REPORT ON WATER WORKS SYSTEM

City Engineer Van Buskirk Recommends the City Council to Obtain an Additional Water Supply as Soon as Possible From Rock Creek--The Construction of a Reservoir and the Laying of Large Mains to the Distributing Station Urged.

The following interesting report on the city water works system by City Engineer Van Buskirk is now before the city council.

Gentlemen: Upon my arrival in the city about a year ago, I was shown the dams, tanks, and various pipe lines comprising the water works system, and obtained from Mr. Fellows the superintendent, a large amount of information not otherwise obtainable in regard to the works.

I found that the city had purchased a large quantity of pipe for the purpose of extending and improving the system and that the work of laying the pipe was then being done.

I found no plans of this work, and could not find that any definite plans or reports had ever been made. I at once recognized the necessity of improving the distribution system, however, and came to the conclusion that I would proceed with the work but would, to a certain extent, disregard the crude plan of operation being followed.

After taking stock of the pipe, specials, etc., on hand and making an inspection of the lines of pipe already laid, I recommended the purchase of an additional quantity of pipe, specials, and hydrants in order that I might be able to use to advantage the material already purchased.

The work of laying the new pipe in place of the small sized pipes of the old system was proceeded with and many of these small pipes taken out were relaid for the purpose of supplying water to districts that could no be reached by the large mains.

This work and the care of the supply system occupied the whole of the working season of the past year so that I was unable to devote much time to the making of, surveying and consideration of the extension and improvement of the supply system. I was, however, able to gather much necessary information not readily obtainable and such as could not possibly be collected in a short time.

I am of the opinion that no further work of any magnitude should be undertaken until you have thoroughly considered the whole question of the water supply of the city, consequently I will give give a short description of the works as they now are and proceed with the discussion of the question of further supply.

Existing System.

The present water supply of the city of ossland is drawn from Stoney creek at a point located at a distance of 13000 feet northerly from and at a height of 375 feet above the business center of the city. The water is diverted from the creek channel by means of a small log dam and is carried in a twelve inch wooden stave pipe, 9250 feet in length with a fall of 105 feet to wooden tank or reservoir, situated at the northerly limit of the city in what is known as the Centre Star Gulch. This tank contains about 140,000 gallons of water, is distant about 4000 feet from, and 270 feet above the business center of the city.

The water is conducted in an eight inch steel pipe from the above mentioned tank to a second wooden tank or reservoir, having a capacity of 184,000 gallons. This tank is situated on the Virginia Mineral claim at a distance of 2700 feet from and 260 feet above the business center. The eight inch steel pipe is continued from this tank to the distributing system.

Water is also supplied to the distribution system by a ten inch steel pipe connected directly with the stave pipe and the first mentioned tank. In addition to these two tasks there is a third wooden tank having a capacity of 184,000 gallons situated on the line of the wooden stave pipe at a distance of about one mile north of the city. The reason for locating this tank at such a distance from the city is not clear, nevertheless it can be made use of in case of fire. The total quantity of water stored in the three tanks and the stave pipe, all of which can be delivered to a fire is approximately 500,000 gallons.

The eight inch pipe leading from Nos. 1 and 2 will deliver water to the business center of the city at a rate of 58.6 cubic feet per minute, the ten inch pipe at a rate of 106.3 cubic feet per minute. The quantity of water that can be delivered to the hydrants is therefore 160.6 cubic feet per minute, or 1,225 gallons. This quantity is sufficient for five fire streams each delivered through 300 feet of two and one-half inch hose and a one inch mozzle. The pressure is sufficient to give an effective height of 83 feet and the quantity of water used, for about six hours service.

In case of a large fire, it will be possible to increase the number of fire streams for a time by increasing the velocity of the water carried in the ten inch pipe. This, however, should not be be done in dry weather, as it will exhaust the supply of stored water too rapidly and will of course decrease the pressure.

I find that the different parts of the supply system were minutely described in a report made by Mr. H. B. Smith, M. Inst., C. E., consequently I consider it unnecessary to burden this report with descriptions in details of dams, tanks and pipe lines.

The supply system is of a crude, complicated and temporary character, and is only maintained in its present condition by constant attention and care.

There are three striking features in the supply system which, to enable it to fairly meet the demands of the service which it was intended to perform, should receive prompt attention.

First—A distributing reservoir of sufficient capacity to supply water for domestic and fire consumption for a period long enough to permit of repair to the supply conduit should it be seriously damaged or broken at any time. Such a reservoir should be at an elevation such that sufficient pressure for fire streams will be obtained in all parts of the city and should be as close to the city as possible in order that the large pipes necessary to deliver the fire supply will be as short as possible.

Second—The readjustment of the mains in the northern part of the city by a radical enlargement of the pipes from the head of Washington street to the railway bridge at the southerly limit of the City of Spokane mineral claim, and by the construction of a new main from this point to the new reservoir.

In addition to these a new main should be laid from the above mentioned railway bridgesoutherly along the westerly side of Centre Star Gulch and on Davis street to Le Roi avenue. This main should be connected to the Washington street main by pipes laid on Third and Columbia avenues.

These mans are necessary to enable the business section of the city to secure the requisite quantity of water for efficient fire service.

Two and even three fires at one time are liable to occur in the city, and it would not be unreasonable to provide for the supply of water for two considerable fires with effective hydrant pressure.

These, under a very reasonable estimate, would consume not less than 352 cubic feet per minute, or at the rate of three and three-quarter million gallons in 24 hours. Now the nominal consumption for a population of 25,000 will be one and one-half million gallons per 24 hours, or 235 cubic feetper minute. So that to meet the possible demands of domestic and fire service, the mains from the distributing reservoir to the centre of the city should be capable of carrying 587 cubic feet per minute.

Third—The third and perhaps the most important requirement is the procuring of a large quantity of water than is obtainable from Stoney Creek in dry or low water seasons of the year. In considering the question of procuring more water, it is advisable at the outset to determine the quantity of water that will be required at the termination of a period in the future up to which it will be reasonable to attempt to forecast the growth of population.

Having made the forecast of the number of people to be supplied we must then fix upon a quantity per head per day which shall be amply sufficient to meet the usual demands for domestic, sanitary and commercial purposes.

It would be folly to pretend that it is possible to predict the future of the city of Rossland with any degree of accuracy; all that can be done is to make a reasonable assumption as to its future progress based upon all conditions likely to operate in determining it.

Since my arrival in the city I have taken every available opportunity of learning the views of those whom I thought were more or less competent to form an opinion on this question, as I recognized that owing to the nature of the occupation of the majority of the citizens, it is not advisable to base an information obtained from other cities and towns. Such information is however, valuable, in that it more or less accurately fixes the proportions of population between producers and non-producers and this simplifies the problem. In estimating the number of producers it is not safe to follow the hard and fast rule of estimating only on the ore in sight, since there can be no doubt that the mines now being developed are permanent and also that several others will be proved in the near future.

Since my conclusions are not based on definite figures I think it is not necessary to further labour the question. I have no difficulty in advising you that it will be well to count on a population of 18,000. It is advisable, however, to make a liberal allowance for growth in the future as, except for economical reasons, there is no danger of procuring too great a supply of water. I do not happen to recall an instance of a community suffering from the possession of too much water while the want of enough is proving a serious trouble to cities and towns all over the country. I have therefore decided to recommend the procuring of water for a population of 25,000.

Having decided on the population it becomes necessary to discuss the question of the quantity of water that ought to be provided daily per head.

It is a matter of common knowledge that the consumption of water per head in America is vastly greater than it is in Europe; and it may be taken for granted that a quantity sufficient for a European city will prove totally inadequate for any city in Canada.

I think that we must be guided by the experience of Canadian and American cities and provide for a consumption of at least 100 gallons (one hundred gallons) per head per 24 hours.

I have no hesitation in advising you that this is a safe but not extravagant estimate.

The total quantity required will therefore be 2,500,000 U. S. gallons in 24 hours. Where can this water be obtained?

I find that the flow of Stoney creek, the present source of supply, was during the dry weather period of 1900 approximately 500,000 gallons per day, and I am satisfied that it does at times fall short of this quantity. You will understand that I cannot state definitely what the certain yield of this stream will be, since my guagings of flow have covered a comparatively short period and no information other than that gained during 1900 is obtainable.

The other sources of supply are: Rock creek, Murphy creek and branches, and Little Sheep creek.

Additional water for use in dry seasons can be obtained by storing the surplus flowing in the streams in time of freshet.

Rock Creek.

Rock creek, according to the best information available, is capable of furnishing at all times a considerable portion of the quantity required and it is probable that it will furnish enough to supply the city until it shall have increased to 10 or 12 thousand.

I have not as yet been able to make any accurate guaging of this stream and am of the opinion that until accurate guagings have been made, covering a period of several years, it will not be safe to rely upon it for a greater quantity of water than above indicated.

Murphy Creek.

The several branches of Murphy creek will doubtless furnish the balance of the 2,500,000 gallons required, but the information available is not at all reliable as the measurements of flow cover a shorter period than those of Rock creek.

Little Sheep Creek.

Accurate guagings of this stream were taken by me during the summer of 1900, These measurements show a dry weather discharge of approximately 300,000 gallons per day and it is probable that this quantity would be very much reduced at times as I am informed that it is not uncommon to find the easterly branch of the creek entirely dry in the summer.

A report on the method of obtaining this water as an addition to the present city supply was laid before the council in July, 1900, but owing to the few measurements of the stream that had been taken up to that time, the quantity of water available in dry seasons was not known and no recommendation as to the advisability of constructing works was made.

The plan and profile accompanying that report show that it would be necessary to construct a pipe line 15,000 feet in length in order to convey the water from the westerly branch of the creek to the present tanks at the northerly limit of the city.

I am of the opinion that it is not advisable to construct this line at present since the quantity of water procurable from Little Sheep creek in dry seasons, even should the whole of it be taken for domestic use, will not be sufficient to make up the quantity required for the present population; and if we deduct the quantity necessary and now being used for the mines it will be evident that the expenditure of the large amount of money required to build the works cannot at present be justified.

Water from little Sheep creek will nevertheless furnish a valuable auxiliary fire supply in the future, as whatever quantity is available can be delivered under heavy pressure to the mains in the westerly section of the city when the population of that section becomes large enough to warrant the expenditure for works. The length of pipe line necessary, and the expense of utilizing this water will be less than is done at present ,since the ordinary street mains will take the place of the easterly part of the pipe lines shown on plan.

No one can predict with any certainty what the future of the mines lying to the west of the city will be, but it may be taken for granted that the growth of the city is dependent upon the development and operation of mines in this and other localities and that the water of little Sheep creek will be required for the ordinary uses of the several mines now using it and for those that will be developed in the future. It is, however, important that this water be controlled by the city since as above stated it will furnish an auxiliary fire supply and can be distributed among the different corporations requiring it in a just and equitable manner and in the interest of all parties concerned.

Storage of Water.

The storing of part of the immense volumes of surplus water flowing in our streams during the freshets, so that a suitable and sufficient average may be maintained tarough periods of low water is an attractive and not unusual method of obtaining a water supply. It is not by any means a simple problem, however, and cannot be properly and economically solved without more information than is at present available. It may be sufficient for the present to indicate the approximate quantity of water that it would be necessary to store in order to supply a population of 12,000. in a season similar to that of 1900.

The stream guagings of Stoney creek were begun in the middle of July, consequently the calculation cannot cover the whole of the season.

The total puantity of water repuired per day will be 1,200,000 gallons. Now the average quantity flowing in Stoney creek between the middle of July and the middle of September was 661,182 gallons per day, therefore to cover shortage during this period it would be necessary to store 33,400,000 gallons. This quantity would require to be increased to cover the quantity lost through evaporation, leakage from reservoir, etc., consequently we may assume that it would be necessary to store about 40,000,000 gallons to cover shortage for two months. The shortage for the whole summer would probably be nearly double this quantity.

The storage of this enormous quantity of water is not to be lightly undertaken as it would involve the expenditure of a very considerable amount of money.

I think it is not necessary to discuss this matter further as I have no difficulty in advising you which scheme to adopt.

Recommendations.

1. I recommend you to obtain an additional supply of water at as early a date as possible from Rock creek.

The obtaining of water from Murphy creek will cost more than is advisable to expend at present, but when an additional quantity is required it will be necessary to construct a conduit from this creek to the reservoir.

2. The construction of a reservoir and the laying of large sized mains from it to the distribution system.

3. The laying of mains on certain streets for the purpose of increasing the area supplied with water for fire protection and for the purpose of closing circuits.

Owing to the large amount of work involved in improving the collecting system, I am of opinion that it will not be possible to lay many of the necessary street mains this year. I think, however, that a few of the more important ones should be laid and that a few more hydraunts should be put in.

An estimate of any work that is considered advisable to do can be furnished on short notice.

Distribution System.

The street mains necessary are as follows:

12-inch on Spokane street from Columbia avenue north, 2,350 feet.
8-inch on Third avenue from Davis to Washington street, 1,290 feet.
8-inch on Columbia avenue from Davis street to Spokane street, 850 feet
8-inch on Columbia avenue from St. Paul street to Butte street, 370 feet.
6-isch on Columbia avenue from Cliff street to Davis street, 366 feet.
6-inch on First avenue from Butte to Park street, 732 feet.
6-inch on Second avenue from St. Paul street to Georgia street, 366 feet.
6-inch on Cook avenue from St. Paul to Spokane street, 1,226 feet.
6-inch on Cook avenue from Davis street to Monita street, 732 feet.
6-inch on Victoria avenue from Davis to Cliff street, 426 feet.
6-inch on Washington street from Cook avenue to Kootenay aveue, 282 feet.
6-inch to Spokane street from Columbia avenue to Thompson avenue, 1,030 feet.
6-inch to Monita street from Thompson to Kootenay aveune, 564 feet.
6-inch to Davis from Thompson to Union avenue, 564 feet.
4-inch to Washington street from Thompson to Cook avenue, 282 feet.
4-inch to Union avenue from Davis to Earl street, 384 feet.
4-inch to Thompson avesue from Cliff to Nevada street, 430 feet.
4-inch to Thompson avenue from Spokane to Washington street, 282 feet.
4-inch to Third avenue from Davis street to West End, 300 feet.
4-inch to Fifth avenue from Washington to Spokane street, 400 feet.
Totals: 12-inch pipe, 2,350 feet.
8-inch pipe 2,510 feet.
6-inch pipe, 6,288 feet.
4-inch pipe, 2,078 feet.

ESTIMATES.

1. Rock creek pipe line and dam.

12-inch steel pipe, 14,000 feet	$17,050,000
Excavation and fill	3,000.00
Right of way	1,000.00
Roadway, etc.	600.00
Clearing	2,950.00
Dam on creek	3,500.00
	$26,550.00
10 per cent engineering and incidentals	2,655.00
Total probable cost	$29,205.00

2. Reservoir.

Exeavations	$ 8,280.00
Puddle lining	4,650.00
Crushed stone	720.00
Paving	9,690.00
Gate house	2,400.00
Pipes and specilas	1,500.00
	$27,210.00
10 per cent engineering, etc.	2,721.00
Total probable cost	$29,931.00

3. Pipe from reservoir to Bridge No. 2, C. P. R.

20-inch steel pipe	$ 9,000.00
Excavation and refill	2,000.00
Specials and valves	760.00
	$11,760.00
10 per cent engineering and incidentals	1,176.00
Total probable cost	$12,936.00

4. Pipe from bridge No. 2 to head of Spokane street.

16-inch pipe	$ 3,250.00
Excavatios and refill	1,000.00
Valves and specials	310.00
	$ 4,560.00
10 per cent engineering, etc.	456.00
Total probable cost	$ 5,016.00

5. Pipe from Spokane to Washington.

12-inch pipe	$ 688.00
Excavation and refill	322.00
Valves and specials	202.00
	$ 1,212.00
10 per cent engineering and incidentals	121.00
Total probable cost	$ 1,333.00

6. Pipe from bridge No. 2, C. P. R., to Le Roi avenue.

12-inch pipe	$ 5,600.00
Excavation and refill and laying	2,975.00
Valves, specials, etc.	530.00
	$ 9,105.00
10 per cen engineering and incidentals	910.00
	$10,015.00
Rock creek pipe line and dam	29,205.00
Reservoir	29,931.00
20-inch pipe	12,936.00
16-inch pipe	5,016.00
12-inch pipe	1,333.00
12-inch pipe west of gulch	10,015.00
Total	$88,436.00

All of which is submitted for your consideration.

I have the honor to be Gentlemen,
Your obedient servant,
W. K. VAN BUSKIRK,
A.M. Can. So. C. E.
City Engineer's Office, Rossland, B.C., April 12th, 1901.

Mr. A. H. MacNeill has returned from a visit to the coast.

YMIR GOLD MINES.

Proceedings at the Annual Meeting—The Dividends.

The second annual general meeting of shareholders of the Ymir Gold Mines, Ltd., was held at Cannon street Hotel, on Monday, Mr. Montagu F. Armstrong (chairman of the company) presiding.

The secretary (Mr. F. R. Tasman) read the notice convening the meeting, and also read the auditors' certificate, as follows: "To the shareholders of the Ymir Gold Mines, Ltd.—In accordance with the provisions of the Companies' Act, 1900, we certify that all our requirements as auditors have been complied with, and we report that we have audited the London books and have checked the incorporation therein of the accounts received from British Columbia, certified by the general manager, from 1st January, 1900, to 1st December, 1900, and the above balance-sheet in our opinion is properly drawn up so as to exhibit a true and correct view of the state of the company's affairs as shown by the books of the company.—(Signed) Monkhouse, Stoneham & Co., chartered accountants, London, E.C., 7th March, 1901.

The Chairman: Gentlemen,—It is about a year since I last addressed you, when our mine was a far less important undertaking than it is today. We then had only a 40-stamp battery, and that solely dependent upon water power, and consequently liable to interruptions caused by the severe change in the weather which are so common to British Columbia. The full capacity of the mill at that time did not exceed 35,000 tons per year, whereas we now have a complete milling equipment sufficient to deal with double that amount of ore—namely, 70,000 tons per annnum, not dependent upon water power—as the old one was—but supplemented with steam power capable, when requisite, of doing the entire work, and thus always ready to provide watever power may be required over and above that available from the water power. Naturally, water power can be worked at a much less cost than steam, and consequently the latter is only brought into operation to supplement the former when a shortage of water occurs. We have also intrduced a complete 10-drill air compressor plant and several other improvements—all tending to the reduction of working expenses, and so adding to the value of your undertaking.

Mr. Fowler has furnished a very full report upon last year's operations, together with a plan of the mine workings and some interesting photographs, copies of which form part of the report which you now have in your hands. Upon reference to this report and plan, you will find that the main shaft had, at the commencement of this year, attained a depth of nearly 650 feet, from which short drifts have been put in, revealing the vein at that depth to not only correspond in width with the ore above but to contain similar value. In other words, the ore at depth is just as rich as it was above—a uniformity the importance of which will be appatent to you, and from this I think we can assume that the mine at the end of last year was proved to the depth of 650 feet. Mr. Fowler also states that no signs of geological disturbance have yet been met with which would indicate any change or cause him to doubt the continuity of the vein at even greater depth. Work at the main shaft is being continued for another 350 feet, when it will reach the 1,000 feet adit tunnel now being driven in from the surface. With the aid of the air drills this No. 10 adit tunnel is at present being driven at the rate of 125 feet per month, and having reached a point 596 feet in at the end of last year, it should reach the vein at the end of this year. Mr. Fowler estimates that at the end of last year there remained above No. 3 level ore reserves to the extent of 97,600 tons, from which you will see there is more than sufficient ore to keep the mill going, above No. 3 level, until the 1,000 feet adit connects with the vein and becomes the main working level of the mine. This is important as showing you how completely all the working arrangements of the mine have been made to harmonize with each other so as to avoid any such circumstance occurring which one notices so frequently in many British Columbian mines of having to curtail the output owing to development work not having been pushed sufficiently ahead. To sum up the position, I think I am right in saying that the Ymir mine operates the largest and best equipped stamp battery in British Columbia, the character and style of which yu can judge for yourselves from the photographs appended to the report. For some time past Mr. Fowler and his staff have had under consideration the most advantageous process to adopt for extracting the gold remaining in the tailings as they pass from the mill, and, finally, after extensive tests, the cyanide process was selected as likely to be the most satisfactory. This being so, your directors gave instructions for a cyanide plant of 10-ton daily capacity to be erected without delay, and this plant commenced operations on the 10th of this month, and we shall know the result by the end of the month. Mr. Fowler, in his report, refers to the ore being slightly less amenable to amalgamation in the lower part of the mine than is the case above, which, while tending to reduce the extraction by means of the amalgamating tables, increases the amount of concentrates derived from it. It is, however, very satisfactory to learn from Mr. Fowler that he considers whatever loss there may be from this cause will be more than compensated for by the gain derived from the use of cyanide, and that should the ore at depth prove slightly more refractory than it is above, no reduction of profit is likely to arise on that account. As explained in the report, the net profit shown in the accounts before you for the last year amounts to £30,928 5s. 7d., after writing off considerable amounts for development, depreciation, and other charges which, considering that during last year work was interfered with, and fraught with many expenses which are not likely to occur again, is a result which, I think, can only be regarded as extremely satisfactory.

The accounts furnish every detail and explain themselves, but must draw attention to the heavy general expenditure in British Columbia, the whole of which, you will observe, is charged against the year's revenue. Of course, the government tax accounts partially for this, but the greater portion is due to the extra expense thrown upon the administration by the purchasing of the machinery and material and other work in connection with it. The interest on loans also arose entirely from the same cause. Apart from these extraordinary expenditures I must admit that the working costs have been somewhat higher than your directors had expected, but which when due allowance is made for interruption and disorganization arising from the introduction of the new arrangements for doubling the output, I think you will agree with me that they are not unduly so. Until the commencement of July the 40-tamp mill, being operated by water alone, was to a certain extent dependent upon the thermometer, and consequently suffered considerable interruption. The connecting up of the new mill also caused nearly one month's delay, and, again, the whole mill was shut down for two periods since then owing to the accidents which are so very liable to occur with new machinery at the commencement of operations. Upon connecting up the new mill with the old one the opportunity was taken to thoroughly overhaul the old battery and to put it in first-class repair, the whole cost of which was debited to the past year's working expenses. In fact, it is only right for me to explain that our general policy is to charge all repairs against revenue, which, for last year, were so heavy as to appreciably affect the working expenses. Under these circumstances I feel confident that we can rely upon the working expenses for the current and future years being less than those of the year 1900, and, consequently, for that reason alone we may expect that our profits will be proportionntely larger, apart from the fact that the mill equipment is capable of giving 55 per cent better output than it was last year. You will doubtless have noticed from Mr. Fowler's report that little or no rich carbonate ore was shipped from the mine during 1900, which, to an important degree, accounts for the average value per ton of ore produced being less in 1900 than it was in 1899. These rich carbonate deposits only occur at intervals, and the fact is that practically no fresh deposits of this character have been opened up during the past year. Whether there are any more or not is a question which can only be known as the stoping proceeds. Without these deposits of very rich ore, and with the excellent arrangements now made for treating the main ore body, the accounts before you must be convincing that the Ymir Mine is one which can not only be worked at a profit, but at a very large profit indeed. It admits of the cheapest possible mode of working, it has been proved to a depth of 650 feet, and can be worked to a further depth of 350 feet, or 1,000 feet in all, by means of level adits, and how much further the vein will maintain itself below that depth is a matter upon which I hope to be able to give you some information at our next meeting. I feel that I should not close my address without congratulating the shareholders upon the very much improved position of the company, resulting from the reinvesting of the profits in the mine for the purpose of doubling the output, instead of increasing the capital of the company. This policy, although somewhat taxing your patience in not receiving dividends upon the profits made has practically doubled the value of your holdings. From the accounts before you you will preceive that at the end of the year, after paying off all liabilities, and upon receiving payment for the product in transit, the company was in the position of having cleared off all debts and liabilities, and had a credit balance of some £7,500 to its account, which, with profits made during January, enabled the directors to declare an interim dividend of 1s. per share, free of income tax, at the end of January.

Twenty per cent and Bonus.

Although the Ymir Mine possesses the element for a more regular return than most gold mines do, the directors hesitate to state what the yearly profits are likely to be, but I think I might go as far as to say that they have at the present time in their minds the practicability of quarterly dividends of 1s. per share, which, it is hoped, will still permit of an additional substantal balance being distrbuted at the end of the year.

It would not be right that I should close my remarks without referring to the services rendered by your managing director in London, Mr. Popkiss, and of your staff in British Columbia. I can assure you that the shareholders are greatly indebted to Mr. Popkiss for his unremitting attention to their interests, and I can speak with knowledge of the advantage which has accrued from his unceasing watchfulness and careful study of the position. No item is too small, no trouble too great, if he thinks that effort on his part will condue to the advantage and value of your property. Your very hearty thanks are also due to our general manager in British Columbia, Mr. Robertson, and your engineering chief, Mr. Fowler. These gentlemen have from the commencement done their very best, if not the best, in British Columbia, and I feel that their efforts are being crowned with success. (Applause.) I will now move: "That the directors' report and statement of accounts to the 3st December, 1900, now submitted to this meeting, be and the same are hereby adopted."

Mr. Richard Popkiss seconded the motion, which, after a short congratulatory discussion, was agreed to unanimously.

The retiring directors, Mr. Edward Heasman and Mr. R. C. Ogilvie, were then re-elected, the auditors reappointed, and a vote of thanks t the chairman, directors and staff terminated the proceedings.—B. C. Review of London, Eng., of March 30th.