entail a close examination should these mines be closed. I can assure you I am more than anxious and nervous of the present conditions and state of affairs, notwithstanding safety lamps are used in all stalls and levels, but the fact still remains that gas can be detected in the safety lamps in the main return airways, proving conclusively that an explosion is possible by a heavy charged blown-out shot, which frequently happens, as the mine is naturally dusty.

The ventilation is gradually decreasing owing to the works extending, the friction becoming greater every day. I trust this is sufficient at present, as my late reports are now in your Department.

I have, etc.,
(Signed) James McGregor,
Inspector of Mines.

Hon. R. McBride, City.

DEPARTMENT OF MINES,
VICTORIA, Dec. 7, 1900.

SIR,—I beg to inform you that I am in receipt of a telegram from the Honourable the Minister of Mines, asking me to forward at once to his address at Cranbrook a copy of the report made by Mr. McGregor and yourself on the result of your recent inspection of the Fernie Coal Mines.

In order that there may be as little delay as possible, I would suggest that if the report is prepared you send a duplicate copy of it to Mr. McBride's address, Cranbrook.

I am writing to Mr. McGregor to the same effect.

I am, etc.,
(Signed) MALLCOTT RICHARDSON,
Secretary.

Archibald Dick, Esq.,
Inspector of Mines, Nanaimo, B. C.

NANAIMO, B. C., Dec. 8, 1900.

I have the honour to herein enclose my Report to you of the Crow's Nest Coal Mines, as I found them when making an inspection of the same on the 21st, 22nd and 23rd days of November.

I have, etc.,
(Signed) ARCHIBALD DICK,
Government Inspector of Mines.

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

P.S.—As requested, I have mailed a copy of the enclosed Report to the Minister of Mines at Cranbrook.
A. DICK.

NANAIMO, B. C., December 8th, 1900.

SIR,—I have the honour to make the following report as to the coal mines of the Crow's Nest Coal Company, recently inspected by me in pursuance of your instructions.

I left Nanaimo on November the 18th, 1900, arriving at Fernie on the 20th. On the 21st I proceeded by the cars, five miles, to what is known as the No. 1 tunnel, which enters the mountain on the right side of Coal Creek. I went into this tunnel, which is 9 by 5½ feet, as far as the face, examining it carefully as I went along. Near the face there was some water, where there was a fault in the coal. Going past this and close to the face, in the first place that I got in the gas flashed in my safety lamp. I then went to the next place—to the rise going out—and there found that the atmosphere (or air) of the mine was heavily charged with gas, there being a blue flame or cap, 2 inches long, burning on the flame of my lamp. This was the last place in this mine where I found any trace of gas. All along this division the men were working with safety lamps.

On going in to the other district and examining it, I found it was clear of any accumulation of gas, at the same time I had not the least doubt that the coal was giving off gas. In this division the ventilation was fairly passable. The miners here were using open or naked lights. In the first division and the places mentioned in that district, in my opinion, it was not safe for men to work, unless they were experienced hands, accustomed to working with safety lamps, and work should only be done there, under the present conditions, in case of emergency, in order to make connection with other places to give relief, and it appeared to me that this was not the case at the time of my examination of the mine.

In the tunnel and in the divisions of the mine, seventy (70) men are at work, viz.: In the first or level split there were 30; and in the upper division (found by me to be clear of accumulated gas) there were 40 men working. This includes all hands, both on the main roads and at the face of the coal.

This mine is ventilated on the separate split system, by a "Chandler Fan," 14 feet in diameter and 4 feet wide. This fan was keeping in motion and was passing 20,000 cubic feet of air per minute, being an inadequate quantity of air to dilute and render harmless the noxious gases given off in the mine, to keep up a supply of fresh air and to make the working places in a fit state for 70 men to work in. In this mine I found them very negligent with the brattice. In the course of my examination I found that the brattice was, in some places, 12 yards away from the face, and in testing those places, although I did not always find gas, I observed that there was too much smoke, most of which, however, came from the miners' lighted lamps.

In my interview with Mr. Wilson, the Superintendent, I was informed by him that he had been East and that he had ordered a new and powerful fan for this No. 1 tunnel, which would be at the mine and erected as soon as possible. Judging from the description which the Superintendent gave me of the machinery which he stated he had ordered, I feel quite safe in saying that when the new ventilating fan is put up and working, no further trouble will be experienced from gas in this mine.

On the 21st of November the readings of barometer and thermometer were: barometer, 26° 10′, and thermometer, 10° below zero.

This mine is dry and there is very little powder used. Coal is brought out of the mine by electric motors. The cars when loaded form a square front of about 4 by 4 feet, and this presents quite an obstacle in the main intake, which only measures 8 by 5½ feet, but the enlargement of this road and other parts of the air-way, which I noted as being small, would improve the ventilation with the present fan at work. Being satisfied that I had viewed the workings of No. 1 tunnel, I then went to what is known as

No. 3 Deep (Dip).

This mine is on the side of Coal Creek opposite to the No. 1 tunnel. This No. 3 deep is, I estimate, about 200 yards distance. The coal appeared to me to be good. The workings at the coal face vary from 6 to 8 feet in height, having a good roof of very strong, hard rock. I examined this mine, or division, and found that the place was in good order, except that in all the places, or stalls, they seem to be trying to do without brattice; in some places I saw that the brattice was 18 yards from the face; in other words, they were trying to work by leaving pillars 12 yards square without using any brattice. This division is wet both top and floor. I pointed out to the Manager that brattice must be put in, and that the "Coal Mines Regulation Act" provides "that all working places shall be bratticed up within four yards of the face." The Manager said he would have it attended to.

This mine is ventilated from the surface, the main hauling road being the intake. All this mine appears to me to need is that the air-way should be made larger—in several places the air-way is small—and that the brattice should be taken further towards the face.

On going through No. 3 mine I got into the workings of what is here called the

No. 2 Deep (Dip).

This mine is worked (as far as ventilation is concerned) in connection with No. 3, the same fan being the motive power for ventilation of both mines, the intakes of both being the main hauling way, where the coal is taken out to the surface. The coal is similar to the No. 3—the rock overhead being also the same. The roofs being very strong and hard, there is nothing falling in the old workings, therefore they are open, and any place into which I went was dry, with considerable dust.

When in the No. 1 stall of this deep I found gas; there was a blue cap fully two inches long on the flame of my safety lamp. Two men were at work in this place, by the light of safety lamps. There was very little air entering the place, although the brattice (cloth) was not far from the face. I then went out about 60 yards and upon making a test saw the blue cap on the flame of my safety lamp. From thence I went into the main return air-way and there I again saw the blue cap on the flame of my safety lamp. While there I saw some person come into the air-way, not far from where I was, with an open light burning on his head; I called out to him, but he went back so I could not find out who he was. This would tend to show that there is a want of discipline in the mine.

On the intake the anemometer registered 37,000 feet compared with 40,000 taken on a previous inspection by Mr. McGregor, Inspector of Mines. From the intake I went to the return where the same instrument registered 27,500 feet. This goes to show that there is leakage somewhere. Mr. Smith, the manager, was present when the air was taken by me.

This No. 2 deep has its main road of 9 by 5½ feet in area, but when it is taken into consideration that there is a motor working on the road, taking along ten cars of coal each trip, forming a train 60 feet long, the area of the end of the train being about 4 by 4 feet, which for the time of its running almost stops the current of the intake, it is evident that in order to overcome this obstacle there should be a larger or a counter air-way. I expressed my views on the matter to the manager.

Both Nos. 2 and 3 have for the motive power of ventilation what is known as a Murphy fan, of a diameter of 8 feet, giving the result which I have mentioned, being 37,000 feet on the

intake and 27,500 on the return. This is for the use of 106 men and boys, on the separate split system as follows: 46 men in the one division and 50 in the other. It will be noticed that owing to the leakage between the intake and the return air-way, much of the air gets into the old workings; no doubt it helps to keep them clear, but it is all wanted at the face where the miners work.

From information which I received from Mr. McGregor, it appears that ventilation has been much improved within the past two months, but it is to be hoped that it will continue to keep getting better, since there is room for improvement in this respect at the mines which I examined. Some of the improvement effected was by putting in a better class of stoppings, that is to say they are building up the old places with rock. This is the means used for conducting the air to the face of the working places.

There are a great many foreigners in this mine who seem to think that if they have a safety lamp in their hand everything is all right, whether they understand it or not. In this much danger lies, but this may be overcome soon.

I may mention that after the mine has been stopped only one day they cannot find any gas, but when it is at work the gas is liberated so that the atmosphere of the mine becomes heavily charged with gas. There is one general complaint with the men at the mines, and that is with reference to the oil, which is said to be very bad for illuminating purposes in a mine; it gives off when burning a thick, black smoke, with a strong odour, which makes it very disagreeable, besides being heavy to breathe. It is desirable that those who furnish the oil will provide an article that will not make so much smoke nor be so offensive.

As in No. 1 tunnel, Mr. Wilson stated that there is also a new fan ordered for Nos. 2 and 3 deeps, with the capacity of keeping in motion 220,000 feet of air per minute, but he could not guarantee that the fans would all be running before next spring (1901). With a fan of this description in operation it will be a rare thing to find gas in any of the mines. I should state that in No. 2 mine is where the most danger lies at present, mainly owing to its being dry and dusty, and also because it gives off much gas when the mine is at work. As also No. 2 is in connection with No. 3 mine, any serious explosion going off in No. 2 might affect No. 3, although it is wet. However, by proper use of a ventilating fan now in use, enlargement of its air-ways, keeping the brattice close into the face, and continuing to put good stoppings when required, and maintaining good discipline in the several mines, there should result a fair exemption from danger; and if what I have pointed out be complied with, I cannot see where there would ordinarily be any danger from any serious accident of any kind, provided, as I have said, that the management and workmen carry out the above suggestions on their respective parts and comply with the "Coal Mines Regulation Act" and the special rules of the mines.

I have, etc.,
(Signed) ARCHIBALD DICK,
Government Inspector of Mines.

To the Honourable Richard McBride,
Minister of Mines for British Columbia.

DEPARTMENT OF MINES,
VICTORIA, Dec. 11th, 1900.

SIR,—In the absence of the Honourable the Minister of Mines, I beg to acknowledge the receipt of your report on the Crow's Nest Pass Coal Mines, and I would at the same time thank you for so promptly forwarding to Mr. McBride a duplicate copy of this report.

I am, etc.,
(Signed) MALLCOTT RICHARDSON,
Secretary.

Archibald Dick, Esq.,
Inspector of Mines, Nanaimo, B. C.

ROSSLAND, Dec. 21st, 1900.

SIR,—In compliance with your instructions I again visited the Fernie Coal Mines. Sunday I drove up, but found nothing doing, and again on Monday I visited them, when the mines were laid idle owing to the electric machinery breaking down.

Tuesday I carefully examined the return air-ways and measured the ventilation, and found the quantity in Nos. 2 and 3 very much increased. No. 2 proper was getting 49,925

cubic feet per minute, and No. 3 5,500, totalling 55,425 returning up the main return, as Nos. 2 and 3 air return to the same fan. I did not find any trace of gas in the return this time, but noticed in the fireman's report gas in the face of the main tunnel; quite a large body. I told them not to move it away till night, but during the day it gradually moved and by night was nearly clear.

After measuring the size of the air-ways I find, in many places, they are very small. The up-cast shaft in No. 2 is only 6 x 6, and in No. 1 the approach to the fan is only 4½ x 4. In both of these the friction is very great.

Mr. Smith, the manager, promised me he would increase the size of the air course in No. 1, in about three weeks, by connecting the present working tunnel to the fan and use the new tunnel for the intake, which will, no doubt, greatly increase the amount of ventilation. He also stated it was their intention to enlarge the air-ways through the No. 2 mine at once, also the up-cast shaft.

The main deep is at present being enlarged; altogether the conditions are improved, especially with reference to ventilation.

I also wish to mention the practice of using naked or open lights in some parts of No. 2, and in other parts safety lamps. I would like to have your opinion of Rule 8. When open lights are used in any part of the mine other than on the main intakes they come in contact with the returns.

My interpretation of this rule forbids open lights, but as No. 3 slope is now connected with No. 2 tunnel it would be almost useless to compel the use of closed lights entirely in No. 2 and not in No. 3 slope, as they are practically one mine. It simply means one-half of the mine are using open lights, and the other half safety.

Please advise me as to your opinion of the situation as explained.

I have, etc.,

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

(Signed) James McGregor,
Inspector of Mines.

Crow's Nest Pass Coal Company, Ltd.,
December 31st, 1900.

Dear Sir,—We are placed under the necessity of informing you that Mr. Smith, the mine manager of the Company's Coal Creek Mines, is leaving us to-morrow, and that in accordance with the Revised Statutes of British Columbia, 1897, of the Coal Mines Regulation Act, chapter 138, section (*b*), our company asked the privilege of appointing R. Pearson to fill the vacancy made by Mr. Smith leaving, until such times as the said R. Pearson may be able to secure certificate of competency, either through chapter 138, section (*b*), or through section 39, C. A. of 1888, c. 84, s. 39.

Trusting our request will have your approval,

We remain, etc.,

J. McGregor, Esq.,
Inspector of Mines, Rossland, B. C.

(Signed) W. R. Wilson,
General Manager.

Crow's Nest Pass Coal Co., Ltd.
Fernie, B. C., Dec. 31st, 1900.

Dear Sir,—Your telegram informing us of the failure of all the Fernie candidates in the recent mine manager's examination, held in Fernie, is very disappointing.

It is hard to realise how four of the brightest men we have in the whole community here should all fail to give satisfactory evidence of ability, and requisite knowledge of mining.

Mr. Pearson I knew twenty years ago when he held responsible positions at one of the most dangerous mines in England.

Mr. Lamb, Mr. Morris, and Mr. Devision all appear to have spent their time from boyhood up to the present time in working up through the various grades of mine labour, and since I have been here, and previous to my coming here, have each held the same responsible position they now hold.

My aim since I have come to Fernie has been, and always will be while I remain here, to take a consistent interest in all the worthy men the company here have working for them.

I have, therefore, watched the conduct of these special men, and with a great deal of interest observed how industriously they have tried to prepare themselves for the examination that will prove so disappointing to them. Following the further trend of your telegram we have sent the notice designated in sub-section (*b*), section 33, chapter 138, to Mr. McGregor, Inspector of Mines, a copy of the same notice we enclose you herewith.

Thanking you for the personal interest you have taken in our company's wants,

I am, etc.,

(Signed) W. R. WILSON,

General Manager.

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

NELSON, B. C., Feb. 11, 1901.

SIR,—I herein enclose a copy of a letter I sent to Mr. Pearson, Manager of Crow's Nest Pass Colliery, showing the condition of the Mine.

When I again go to the Fernie Mines, if I find that they have disregarded my notice, and have not improved the ventilation of the mines, there will be nothing open for me but to bring the Manager before the Magistrate for an offence against the "Coal Mines Regulation Act."

I have, etc.,

(Signed) ARCHIBALD DICK,

Government Inspector of Mines, Nelson, B. C.

Hon. Richard McBride, Minister of Mines,
Victoria, B. C.

FERNIE, B. C., Feb. 7, 1901.

SIR,—As you are aware, I examined your mines of the Crow's Nest Pass Coal Company on the 30th and 31st ult. I was in Nos. 2 and 3 tunnels, and on the 1st inst. I was in the No. 1 tunnel of the above company, of which you are manager. I beg to draw your attention to Section 82, Rule 2, of the "Coal Mines Regulation Act," part of which is as follows: "and every place shall be bratticed up to within four yards of the face." As you were along with me on the above inspection, I pointed out to you the infringement of the above rule, so that it will not be necessary for me to go into minute details, as I otherwise would do.

1. I went into No. 2 tunnel. I found this much improved since I was there on a previous occasion. I did not find (this time) any trace of gas; the floor is damp in many places. I also saw that my instrument registered 16,000 cubic feet of air passing per minute in two divisions where there were 73 men. Here I want to draw your attention to the brattice. It must be kept within four yards of the face and in good order.

2. No. 2 tunnel I cannot speak too strongly about. In this mine the brattice seems to have been overlooked nearly altogether. I could not detect any gas, but the atmosphere of the mine was thick with smoke; on the floor there was much water, so that there was not much danger from dust. I also saw that there was 8,550 cubic feet of air passing per minute. There are 40 men employed in this mine. I must insist on you giving your immediate attention to the ventilation of this place, to put it in order so that it will be in a condition for men to be in. In this mine, as well as all the others, the brattice must be as near the face as mentioned in the above rule, and must be kept in good order.

3. No. 1 tunnel. As you are on the eve of a great change in your ventilating system here, after you make your changes, I think you will have plenty of air, so that I will expect you to keep the brattice close and in good order.

I will be at your mines soon again, and will expect to find everything in good order.

I have, etc.,

(Signed) ARCHIBALD DICK,

Government Inspector of Mines, Nelson, B. C.

Mr. Pearson, Manager Crow's Nest Pass Coal Co.,
Fernie, B. C.

Department of Mines,
Victoria, B. C., Feb. 15, 1901.

Sir,—I beg to acknowledge the receipt of your letter of the 11th instant, enclosing a copy of a letter you have addressed to Mr. Pearson, Manager of the Crow's Nest Pass Colliery, with regard to the unsatisfactory condition of the mines under his supervision.

I fully concur in the action you have taken, and will give you every support in enforcing a compliance with the Act.

I have, etc.,
(Signed) Richard McBride,
Minister of Mines.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

Nelson, B. C., February 11th, 1901.

Sir,—I left here for Fernie on the 29th ult. When I got there I found that there had been a fatal accident in No. 3 Mine, whereby Abel Tompkins lost his life by a fall of rock. I went and examined the place. The inquest having been adjourned to February 4th, then again to the 5th, I attended the inquiry. After much trouble, the jury's verdict was accidental death; no blame.

On the 30th and 31st ult. I examined 2 and 3 tunnels, on the 1st inst. No. 1 tunnel, the 2nd was a holiday, on the 4th and 5th insts. we had the inquest. Then on the 7th I went to Michel. Here they had three mines opened, one on the south side and two on the north side of the C. P. R. The mine on the south side is in about 1,000 feet; there were 12 men working, but they are making great preparations for an extensive mine here; coal 8 feet thick. On the north side they have two mines, one is known as No. 8. To all appearance this is going to be the principal mine. Here they have gone in about 600 feet, with a connection by a short tunnel to where they have a ventilating fan. It is at this place they are going to have extensive mines, and they are getting everything in order to build coke ovens, so that this place may yet get ahead of Fernie in regard to coal production. There is another tunnel about 400 feet east of 8; this is a thick seam not like No. 8. As the above mine is close to the C. P. R, it will have an advantage over Fernie. I left Michel early in the morning of the 9th, intending to see Fort Steele, Kimberley and Moyie mines, but as I have been very sick for seven days, I thought I would go on to Nelson, where I am now, but I expect to leave about the 13th for Greenwood. I only mention the above so that you may know where I am and what I am doing.

I have, etc.,
(Signed) Archibald Dick,
Govt. Inspector of Mines, Nelson.

Hon. Richard McBride,
Minister of Mines, Victoria. B. C.

Nelson, B. C., February 12th, 1901.

Sir,—I have omitted to mention to you that while I was at Fernie and Michel Mines, both collieries were being worked without a Certificate Manager—Mr. Pearson had charge. I could not say anything, as I knew nothing of where he got his authority. I understand that Mr. Pearson failed at the late examination. Mr. Hargreaves is employed at the collieries, and I understand he was a successful candidate. Mr. Pearson may be a good man, but I cannot overlook the fact that he has not got the necessary qualifications. There is also Mr. Smith at Fernie, with a certificate, but he gave up the position as manager of the Crow's Nest Pass Mine.

Now it is necessary that they should make an attempt to get a certificate man before they put on one that has no certificate, under the "Coal Mines Regulation Act" of British Columbia.

Please answer as soon as convenient, so that I may know how to act when I again go to Fernie. I do not want to make trouble, neither do I want to get into trouble. If you leave it to me, I will be guided by the "Coal Mines Regulation Act."

I have, etc.,
(Signed) Archibald Dick,
Government Inspector of Mines.

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, February 16th, 1901.

SIR,—I beg to acknowledge the receipt of your letter of the 12th inst, with reference to the Fernie and Michel Coal Mines being operated under the management of Mr. Pearson, who is not in possession of a certificate of competency.

Mr. Wilson, the Manager of the Crow's Nest Pass Coal Company, applied to Mr. James McGregor, under section 33, sub-section (*b*), of the "Coal Mines Regulation Act," for permission to employ Mr. Pearson as Manager of the Crow's Nest Coal Creek Mines, and I now enclose a copy of the correspondence in this connection for your information.

I am not aware of the exact date that this permission was granted, but on the expiration of the two months prescribed by the Act it will be your duty to see that the penalty for infraction of section 33 is rigidly enforced, provided a duly Certificated Manager is not then appointed.

I am, etc.,
(Signed) RICHARD MCBRIDE,
Minister of Mines.

Arch. Dick, Esq.,
Inspector of Mines, Nelson, B. C.

DEPARTMENT OF MINES,
VICTORIA, B. C., 2nd March, 1901.

DEAR SIR,—With reference to your loss of one hundred dollars, of which you wrote me on January 22nd, I have much pleasure in telling you that the Minister has, to-day, endorsed a voucher refunding this amount to you.

I am glad to see you are keeping tight rein on Crow's Nest. Do not have any accident there through lack of enforcing of the laws. With kind regards.

I am, etc.,
(Signed) WM. F. ROBERTSON,
Provincial Mineralogist.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

FERNIE, B. C., March 9th, 1901.

SIR,—I have the honour to herein enclose a copy of my letter to Mr. Wilson, General Manager of Crow's Nest Colliery, and a copy of his answer to the same.

When I get to Nelson I will report to your Department the condition of Crow's Nest Pass and Michel Collieries, and of the metalliferous mines I have inspected since I last wrote to you.

Please send me a few copies of the "Coal Mines Regulation Act," and special rules.

I have, etc.,
(Signed) ARCHIBALD DICK,
Government Inspector of Mines, Nelson.

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

NELSON, B. C., March 5th, 1901.

SIR,—I hereby notify you that you must comply with section 33 of the "Coal Mines Regulation Act, 1897."

That the Crow's Nest Pass Coal Company's Mines must be under the control and supervision of a Certificate Manager, the said certificate having been granted under the "British Columbia Coal Mines Regulation Act."

I have, etc.,
(Signed) ARCHIBALD DICK,
Government Inspector of Mines.

Mr. Wilson, General Superintendent,
Crow's Nest Pass Coal Co., Fernie, B. C.

Department of Mines,
Victoria, March 16th, 1901.

Sir,—I beg to acknowledge the receipt of your letter of the 9th instant, enclosing a communication addressed by you to Mr. Wilson, General Manager of the Crow's Nest Pass Colliery, and his reply to the same.

I beg to inform you you may rely on the full support of this Department in seeing that section 33 of the "Coal Mines Regulation Act" is rigidly enforced as regards the employment of a certificated manager; at the same time, I cannot give my sanction to any person not holding a certificate being employed as manager for a longer period than two months.

I beg to return Mr. Wilson's letter.

I am, etc.,
(Signed) Richard McBride,
Minister of Mines.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

Department of Mines,
Victoria, March 27th, 1901.

Sir,—I beg to acknowledge the receipt of your letter of the 16th inst., submitting a report of your inspection of the metalliferous mines in the vicinity of Moyie and Kimberly, and am pleased to hear that they are being worked in an efficient manner and with due regard to the safety of the miners.

I note with pleasure also that on again visiting the mines of the Crow's Nest Pass Coal Company, both at Fernie and Michel, you are able to report favourably of the improvements that have been made and the ready compliance with which the manager has acted on your suggestions.

I beg to acknowledge the receipt of your letter of the 25th inst., reporting on your inspection of the mines in the Slocan City District.

I am, etc.,
(Signed) Richard McBride,
Minister of Mines.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

Nelson, B. C., March 18th, 1901.

Sir,—I beg to report to you that John McDougall, miner, working in No. 2 tunnel, Crow's Nest Pass Colliery, was brought before the Magistrate for firing a shot in the above mine without waiting for the shot-lighter to see whether the place was in a safe condition to fire a shot. He was convicted and fined five dollars and costs. This is the district mentioned in my report where all the men were working with locked safety lamps. The shot was fired on the 9th inst., but it was the 11th before they got him, that is McDougall. The Magistrate told all those in court that the next time a case like this came before him, on conviction, they would get the full penalty.

The above John McDougall only escaped from the explosion at Union Colliery as he did not go to work that morning.

I am, etc.,
(Signed) Archibald Dick,
Government Inspector of Mines.

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

Department of Mines,
Victoria, B. C., March 26th, 1901.

Sir,—I beg to acknowledge the receipt of your letter of the 18th inst., informing me of a charge that had been preferred against John McDougall for firing a shot in No. 2 tunnel, Crow's Nest Pass Colliery, without first having ascertained from the shot-lighter that the place was in a safe condition, resulting in a conviction and a fine of $5 and costs.

I am, etc.,
(Signed) Richard McBride,
Minister of Mines.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

SLOCAN CITY, March 19th, 1901.

SIR,—I have the honour to acknowledge the receipt of your letter of the 16th inst., which I received this morning before I left Nelson, and upon receipt of the same I wrote to Mr. W. R. Wilson, general manager Crow's Nest Pass Coal Mines. I thought it would be as well that you should know what was in that letter as Mr. Wilson may make some suggestions to you that may conflict with the same. Enclosed please find a copy of my letter to Mr. Wilson.

I have, etc.,

Hon. R. McBride,
Minister of Mines, Victoria, B. C.

(Signed) ARCHIBALD DICK,
Government Inspector of Mines, Nelson, B. C.

NELSON, B. C., March 19th, 1901.

SIR,—I hereby notify you that you must have a certificated manager, under the Coal Mines Regulation Act of British Columbia, to have charge of your Crow's Nest Pass Coal Company's Mines near Fernie, B. C., as required by section 33 of the above Act.

I have, etc.,

W. R. Wilson, Esq., Gen. Mgr.
Crow's Nest Pass Coal Co.'s Mines,
Fernie, B. C.

(Signed) ARCHIBALD DICK,
Government Inspector of Mines, Nelson, B. C.

DEPARTMENT OF MINES,
VICTORIA, March 26th, 1901.

SIR,—I beg to acknowledge the receipt of your letter of the 19th inst., informing me that, acting under instructions from this Department, you had notified Mr. Wilson, general manager of the Crow's Nest Pass Coal Company, that he must employ a duly certificated manager to take charge of the company's coal mines near Fernie.

I am, etc.,

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

(Signed) RICHARD MCBRIDE,
Minister of Mines.

NELSON, B. C., April 22nd, 1901.

SIR,—I have the honour to here report to you my late inspection of the Crow's Nest Pass Coal Mines, near Fernie and Michel.

On the 9th instant, I left Nelson for Fernie, where I arrived on the evening of the 10th.

On the 11th, I went to what is known as No. 1 tunnel; this worked pillar and stall, and on the separate split system. I first went into what is known as the west division; here I saw that all the men were working with safety lamps. I examined all this district with a safety lamp, but did not get the gas to flash or explode in my lamp; at the same time I was satisfied that the coal gave off considerable gas. I saw that the brattice was near to the coal face; there was not any blasting or shots being fired here.

Ventilation was good, the air being conducted well up to the face by brattice or otherwise. In this district there was 25,000 cubic feet of air passing per minute; this was for the use of forty men and four horses; and to render harmless what gases that were given off; this division is mostly dry. I then followed on to the east district. The air coming from the east and west districts met here, and continues on to the fan, not going near any of the working places. As I have said, I am now in the east split; here I saw that all the men were working with open lights. I examined all this district with a safety lamp; could not find any trace of gas; everything here was in good order, brattice well up to the face.

Ventilation here was good. I saw that there was 14,000 cubic feet of air passing per minute where there were 28 men and 4 horses. The air here is well conducted in. In this division they work out to the gravel, which may account for the absence, or that they are not troubled with much gas.

On the intake or main tunnel I saw by my instrument that there was 66,000 cubic feet of air passing in the mine per minute. Here we have yet 27,000 feet to be accounted for; this escapes at the doors and stopings as it gets along, and gets into the old works, keeps them

clear, so that no gas collects. They now find that this is too much to let escape, as some of it is wanted at the face where the miners work, so that they are going to improve the stoping and make closer seams about the doors. By doing this will force more air into the face.

This is the mine where I mentioned in a previous report that they were making a change in the airway. In my former report of this mine there were 39,000 cubic feet passing per minute, and in the changes it is increased this time to 66,000 feet.

No. 2 Tunnel.

On the 12th instant I examined the No. 2 tunnel of the Crow's Nest Pass Coal Company. I went in what is known as the right division going in (this being also worked on the separate split system). I examined all this district with a safety lamp. Here I also saw that all the men were with safety lamps. I did not get gas to kindle in my lamp, but I was satisfied that the coal was giving off considerable gas ; in the stall that is on the return and gets the last of the air current, the light in the lamp showed a blue cap. In all the stalls the brattice was as close to the coal face as it could be got. All this district is dry and dusty. I sent a notice to the manager, Mr. Drennen, telling him that there must not be any shot-firing in this division, of which I enclose a copy. Here, in this district, I saw that near the coal face there were 8,500 feet of cubic air passing per minute, where there were 37 men working with locked safety lamps. I was all day in this division, going through the present working places and the old works.

13th instant.—I went to what is known as the left division of No. 2 tunnel. Here there were only a few men working, all of whom had safety lamps. I did not find any trace of gas here. This division is generally very wet, water coming from the roof and lying on the floor. Brattice up near the face. When I was there I saw that there were 6,600 cubic feet of air passing per minute near the face. The average number of men that work here is 32. On the intake I found that there were 39,500 cubic feet of air passing in per minute, while there are only 15,100 accounted for; but there is another split where the air goes into the old works. This and the leakage going in take the 24,400 feet. The intake here has got to be improved so that a greater quantity of air may be got to the face where the men work.

No. 3 Tunnel.

April 15th.—I went this morning to what is known as the No. 3 tunnel. I went down here and went through all the workings. This mine is very wet. I saw that all the men were working with open lights. I examined all this mine and did not find a trace of gas. This is a slope; here they have a pump worked by steam, but they are going to take off the steam and work this pump with compressed air. When I was in here I saw that there were 4,320 cubic feet of air passing per minute, where there were 30 men working. In a few days there will be another outlet to the surface which will improve the ventilation here.

Here, between the No. 2 and 3 tunnels, they are sinking a large shaft which will go about 100 feet deep. At the top of this shaft they are preparing to erect one of the large fans that they have got. The fan and steam engine will be the motive-power and the shaft the outlet for the ventilating of the No. 2 and 3 mines. This shaft they expect to have done in a few days. I have again to tell you that, on the 13th instant, Emile Mergeux, miner, working in No. 1 tunnel of Crow's Nest Coal Company, was up before the magistrate, having been caught smoking in the district where nothing but safety lamps are used. He was convicted and fined $5 and costs. The magistrate also said this was the first offence of the kind, the next conviction of this kind would get the full penalty.

April 16th.—To-day I left Fernie to go to Michel, where I arrived in the afternoon. On the morning of the 17th instant I went to what is known as the No. 4 mine. I went in here to the coal face of the upper stall. Here I saw that the men were working with safety lamps, and as I went to all the places I saw that all the men in this mine were using close lights. I examined all the places. I found gas in one place—that was the No. 3 stall—where some coal had fallen out leaving a hole in the roof Ventilation here was good. I saw that there were 12,000 cubic feet of air going in the mine per minute.

The total number of men employed here on one shift is 20. This mine is very wet; there is not a dry place. All stalls are bratticed up within a few feet of the face. After seeing here I went to No. 8 tunnel; this is on the north side of the C. P. R. I went in here to the face, which is about 600 feet. There has not yet been any gas got here. There are no stalls

from this tunnel, and it is only a prospecting place where there are four men working; this mine is wet. From No. 8 tunnel I then went to No. 9 tunnel; this is on the same side of the railway as No. 8 tunnel. This place is in about 700 feet. There has not been any gas found here; the workings are wet. This is also a prospecting place with four men working here. Ventilation is good. Here at the entrance of this tunnel they have started to enlarge this, making it what would appear to be a permanent roadway. They have now made a start here to build coke ovens, but it will be some time before they can be counted.

I expect to leave Nelson to-morrow to go to Sandon.

I have, etc.,

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

(Signed) ARCHIBALD DICK,
Inspector of Mines.

NELSON, B. C., April 19th, 1901.

SIR,—As you are aware, on the 12th instant I examined your No. 2 tunnel of the Crow's Nest Pass Coal Mines. In the division or district on the right-hand side going in, where the miners are working, I found it dry and dusty and giving off considerable gas. I hereby notify you that no blasting with what is known as black powder is to be done here. In the division above referred to, except under the conditions referred to in quotations, section 82, rule 9, of the "Coal Mines Regulation Act," end of quotation. (*See* section and rule above mentioned.)

I have, etc.,

Robt. G. Drennen, Esq.,
Manager Crow's Nest Pass Coal Co., Ltd.,
Fernie, B. C.

(Signed) ARCHIBALD DICK,
Nelson, B. C.

NELSON, BRITISH COLUMBIA,
June 4th, 1901.

SIR,—I hereby report to you what I have been doing since I last reported to you.

May 3rd.—I went to-day to Ainsworth; here I found that there was nothing doing except at the Highland and Highlander Mines. I was in all the workings of both mines. They were in good order.

May 3rd.—I left Nelson for Fernie; I got there on the following day, the 5th being Sunday. 6th.—I went to day to Crow's Nest Pass Coal Company's No. 2 tunnel. I went in here and went through this mine working places and old works; I saw that everything was in fair order, and to all appearance they will be further improved soon; the working here is on the separate split system, known as the right and left side. On the right side I saw that there were 28 men at work, and I also saw that there were 5,250 cubic feet of air passing per minute—this was near the face.

On the left side I found there were 33 men working; here there were 5,000 cubic feet of air passing per minute; this was close to where men were working, the most of it passing along the coal face.

On the intake I saw that there were 43,200 cubic feet passing in the tunnel per minute; this showed that there were 32,950 feet to be accounted for. This was escaping at doors and stoping, getting into the old works, keeping them clear of gas. I may here say that I did not find gas in any of the works.

May 8th.—I went to-day to No. 1 tunnel; I went through all the workings of this mine, I saw that they were much improved since a previous inspection. This mine is also worked on the separate split system, known as the east and west side. In the east side I saw that there were 21 men working and 10,800 cubic feet of air passing per minute; on the west side I saw that there were 17,500 cubic feet of air passing per minute, where there were 32 men working. The above air was well conducted in by brattice or otherwise. On the main intake there were 57,500 cubic feet of air going in per minute. This leaves 29,200 cubic feet of air per minute to be accounted for. This is escaping at doors and other roadways as it goes in; at the same time it prevents gas from collecting in the old works.

On May 7th I went to No. 3 tunnel; went down here. This mine was in good order. There is not any gas seen in this mine, and it is very wet, both floor and roof. Here I saw 19 men, with 4,500 cubic feet of air passing per minute.

They are sinking a new air shaft between No. 2 and 3 tunnels, where they are going to erect one of the large fans, which is now on the ground, and will be put up as soon as the shaft is finished. In the right hand split of No. 2 and the east division of No. 1 tunnels only lamps are used. I was going away with the train on the evening of the 8th ulto., when I heard that there had been two men burnt; I did not go, but went on the morning of the 9th to see and inquire into the cause of the accident, which took place in the left division of No. 2 tunnel. The place I went in was in the same condition as it was directly after the accident, viz., brattice 9 feet from coal face workings 5 feet high, width of stall 17 feet. From inquiry and what I could see, a shot had been fired immediately before the accident, the men going in with open lights, the same as they had been working with. The blast had been in the left-hand corner; it had broken a very large piece of coal, which was out about 4 inches from the solid face. This is where I think the gas had collected and kindled at the lamp, in the one corner, the flame going across and burning the man in the other corner about the hand and face, while the man in the right side was almost missed.

May 29.—I went this morning to the No. 1 tunnel of Crow's Nest Pass Mines. I went and examined No. 14 stall where Steve Romano was burnt on the 20th of May. I saw nothing unusual about the place. Brattice was nearly up to the coal face. I tested the air, and found that there were 2,100 cubic feet of air passing at the coal face per minute. I then saw that I should have to wait for information at the inquiry that was to take place on the 31st ulto. After seeing the above I then made a full inspection of the mine, upon which I am now about to report.

I examined all the mine, the same being worked on the separate split system, known as the east and west split.

I went through all the east split, where I saw that all the men were working by light from locked safety lamps.

I examined all the mine, but did not see a trace of gas anywhere. In this division I found that there were 23 men and boys working, and at the same time there were 14,950 cubic feet of air passing per minute. Every place was well bratticed. In the west district I examined all the places.

I saw that they were working with open lights. I examined all the places, but could not find a trace of gas. In this division I saw that there were 25 men and boys working. At the same time I found that there were 17,850 cubic feet of air passing per minute, every place being well bratticed up within a few feet of the face. On the main intake I found that there were 63,000 cubic feet of air passing per minute, and only 32,800 feet accounted for, thus leaving 30,200 feet to escape into the old works. This is a large quantity to escape, but it is not lost as it keeps the old works clear. This mine is in good order now, but they may take men on to the force.

May 30th.—I went to-day on a tour of inspection to No. 2 tunnel of Crow's Nest Pass Coal Mines. This mine is worked on the separate spilt system, known as the east and west division.

I went first in the east division. I went into all the working places, and was in all the old works where it was possible that any gas could collect. I saw that all the men were using locked safety lamps. In going through this district I did not find any gas, and only once did I see a trace of the same, and that was weak. Ventilation here was fairly good. I say fairly, not but that what it could be better, as I expect that in about one month's time that there will be a strong wind passing through this mine. When I was down I found by my instrument that there were 12,800 cubic feet of air passing per minute. This was directly after it left the working faces where there were 35 men and 5 horses. Brattice was in all cases as near to the face as it was possible to have it. Much of the working in this district is now damp, not very wet.

I then went into what is known as the west division.

In this district I saw that all the men were working with open lights. I examined all this district with a safety lamp; did not find or see a trace of gas on the intake at the first stall of this division. I saw that there were 5,100 cubic feet of air going in, but on the return near the last stall I found that there were 12,000 cubic feet of air passing per minute. Between the figures above mentioned there were 33 men and 4 horses. Brattice close up in all stalls. On the main intake, before getting to the split already mentioned, I found that there were 42,500 cubic feet of air passing in per minute. This shows that there are yet 17,700 feet to be accounted for. Some of this is intentionally sent in a certain part of the old works, and some

escapes at the doors and stoping. The air thus escaping keeps the mixture in the return airway from being explosive. As I have said, once they get the shaft connected and the new ventilating fan working, with the air-ways improved, I shall be quite safe in saying that there will be sufficient air in this mine for a much greater number of men than are now working here. I may also say that instruction has been given by the manager to the overmen and firemen that only locked safety lamps are to be used in the Nos. 1 and 2 tunnels from June 1st until further orders.

May 31st.—I went this morning to the No. 3 tunnel. I went through all the working places, which were in good order. This mine is very wet, both roof and floor. There has not been any gas found in this mine for a long time. When I was down I found that there were 5,000 cubic feet of air passing per minute here where there are 17 men and 2 horses The coal here is very hard, and I am safe in saying that there is more powder used in this small mine than in all the others put together, so that a strong current of air is required to carry off the smoke.

The new shaft and fan, already referred to, will be between the Nos. 2 and 3 tunnels so that it will ventilate and pull from both of these mines.

May 31st.—I attended the inquest to-day, and also on the 1st of June, as it occupied 2 days. Everything was gone fully into. The whole evidence went to show that Steve Romano, after being told by the night and day firemen that he was not to go into his stall as there was gas in it, went in, and the result of it was an explosion. This was on the 20th of May. Romano was severely burnt, and died on the 22nd day of May.

Jury's verdict.—Steve Romano came to his death by being burnt in No. 14 stall of No. 1 Mine, of the Crow's Nest Pass Coal Company, from his own carelessness in going into his stall after being repeatedly told not to go as there was gas in his stall.

The above are not the exact words, but is the substance of the verdict.

I have, etc.,

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

(Signed) ARCHIBALD DICK,
Inspector of Mines.

DEPARTMENT OE MINES,
VICTORIA, June 11th, 1901.

SIR,—I beg to acknowledge the receipt of your letter of the 7th inst., enclosing a report of your inspection of the mines in the Fernie District, during the month of May.

While regretting the accidents to which you refer, which occurred to two men employed in No. 2 tunnel, Crow's Nest Pass Coal Mines, I must express the satisfaction it affords me to receive such a satisfactory account of the general conditions of the workings of the mines you visited.

I am, etc.,

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

(Signed) RICHARD MCBRIDE,
Minister of Mines.

NELSON, B. C., June 15th, 1901.

SIR,—I beg to report to you that on the 5th inst. there was a miner up before the Magistrate at Fernie for being caught smoking and having matches in his possession, in No. 4 Mine, Michel. He was convicted and fined in $5 and costs, with the usual warning, this being the first case of the kind from there.

I have, etc.,

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

(Signed) ARCHIBALD DICK,
Government Inspector of Mines.

Department of Mines,
Victoria, B. C., June 19th, 1901.

Sir,—I am instructed by the Honourable the Minister of Mines to acknowledge the receipt of your letter of the 15th inst., informing him of the prosecution of a miner who had been discovered smoking in No. 4 Mine, Michel, resulting in a conviction and an imposition of a fine of $5.

I am, etc.,
(Signed) Mallcott Richardson,
Secretary.

Archibald Dick, Esq.,
Inspector of Mines, Nelson, B. C.

Cranbrook, B. C., August 12th, 1901.

Sir,—I have the honour here to give you my report on the inspection of Crow's Nest Coal Company's mines at Michel, Fernie and Morrissey.

July 27th.—To-day I went to Michel; went to the No. 4 tunnel; examined all the works on the outside, then went in the mine; there were only two places where there were any men working, with the exception of three men fixing the tunnel; I examined the places with a safety lamp, could not find a trace of gas anywhere. I saw that all the men were working by the light from safety lamps. Ventilation was good, there being only six men in the mine. The manager had caused the ventilation fan to be slowed down as it was not necessary under the circumstances to run it full speed. For all I could see this mine was in good order. From here I went to

No. 8 Tunnel.

I examined all about the outside. This is where they have built large and extensive works for tipling and handling a large quantity of coal per day. After seeing all the above works I went into the mine. Here I saw that there were only four men working at the face of the coal and three improving the road. Everything here is in good order and they are further improving so that the roads may be more convenient for the handling of a large quantity of coal per day. Here, near to this tunnel, they are building a large number of ovens for coke making. Fifty of them are now almost ready for a fire. There is no gas yet seen in this No. 8 mine. Ventilation good, there being two separate connections with the outside. From here I went to

No. 9 Tunnel.

Here I saw that this mine was fenced across to keep any person from going in; in addition the usual notice Danger was posted up.

28th July.—I went to Fernie to-day (Sunday).

29th.—I went to-day on a tour of inspection to Fernie mines. I first went about all the works on the surface, then went to the No. 1 tunnel. Went in this mine, which is worked on the separate split system known as the east and west districts. After going in the tunnel I first went in the west division, old works and air-ways. After seeing much of them I got to the coal face where the miners were at work. I was in all the working places and air-ways, examining them with a safety lamp. Could not find a trace of gas in my lamp in any of this division. Every place was well timbered and bratticed up near to the face. Ventilation was good. I saw that there were 8,990 cubic feet of air passing per minute for 36 men, all of whom were working by the light of locked safety lamps. I then went to what is known as the

East District of No. 1 Tunnel.

I went along all the air-ways of this section and most of the old works. I was most particular about the old works, to find if there was any gas collected in them, but I saw that they were clear. I then went to the places where the miners work. I was in all the working places in this mine and all the old stalls that have been stoped; examined them with a safety lamp. I saw that there was not any standing gas and could not detect any in my lamp that might have been travelling in the atmosphere of the mine. Here, as in the west district, I saw that all the men were working by light from safety lamps. In this division I saw that there were 11,250 cubic feet of air passing per minute, where there were 36 men at work. I may also here mention that in the main intake I found that there were 50,000 cubic feet of air passing per minute, thus leaving 29,760 cubic feet of air to be accounted for. This escapes at stoping and doors as it goes in, but much of it is caught up at the face as it cannot escape.

Then again it keeps the old works clear. I am pleased to be able to tell you that as to the safety of this mine it has much improved of late; ventilation is better and where it used to be dry it is now getting wet. In most of the places of this No. 1 mine the roof is hard and strong but the timbering has to be done all the same. I always find the brattice as close up as it is almost possible to have it.

July 30th.—I went this morning to the No. 2 tunnel of the Crow's Nest Pass Coal Co.'s mines. The machinery and tiples are the same plant as that in use at No. 1 mine. This No. 2 tunnel is worked on the separate split system and is known as the right and left divisions. I went first into the old works of the right division, following along the old works until I got to where the mine is working. I then went to all the working places and air-ways of this district, examining all places where I thought it possible for gas to be, and at no place could I find a trace of gas in my lamp. The men were at work when I was there, so that I could see the usual condition of the mine. This mine used to be very dry, but it is now getting damp throughout and in some places very wet. As a general rule the rock overlying the coal is hard and solid. Even with that it has to be regularly propped so that there may be less risk of accident. I also saw that the brattice is kept up near to the face. From here I then went to the left division. I first went to the old works and examined them. While in this district I saw that most of the miners had gone home, but not on account of anything being wrong with the mine. As I have said I first went through the old works, after which I went to all the stalls, many of which were empty as the men had gone home. I examined all the places with a safety lamp but did not find any gas. There is no dust here, much of the work being very wet. I saw that all the stalls were well timbered with brattice near to the face.

Ventilation was fairly good, but by the next time I hope to be able to report to you that it is very good.

In this left division I saw by my instrument that there were 7,500 cubic feet of air passing per minute, and when the men are all in there are 32 men. In the right district there were 10,000 feet passing per minute for 32 men. There is also another split where there are 4 men at work. Here there are 7,000 cubic feet of air passing per minute, and on the main intake I found that there were 50,000 cubic feet of air passing per minute, thus leaving 25,500 cubic feet to be accounted for, all of which escapes into the old works, which makes the mine more safe as this keeps gas from collecting in the old workings. From No. 2 I then went to

No. 3 Tunnel of Slope.

I went down this slope to the face. There are only a few men working down here, but they are making great preparations to put more miners in here. As I have said, I went to the face and went along all the working places. I saw that they were well timbered and the brattice well up. This mine is very wet. There is no dust at all in this mine. I went into most of the old works. They have no gas in this mine. When I was down there were 18 men in the mine, and I saw that there were 5,000 cubic feet of air passing per minute.

This mine and No. 2 is ventilated by the same fan, and upcast shaft. You will have observed in previous reports that they were making another shaft. This is now finished, area 100 feet. They are now putting up a large fan, from which they expect great results, but I will wait until it is working, and if it can pass what they give it out for it will be the greatest fan in British Columbia.

5th August.—I went to Morrissey, where the Crow's Nest Pass Coal Company is opening out new coal mines. When there I saw that they had 7 tunnels into as many different seams of coal. They are only a short distance in and vary in thickness from 4 to 14 feet thick. They are now building a tram road that goes close past all the above tunnels. They are also excavating and making ready for building a large number of coke ovens. In addition to this they are building a railway from Crow's Nest main line up to where the ovens are to be built. This will be about 2½ miles long. All the above is on the north side of Morrissey Creek. Again on the south side of the same creek there is another party at work which was told me to be a C. P. R. Company. They have one tunnel into the coal and there is another only a short distance from it, so that this place, from all appearance, is going to be a strong opposition place to Fernie. To all appearance there is plenty of coal on both sides of Morrissey Creek. Hoping that you will find the above report on the coal mines of this district satisfactory.

I have, etc.,

Hon. Richard McBride,
Minister of Mines, Victoria, B. C.

(Signed) ARCHIBALD DICK,
Inspector of Mines.

VICTORIA, 15th August, 1901.

SIR,—In the absence of the Honourable the Minister of Mines I beg to acknowledge the receipt of your letter of the 12th inst., submitting a report of your inspection of the coal mines at Michel, Fernie and Morrissey.

I will see that the Minister's attention is drawn to this report immediately on his return to Victoria, and feel sure that the favourable state in which you found the mines cannot fail to afford him the greatest satisfaction.

I am, etc.,

Archibald Dick, Esq., (Signed) MALLCOTT RICHARDSON,
Inspector of Mines, Cranbrook, B. C. *Secretary.*

VICTORIA, September 9th, 1901.

SIR,—I have the honour, by direction of the acting Minister of Mines, to acknowledge the receipt of your report of the mines you visited during the month of August.

I have, etc.,

Archibald Dick, Esq., (Signed) MALLCOTT RICHARDSON,
Inspector of Mines, Cranbrook, B. C. *Secretary.*

CRANBROOK, October 28th, 1901.

SIR,—I have the honour to here report to you the condition of the Crow's Nest Coal Company's mines, as I found them on the dates here mentioned.

October 8th.—I went to-day to what is known as the Morrissey mine, which is under the charge of Robinson Pearson, certificated manager.

There are here seven tunnels into the coal, all of which are in different seams. They are not far into the coal, as there is not much accommodation to bank it. The seams vary in thickness from 4 to 18 feet in thickness. At present they are only working in three tunnels, but all the others are stoped, well timbered and in good order, so that they are in a position to start as soon as they are complete. This railway from the C. P. R. will be about three miles long, and they think in about one month more, if the weather is fine, that the grading will be finished, but there will be much work to do before they can send away much coal, as there is much wood work to do before they can have tiplers built for the handling of much coal.

In all the above mentioned tunnels they find gas, and at times use safety lamps. All the mines referred to are on the north side of Morrissey creek.

On the morning of the 9th I went to what is known here as the C. P. R. Camp. This is on the south side of Morrissey creek. I first saw them prospecting in the bank, but had not got any coal. I then went to where they had two tunnels in about 200 feet. These tunnels were both being driven in the same seam of coal and about 50 feet apart. This coal is 18 feet thick and of a very good quality. On this side of the creek there has not been any gas found up to the time I was there. There have also been other seams of coal found on this side of the creek, but the other two above mentioned is where the greater part of the work has been done. In the C. P. R. Camp there are 30 men at work.

I would have liked very much to have gone and seen the other seam, but as I had to get the train to go to Fernie I had not time.

October 10th.—I went up early this morning to the Crow's Nest Coal Company's mine near Fernie. Here I found that Robert G. Drennen was the certificated manager, having been notified of the same by Thomas Stockett, who is now general manager.

After seeing all about the outside, I went in No. 1 tunnel. This mine is worked on the separate split system, known as the east and west divisions. I first went in the east side; was in all the travelling roads, working places, and much of the old works. I examined all the places above mentioned with a safety lamp, but did not find or see any trace of gas on my lamp.

I saw that the men were working with safety lamps. I also saw that the roadways and stalls were well timbered. I told the miners to be very particular and have their places well timbered and keep themselves safe. Ventilation in this district:—I saw that there were 6,400 cubic feet of air passing per minute. This was only a few yards from the face of the workings; and at the intake, by my instrument, I saw that there were 7,500 cubic feet of air passing per minute. In this division there are 40 men and boys at work. Here I saw that

the brattice was up near to the coal face. There is no dust in this district, although in some places not very wet, yet it is not dry, and much of it is very wet.

West Side or District:—I went into all the working places here. I went along the air-way from one end to the other. I was through most of the old works. In none of the old works or air-way could I find a trace of gas, and in only one place where the men were working I saw gas burn in my safety lamp.

This place had the brattice close up, but there was a cross-cut about through. I may here say that in this place where I found gas, the coal was 8 feet thick, and one of those places where the coal almost works out itself. Places of this kind, I find, are always the worst for gas. The above mentioned gas was all the gas I found in this mine. It was in very good order, well timbered, and in all the stalls the brattice was up near the face. I saw that there were 7,500 cubic feet of air passing per minute, near the face, and in the intake at the face of the level my instrument registered 10,500 cubic feet passing per minute. Here there were 55 men and boys at work, and, as in the east district, they use safety lamps.

In the main tunnel or intake I saw that there were 50,000 cubic feet of air passing per minute. This leaves yet 32,000 feet to be accounted for. This escapes at stopings and doors where the motor passes, but it gets into the old works and keeps them clear of gas, and much of it gets to the face of the working by a shorter way than going around the air-way. They are now making preparations so that more of the air will go direct to the face, where it is wanted.

October 11th, No. 2 tunnel.—I went into this tunnel of the Crow's Nest Coal Company to-day. This mine is also worked on the separate split system, known as the right, left and new motor road division. I went in the right division. I went to all the working places, travelling roads. I went through the old work to see the condition and if there wasgas, but I could not find any gas, neither could I get it to show in my lamp, and close to the face of the inside stall of this district I saw that there were 10,800 cubic feet of air passing per minute. Here there were 34 men and boys at work. Brattices kept close up and the roof in the stalls well timbered. I then went to what is known as the left side or division. I went in here and examined all this district from one end to the other—working places, air-ways and old works,—with a lamp, but did not find gas, nor see any trace of it. I also saw that the brattice is kept well up and stalls well timbered. Ventilation was good. In the intake, near to the face of this division, I saw that there were 5,425 cubic feet of air passing per minute. Here there were 34 men and boys at work. The above volume of air will increase as it goes out, as the return is by the face. There is another split in this No. 2, known as the new motor road. In this district there are 8 men working. They are driving this ahead to connect with what I have already described as the right division, so that the coal from there may come this way, so that this will yet be the principal outlet in this No. 2 tunnel. Ventilation was good. I saw that there were 12,000 cubic feet of air passing in per minute, and, as I have said, there were 8 men working. The three places here were well bratticed and timbered. In the main intake I saw that there were 49,000 cubic feet of air passing per minute, so that there were yet 20,775 cubic feet to be accounted for. As in No. 1 it is necessary for some to escape, so that the old work may be kept clear of gas.

This mine, which used to be dry, is now damp, and much of it very wet. There has not been gas reported from this mine for quite a time, but everything goes on the same as it used to do when gas was giving them much trouble. All the miners in these three districts work with safety lamps.

October 14th, No. 3 tunnel.—I went early this morning to No. 3 tunnel or slope. I went down here and examined all the working places, and went through all the old works to the fan shaft. I did not find any gas in this mine, which was in very good order; brattice up close and well timbered. The roof is very hard and nothing ever falls out. Ventilation was very good. When down, I saw that there were 12,000 cubic feet of air passing per minute, where there are 15 men at work. This mine is very wet on the floor, and much water is coming out of the roof.

The fan that I have mentioned in previous reports as being under construction is now working, running slow and only in connection with this No. 3 tunnel. I heard some of the miners say that there was too much wind. This fan is also to be the motive-power for ventilating the No. 2 tunnel, but the air-way in that mine is not yet ready for the change. They have the old fan for No. 2, the new fan being the motive-power for the ventilation of No. 1. This new fan has now been running for a week and runs smoothly.

(Here follows an account of the Michel mines.)

You will have observed that the ventilation of the Fernie mines has gradually improved, until now they may be considered in fair order, but when the new fan is put to a nominal speed I think No. 2 as well as No. 3 tunnel will be well ventilated, so that I think with usual care and good management we have got over the most dangerous time with 2 and 3 mines. There is yet another fan on hand—this is to be put up as a motive-power to the ventilation of No. 1 mine—but it will be some time before it will start.

All the Fernie or Coal Creek mines, which at one time were very dry, are now damp in all the parts of the mine and some places very wet.

Hoping you will see by the above report that the safety of the men working in the Crow's Nest Pass Coal Company's mines has much improved of late, and that the report is satisfactory.

I am, etc.,
(Signed) ARCHIBALD DICK,
Inspector of Mines.

Hon. Minister of Mines,
Victoria, B. C.

DEPARTMENT OF MINES,
VICTORIA, 1st Nov., 1901.

SIR,—I have the honour, by direction of the Honourable the Acting Minister of Mines, to acknowledge the receipt of your communication of the 28th ultimo, reporting on the result of your inspection of the Crow's Nest Coal Company's mines during the past month.

I am, etc.,
(Signed) MALLCOTT RICHARDSON,
Secretary.

A. Dick, Esq.,
Inspector of Mines, Cranbrook, B. C.

CRANBROOK, B. C., Nov. 30th, 1901.

SIR,—I have the honour to herein submit my report to you on the Crow's Nest Pass Coal Company's mines, at Coal Creek and Michel.

No. 3 MINE.

Nov. 14.—I left Fernie early this morning for the coal mines, as above mentioned, where I arrived in due time. I examined all the works on the outside. I then went to what is known as the No. 3 tunnel, or rather a slope as it might be called. As soon as I entered underground I could feel the change in the atmosphere of the mine to what it had been on former occasions, the wind travelling with much greater velocity. I went down the slope to the face; I then went to all the working places on both sides of the slope, which I saw were in good order, well timbered and bratticed. The roof in this mine is very hard rock, but it is well looked after. There is no dust, as it is wet throughout. After seeing all the working places I went into the old works, examining them with a safety lamp to see if there was any standing gas. I failed to find a trace of gas in any part. I saw that all the men were working and had open lights. This mine has always been free from gas. Ventilation was very good. Some of the miners thought that the velocity of the wind passing was too strong. I saw by the register of my anemometer that there were 30,000 cubic feet of air passing per minute, all of which was for the use of this No. 3 mine, where there are 30 men employed. The motive-power for the above ventilation is a new fan lately started, of which I will mention further on. In addition to the fan, they have lately put in operation a large air compressor, which has done away with steam in the mine where it was used for pumping, the air having taken its place. Air is now used here in pumping, hoisting and lowering coal in the mines.

No. 2 TUNNEL.

Nov. 15.—To-day I went to this No. 2 tunnel. This mine is worked on what is known as the separate split system, viz., right, left and new motor road districts. I first went to the right division. I went into the old works, travelled through them until I got to the working face, where I saw the miners working from the light from locked safety lamps. I examined all the places in the mine where gas was likely to collect. I went along the air-way from the intake to the face shaft; did not find gas in any place. Brattice was up as close to the face as it was

convenient, or could expect to have it. In many of the stalls the roof was very bad and full of slips, but they had it well timbered. The men are all instructed that at any time they should be short of timber, and the roof bad, they must leave the face until it is made secure. Ventilation was good. I saw by my instrument that, near to the face of the last stall in this division, there were 13,300 cubic feet of air passing per minute where there was a total of 30 men at work. After having been through this split, I went to what is known as the

NEW MOTOR ROAD DISTRICT.

Here there are only 7 men working, and they are working to make a connection with the district above mentioned, and another part of this mine further to the right. This last-mentioned place has been stoped for quite a time, waiting until such time as the connection here mentioned is made, which will be soon. When I was in this place they had a large piece of the brattice down on purpose to have the road-bed graded ; by so doing cut off the air from the face, where there was a quantity of gas collected, but they were again putting brattice in order when the gas would soon go away, direct to the up-cast shaft. The air from here and the right district comes together a short distance after leaving here, when upon again testing it I saw that the velocity was 1,000 feet per minute. Much of this finds its way into the old works, and keeps them clear of any gas that would collect. I think that you will agree with me that this is one of the best safeguards, having a good quantity of fresh air going into the old works, so that gas cannot collect. After being through this district I went to the

LEFT DIVISION.

Here I went through the old works which, with the exception of the stopings, are all standing open. I had them examined with a safety lamp ; did not find any gas. I then went to the face where the miners work. I went into all the stalls, and saw that they were in good order. I could not find a trace of gas in any part of this division. I saw that all the miners were working by the light from safety lamps, with the exception of a few men that were attending to the motor, and that on the main intake they had open lights. Ventilation good. When I went down in the mine and near to the face of the stall that gets the air first, I saw that there were 11,300 cubic feet of air passing per minute, and this in a district where 30 men were at work. Brattice close up, or as near to the face as it was convenient for the men to work and not have it too much in the way. Here, as in the other districts, much of the roof is bad and full of slips. In going from this district I went through the old works to the bottom of the fan shaft. This is a very large and windy place. It is here where the air from the Nos. 2 and 3 tunnels meet and form one volume of 120,000 cubic feet passing per minute. This is the result of the new fan, which I have already mentioned, and is now running 100 revolutions per minute, and as this fan is made to work 200 revolutions, there is yet 100 in the reserve, so that when the connection is made that I referred to, there should be sufficient air got to the face and yet have a large quantity to circulate in the old works. I look upon the old workings of a mine that gives off much gas as being the place where the greatest danger lies for a serious accident, but with the usual good management which is now being carried out, as well as the great care being used by the workmen, I think we should be free from any serious calamity. The mines above referred to used to be dry and had to be sprinkled, but now they are wet and attend to the dust themselves.

NO. 1 TUNNEL.

Nov. 16th.—This No. 1 Tunnel is worked on the separate split system, known as the east and west divisions. In going in the main tunnel I went to what is known as the east side. I went into the faces here by the way of the old works, which I followed until I got to where the miners were working. I went into all the working places and air-ways of this district. Here I saw that the men were working by the light of safety lamps. I did not find any gas, but at the same time I was satisfied that much gas was given off. In many of the stalls the roof was very bad, but the overman is very strict with the men in having them timber the place and in having them make themselves secure so that accidents may be prevented. Brattice is kept up near to the face in all the stalls so that the air may pass the face as near as possible. Ventilation was good. I saw that there were 14,000 cubic feet of air passing per minute. In this district, which has 60 men at work, the quantity of air is much increased. As there is great leakage in the main intake, much of this air had to get to the face of the stalls before getting into the return air-ways.

West Side.

Here I went along the air-ways and old works; I was in all the working places and much of the old works, and all the entrys of the hoist coming down. I was certain there was much gas given off, although I could not detect it on my lamp except in one place, and that was in No. 3 stall, Scott's entry, when the gas burned in the lamp when there was a strong wind passing along the coal faces. The coal here was working off free, which accounts for so much gas coming off at this place. Here in this district I saw that there were 10,000 cubic feet of air passing per minute, where there are 40 men working. Many of the men mentioned here work on the main intake where there is a much greater volume of air passing. All the men work by locked safety lamps. In the main intake I saw that there were 48,000 cubic feet of air passing per minute. This, you will observe, is double of what is above accounted for, as going to the stalls where the miners work. You will see that there is 24,000 feet of air escapes per minute, at doors and stopings, all of which finds its way into the old works. If it was not for this great leakage the old works would soon fill up with gas, so that the air which now escapes from the main intake is the means of keeping the old works clear, although all not getting to the face it supplies a want that could not be done without.

Michel.

Nov. 18th.—I went to-day on a tour of inspection to the Michel mines. I went out early this morning to No. 4 Mine. I went in the tunnel and down the slope until I got to the first level to the left; I went in here where I saw two men working; this was a place off the level. I went up; they told me to keep back as there was gas. I went and found that there was quite a body of it. At this time the overman came and ordered the men out. They should not have been in the place at all, and the overman gave instructions for the place to be fenced off until such time as they got a cross-cut through, which would be soon. I then went down the slope, but could not get to the bottom as there was considerable water in the face. I then went to all the other places and saw that they were all clear of gas. Ventilation good, and with the exception of the place above mentioned, ventilation is much improved since my previous inspection. I saw that there were 14,000 cubic feet of air passing per minute in this tunnel, where there were 19 men employed. Brattice is kept well up and near to the face. At this mine they are putting in the fan that was on the Nos. 2 and 3 tunnels, Coal Creek, and it is expected to be running in four days from now. The same is sure to be a great improvement in the ventilation.

They have also started a rock tunnel from the surface to intersect the present workings, of which I will perhaps be able to tell you about some other time.

The above mine is the only place where there is any work being done at present.

I am, etc.,

Hon. Minister of Mines,
Victoria, B. C.

(Signed) Archibald Dick,
Inspector of Mines.

Victoria, December 5th, 1901.

Sir,—I have the honour to acknowledge the receipt of your letter of the 30th ult., addressed to the Honourable the Minister of Mines, enclosing the report of your inspection of the Fernie and Nickel coal mines.

I am, etc.,

Archibald Dick, Esq.,
Inspector of Mines, Cranbrook, B. C.

(Signed) Mallcott Richardson,
Secretary.

Cranbrook, B. C., February 25th, 1902.

Sir,—I send you the enclosed full report of how the mines and their conditions are, so that you may know how things are about the coal mines.

I purpose going to Kimberley, so that I may see the North Star, as they have some men working there. I may also go and see the Sullivan Mine, not that I think there is much work being done, but I know much work has been done since I was there.

I have, etc.,

(Signed) Archibald Dick,
Inspector of Mines.

Hon. Minister of Mines, Victoria, B. C.

CRANBROOK, B. C., February 28th, 1902.

SIR,—I have the honour herewith to report to you my inspection of the Crow's Nest Pass Coal Company's collieries, and, as far as could be seen, the condition of the same.

On the 12th instant I went to the Morrissey mines, the same being under the management or Mr. Pearson, Certificated Manager. I went first to what is known as No. 1 seam; then to 2, 3, 4 and 5 seams, all of which were in good order. There were only 14 miners working on the two shifts and they were making preparations for what may be expected, and the large number of miners that will be required here after the railway is extended to this place, as there is almost an unlimited supply of coal here, and it is in great demand both in the Kootenays and the adjoining states; they are rushing the works so that they may be in a position to give all the coal they can when the cars get here. In addition to the seams of coal above mentioned, they have discovered another above the No. 1. This late find is 18 feet thick, clean, bright coal.

On the 12th instant I left Morrissey for Fernie, and on the 14th I went to the Coal Creek mines, the same being under the management of Robert G. Drennen, Certificated Manager. I examined all about the outside; then went to No. 2 tunnel, which is worked on the separate split system, known as the high level, right and left divisions. I first went to the high level. In a short distance after I entered the mine I went into the old works to see if I could find any standing gas; this was to the rise of the main hauling road where the coal and men come out. I followed along the old works until I came to where two miners were at work taking coal out of a pillar. The name of one of these men was Underwood. I saw that everything here was in good order, well timbered. Ventilation was good. I saw by my instrument that there were 21,120 cubic feet of air passing per minute, where 19 men were at work working by light of locked safety lamps. After examining all this district I returned by way of the level for quite a long distance, when I again went into the old works, but this time to the low side of the level. This is what is known as the old works of the

RIGHT DIVISION.

I went through most of the old standing waste works of this district and all the working places; did not find a trace of gas in any place. Ventilation was good. Here I saw that 22,400 cubic feet of air were passing per minute. In this district there were 40 men at work. In all the places brattice was near to the face; all the places were well timbered, but many of the stalls had a very bad and slippy roof

15th.—To-day I again went to No. 2 tunnel, but this time I went into the old works of the left district. I was in most of the old works here and in all the working places. I saw the men at work, and also saw how they had their places timbered, and brattice in all the places was close to the stall face, as it was convenient to have it. I examined all the old works. I was in all the working places with a safety lamp, but failed to detect gas in my lamp. Ventilation was good. By my instrument I saw that there were 21,140 cubic feet of air passing per minute where there were 40 men working. Here, as in the right and high level, all the men were working by the light of locked safety lamps. From No. 1 tunnel I went through the works to

NO. 3 TUNNEL, OR SLOPE.

I was in all the present working places and much of the old works. They are in very good order; strong, rock roof, and much of the workings are very wet. There has been very little gas seen here, and the coal is much harder and requires to be blasted. There is not any dust, as the floor in many places is covered with water. When I was down—both here and No. 2—I saw large blocks and pillars of ice near the face of the works.

Ventilation is very good. I saw that there were 29,680 cubic feet of air passing per minute, and was well conducted into the face by brattice or otherwise. There are 39 men employed in this mine, all of whom work with open lights. This is the only mine belonging to the Crow's Nest Company where this is done, except in some of the tunnels at Morrissey, which are only in a short distance from daylight.

The motive power for the ventilation of the above 2 and 3 mines is by the same machinery, which I found is keeping in motion 116,220 cubic feet of air per minute, and having a large reserve, as the fan is working at about half the speed it is guaranteed to run at, and which it will do when required. You will have observed that there are only 94,340 cubic feet of air accounted for in the different splits, thus leaving 21,880 for circulating in the old works, and

which is the means of carrying off what gas may be given off, and this will be increased from time to time, as they are making great improvements in the air-way, as the manager, together with his overmen, is using all means to avoid an accident or anything that might cause any delay to the works.

No. 1 Tunnel.

To-day, the 17th inst., I went to the above tunnel. This mine is worked on the separate split system, and known as the east and west districts, with the main division about 500 feet in from the entrance of the tunnel. In going in I first went to what is known as the east district. I went in the old works until I got to where the miners were at work. I saw that the old works are nearly all standing open. I was in all the working places, and saw that they were in good order, hard rock roof, which was well timbered, with brattice close to the face. I could not find a trace of gas in my lamp, yet all the men were working by the light of safety lamps. Ventilation was good. I saw that there were 10,000 cubic feet of air passing per minute here where there were 38 men at work. I may here mention that they are now making another intake from the outside for the ventilation of this district, and will have an opening for the air to come up in a day or two, and will be a great relief to both districts. I then went to what is known as

West District.

I went through the old works until I came to what is known as No. 1 south level. Here there was a change. When 70 feet from the face, I saw a blue cap burning on the light or flame of my lamp, and on getting to the face it was up in the gauze. I saw two men here, but they told me that they were only fixing the place so that it would stand and not cave, and that they would be out in a few minutes.

The manager told me that there were several places stopped here until they had a stronger current of air passing, as this place was giving off much gas. I then went to 5, 6 and 4 stalls of the same level. Here in these places, with a strong wind passing, it showed a blue cap on the flame of my lamp about $\frac{3}{4}$ of an inch. In the cross-cut of Barton's heading, on the upper side, there was a strong wind, but after passing along the face, and in the low side, there was a blue cap fully one inch long, while on the upper side there was none, which went to show that the gas was being liberated along with the coal, or rather that the gas was pushing out the coal, and in the heading as they took down the coal the gas rolled out along with it, but the air was so strong that it was soon away, All the other places were in their usual condition. I may here mention that they have all along been working the top bench of this seam, and now they are opening out the bottom bench, as the top is getting thin.

I examined all the above most carefully, as I always do.

Ventilation was very fair, as I saw that there were 18,480 cubic feet of air passing per minute where there were 48 men, many of them a long distance out from the face, and the brattice is close to the face. In the main intake there were 64,800 cubic feet of air passing per minute, while there is only 28,380 feet accounted for, thus leaving 36,320 cubic feet per minute passing into the old works, and it takes it all to keep them clear. They tried by sending most of the air around the face, but the old works filled up with gas. In a few days after they have the new intake ready it will improve the ventilation very much.

Michel.

To-day, Feb. 19th, I went to Michel Colliery. I went to No. 4 tunnel. I went through all the works and saw that they were in good order, but before I got out some rocks came down and broke a stoping. The men had to come out until it was fixed. What gas there was cleared away in a short time and the men went to work. In the intake I saw that there were 35,000 cubic feet of air passing per minute, where there are 38 men. I then went to

No. 8 Tunnel.

This has been closed up for quite a time, but as they are now making coke here they have again started with 4 men. Everything is in good order. In the rock tunnel, opposite the tipper, they are getting on well, and have struck an unsuspected 8-foot seam of hard coal, and they have yet 300 feet to go before they intersect with No. 4, so that with the new finds at Morrissey, and this at Michel, great things may be expected from here.

I have, etc.,

Hon. Minister of Mines,
Victoria, B. C.

(Signed) Archibald Dick,
Inspector of Mines.

DEPARTMENT OF MINES,
VICTORIA, 3rd March, 1902.

SIR,—I have the honour, by direction of the Honourable the Minister of Mines, to acknowledge the receipt of your letter of the 25th ulto., submitting a report of your inspection of the Crow's Nest Pass Company's Collieries.

I am, etc.,
(Signed) MALLCOTT RICHARDSON,
Secretary.

A. Dick, Esq.,
Inspector of Mines, Cranbrook, B. C.

DEPARTMENT OF MINES,
VICTORIA, 21st March, 1902.

SIR,—By direction of the Honourable the Minister of Mines, I beg to enclose clipping from the Winnipeg "Telegram," of the 12th inst., of an article stating that the mines in the vicinity of Michel are not in a safe condition.

Will you be good enough, therefore, to carefully examine into the condition of the mines of the Crow's Nest Pass Coal Company and report at the earliest possible moment. It is necessary that such a report, if unfounded, should be denied as promptly as possible.

Permit me to say that I do not think the strictures on your performance of your duties are called for, and I am merely drawing your attention to the article in question in order that it may be denied by a report of inspection at the latest possible date. Please return clipping.

I have, etc.,
(Signed) WM. F. ROBERTSON,
Provincial Mineralogist.

A. Dick, Esq.,
Inspector of Mines, Cranbrook.

CRANBROOK, B. C., March 26th, 1902.

SIR,—I have been requested by the General Superintendent of the Crow's Nest Pass Coal Company to inform you that on examining the workmen of one of the mines of the above company for "matches or apparatus of any kind for striking a light," they found five persons with matches; nine had pipes and tobacco. This was in a mine where there are no open lights allowed in—all working by the light from locked safety lamps. Warrants have been issued for those who had matches, but the Magistrate, Mr. Armstrong, said he could not find anything in the "Coal Mines Regulation Act" to prevent any person having pipes or tobacco in their possession; and it is natural to think that they could only have a pipe and tobacco for the purpose of having a smoke, and to do that they must have a fire.

The officials of this company think, and I am of the same opinion myself, that this is a very serious matter to them, as all the mines here, with one exception, give off much gas, and where only, as I have said, locked safety lamps are used—no other being admitted into the mines.

And if you could see your way clear, and thought it advisable, the officials, and many other men working in the collieries up this way, would like to see some provision made in the "Coal Mines Regulation Act" compelling the workmen to leave pipes and tobacco out of the mine where safety lamps are used, as they only have them for the purpose of having a smoke.

(Signed) ARCHIBALD DICK,
Inspector of Mines.

Hon. E. G. Prior,
Minister of Mines, Victoria, B. C.

DEPARTMENT OF MINES,
1st April, 1902.

SIR,—I have the honour, by direction of the Honourable the Minister of Mines, to draw your attention to the recent prosecution of five men employed at the Coal Creek mine for having matches in their possession while in the mine.

The Inspector of Mines, Mr. A. Dick, has interviewed the Minister, and stated that owing to the excessive quantity of gas in the mine in question such practices are extremely dangerous, and may, at any time, be the cause of loss of life.

The Minister is fully aware that your Company desires to carry out the provisions of the Act to the fullest extent and render the mines as safe as possible, and suggests that, owing to the use of tobacco being the probable cause of the infractions of Rule 8, necessitating these prosecutions, it would be a further deterrent if a *special rule* was made for your mines, rendering having tobacco or pipes an offence.

This would have the same effect as an amendment to the Act, sections 83 and 84, and infringements would be punishable in the same manner as offences committed against the rules therein set out.

If you will be good enough to make the rule mentioned, the Minister will gladly approve of it, or any other you may desire to make securing further safety to your employees.

I have, etc.,
(Signed) Wm. F. Robertson,
Provincial Mineralogist.

Thos. R. Stockett, Esq., Jr.,
General Superintendent Crow's Nest Coal Co., Ltd.,
Fernie, B. C.

April 23rd, 1902.

Coal Creek Mines.

I went to-day to the above-mentioned mines, examined all about the outside, then went in

No. 2 Mine.

This mine is worked on the separate split system, viz., high level, east and west districts. To-day I went into the high level district and examined all the working places and much of the old works. I saw that all the men here had safety lamps, yet I could not find a trace of gas. All the places were well timbered. Here I found that there were 23 men working. Ventilation was good. Only a short distance from the face I found that there were 16,800 cubic feet of air passing per minute, with the brattice as close to the face as it was convenient to have it. Barometer reading 25.85.

April 24.—I again went to-day to No. 2 tunnel, but this time to the west district. I was in all of the working places, which were now in good order and well timbered, although in some places the roof is very bad and full of slips. I put in much of my time in the old workings to see if there was any standing or accumulation of gas. I am pleased to say that in neither the working places nor the old workings was there a trace of gas to be seen, but I saw that all the men were working by light from safety lamps. There were here 35 men working. Ventilation was good here. I saw that there were 20,000 cubic feet of air passing per minute, with brattice in all cases up near the face.

East District.

I then went into what is known as the east district. I first went into all the old workings here and saw that they were clear of gas, after which I went into all the working places, which I saw were in good order, well timbered, with brattice close up—in many cases, under the circumstances, too close to be convenient. In this district I saw that there were 34 men at work, all of whom had safety lamps.

I failed to find any gas in No. 2 Mine, which at one time it would show in the lamp nearly every place you could go. Ventilation is good. Near the face I saw that there were 12,400 cubic feet of air passing per minute, while in the main intake there were 80,800 cubic feet of air per minute, thus leaving 31,400 to be accounted for, all of which escapes into the old works, where it is much required to carry off the gas which is given off there, as by having the old workings clear there is not so great a danger of an accident with the workmen using safety lamps.

No. 3 Mine.

April 25th.—I went down this mine to-day. Here I saw that all the men were working with open lights on their heads. I examined all this mine; there were but few places in the old workings I was not in, as well as being in all the working places. I saw that all the working places were in good order—brattice close up and well timbered. I did not see any sign of gas in the mine.

Ventilation good. I saw that there were 31,800 cubic feet of air passing per minute and conducted well into the face by brattice and otherwise. Here there were 35 men employed. mine is very wet.

I may here say that No. 2 and No. 3 Mine are one and the same by connections below ground, and are connected in many places, both ventilated by the same fan, but are entered by two tunnels from the outside. The motive power for the ventilation of these two mines passes 112,200 cubic feet of air per minute, and has yet 80 revolutions of the fan per minute in reserve before it gets up to its highest working speed.

I am, etc.,

Department of Mines,
Received May 8th, 1902.

(Signed) ARCHIBALD DICK,
Inspector.

[TELEGRAMS.]

DEPARTMENT OF MINES,
VICTORIA, 26th May, 1902.

Archibald Dick,
Inspector of Mines, Fernie, B. C.:

Wire date last inspection two and three tunnels before explosion, also condition having special reference to gas.

E. G. PRIOR,
Minister of Mines.

FERNIE, May 26th, 1902.

Hon. Edward G. Prior,
Minister of Mines, Victoria, B. C.:

On May 19th examined No. 3 Mine, all clear of gas. Ventilation good, 27,000 cubic ft. of air passing per minute—50 men. On May 20th examined No. 2 Mine, high line division, 12,000 cubic ft. of air per minute—30 men. East and west districts 72,000 cubic ft. of air per minute—60 men. Did not find gas in the mines.

ARCHIBALD DICK,
Inspector of Mines.

VICTORIA, B. C.:
Printed by RICHARD WOLFENDEN, Printer to the King's Most Excellent Majesty.
1902.

SUPPLEMENTARY RETURN

OF ALL

REPORTS ON THE CROW'S NEST COAL MINES.

———o———

FERNIE, B. C., June 2, 1902.

SIR,—I have the honour to report to you my inspection of the Crow's Nest Pass Coal Company's Collieries, viz. :—

MORRISSEY COLLIERY.

I examined this colliery on the 17th of May. I went first to the No. 5 tunnel. There was no work being done at the face, but they had four men working fixing the air-way. There they have a small ventilation fan. Ventilation good. No gas here.

No. 4 Tunnel.

There is not any work being done at the face. The rails have been taken up and the men are taking up the bottom, so that a permanent roadway may be put down. I went into the face. Ventilation good. Could not see a trace of gas.

No. 3 Tunnel.

There were two men working at the face here. This is what is called the thin seam; it is in good order. There was good ventilation; no gas seen in here.

No. 2 Tunnel.

There has not been any work done here for some time.

No. 1 Tunnel.

No work being done at the face here, but there are men enlarging and improving the air-way.

0 Tunnel.

Prospecting; not got in coal yet.

All the above works are well timbered where required, and very wet. As there is no coal shipped from here and no yard to put it in, they get out as little as possible, at the same time advancing the mines and keeping them in order, so that they may be in a position to get out coal when outside work is ready.

CROW'S NEST COLLIERY.

May 19th.—I went up this morning to the Coal Creek Mines, where I examined all about the outside, then went down.

No. 3 Mine.

I went down here to the level on the south side. I was in all the stalls as I went in and most of the old works. Examined them with a safety lamp; did not find any trace of gas. I saw that the works were in good order. I came out of this level and went down the slope to where they are starting off other levels. As they are in only a short distance, I came out and went in the level to the north side of the slope. I was in most of the old works here and all the present working places. They were in good order, hard rock roof, plenty timber, but very wet. Ventilation good. I saw that there were 27,000 cubic feet of air passing per minute; this was at a place well down the slope where there are 50 men employed.

After coming out of No. 3 tunnel, I went to

No. 2 Mine.

Thence into what is known as the high-level district. I was in all the working places of this division, examining them with a safety lamp to see if there were any gas, but I failed to find even a trace of gas. All the working places were well timbered, and I saw other timber on hand ready to put in when required. I also went into the old works on the return air-way of this district, and saw that all was clear of gas and the air-way in good order. Ventilation was good. Here, only a short distance from the face, I saw that my instrument registered 12,000 cubic feet of air passing per minute, most of which was conducted into the face by brattice (cloth) or otherwise. Every part in this district was in good order; there were 30 men working in this division when I was there, all of whom were working by the light of safety lamps. I talked with the men and there were no complaints of any kind.

No. 2 Mine.

May 20th.—I again went into No. 2 Mine. To-day I went by the electric hoist and deep, thence up the long incline to the level of what is known as the west side or No. 2 district. I went in here to the face and the stall at the back, which is known as No. 16. I was in all the old works between the level and the face of the working stalls, of which there are 16. From here I went to what is known as the machine district. In short, I was in all the working places up this incline, which is known on the plan as No. 2 district. I examined it very carefully with a safety lamp for gas, but did not see a trace of it anywhere. I also saw that all the places were properly timbered, and in most of the stalls I saw timbers lying that had not then been used, and on the level, leading from the incline to No. 16 stall, I saw large pools of water on the road. Ventilation was good. I saw by my instrument that there were 72,000 cubic feet of air passing down the intake, for the east and west districts, per minute, for 60 men. Everything was in good order.

No. 1 Mine.

May 21st.—I went to-day to examine the No. 1 Mine. I found that the mines were not at work except men in Barton's entry fixing the road, making it higher. After going in the tunnel I went up the west district. In going in here I saw that there were two men working fixing air stoping. I went through all the working places of this district. I saw that they were in good order; all of them had been reported clear of gas. When I was in there was gas of different quantity to show in my lamp in the No. 16 stall, and the three other adjoining stalls. The Overman was along with me. He said there must be a derangement somewhere, so he left me and went to investigate, when he found an air stoping had been broken, so that the air escaped. This was soon made right, and in a short time the gas above mentioned was carried away. Ventilation was good. In this west district there were 32,000 cubic feet of air passing per minute, where in the usual working days there are 50 men. All of the above 32,000 feet does not get to the face of the working, as they have to let a large quantity get into the old works to keep them clear of gas. I then went to the

East District.

I went through this division. There was not any work being done, but I saw that everything was in good order. Examined all the place with a safety lamp; did not find any gas. I also saw considerable timber on hand for use. Ventilation was good. In this division (by my instrument) I saw that there were 42,000 cubic feet of air passing per minute. This was well in. In this division, on the usual working days, there are 46 men working.

I have, etc.,

(Signed) ARCHIBALD DICK,
Inspector of Mines,
Cranbrook, B. C.

Hon. E. G. Prior,
Minister of Mines, Victoria, B. C.

The following is a report of the Miners' Committee, as a result of their examination of the No. 2 and No. 3 Mines of the Crow's Nest Pass Coal Mines, Coal Creek Colliery:—

"FERNIE, B. C., May 7, 1902.

"*To the Management of Coal Creek Mines:*

"SIR,—We, the undersigned, appointed by the Gladstone Miners' Union No. 76, of Fernie, B. C., visited No. 2 and No. 3 Mines, as set apart by the Act, and found them clear of all gases, and in good condition, with the exception of the excessive want of timber in section 2, No. 2 Mine.

(Signed) "THOMAS ADDISON.
"THOMAS STEVENS."

The following is taken from the Firemen's Report Book :—

"Thursday morning, May 22nd.—No. 2 Mine, Nos 2 and 3 Districts, all clear.
(Signed) "R. B. LAMB."

"No. 3 Mine, night shift, May 22nd.—All working places clear.
(Signed) "J. SULLIVAN."

"No. 2 Mine, night shift, May 22nd.—No. 1 District, all working places clear.
(Signed) "J. SULLIVAN."

"No. 2 Mine, morning shift, May 22nd.—No. 1 District, all working places clear.
(Signed) "F. LANDER."

"No. 3 Mine, morning shift, May 22nd.—All working places clear.
(Signed) "J. SULLIVAN."

"No. 2 Mine, morning shift, May 22nd.—Nos. 2 and 3 Districts, all working places clear.
(Signed) "R. PINGELLY."

The above are true copies. (Signed) A. DICK.

VICTORIA, B. C.:
Printed by RICHARD WOLFENDEN, Printer to the King's Most Excellent Majesty.
1902.