

der the old system could not have been collected until the 1st September next, and this, during the extreme monetary pressure which had prevailed, had been of the utmost value to the company. Had that sum not been collected, the company would have been compelled to have applied to some of the banks for a loan, which it was a chance if they got, and even if they did, they would have been compelled to have paid interest upon that sum, until the amount was collected.

Mr. James Blain seconded the adoption of the report, which was carried unanimously.

Moved by Mr. J. Habbick, seconded by Judge Miller—that the thanks of the meeting are hereby tendered to the directors of this company for management of the company's affairs during the present year, and that a further sum of \$600 be placed at their disposal as directors' fees. Carried.

Moved by the president, seconded by the vice-president, and resolved—that the thanks of the committee be accorded to the officers for their valuable services during the present year. Carried.

Mr. Simmons, secretary, returned thanks on behalf of the officers.

Moved by John Fleming, seconded by Wm. Quarry, that the Auditors be granted the sum of one hundred dollars for their services. Carried.

Moved by Mr. Peck, seconded by Mr. Strickland, that Messrs. Flemming and Habbick be scrutineers for votes. Carried.

The scrutineers declared the following gentlemen duly elected directors for the current year:—John Davidson, R. S. Strong, James Crombie, Adam Warnock, Hugh McCulloch, Thos. Peck, James McTague, Samuel Richardson, A. A. Erb, C. McGill, M.P., John Quarry, James Young, M.P., Wm. Turnbull, John Watson, and John Fleming.

At a meeting of directors held subsequently, John Davidson, Esq., was elected president, and R. S. Strong, Esq., vice-president.

EUROPEAN AND NORTH AMERICAN RAILWAY.—At the annual meeting of the stockholders of this company for western extension, the directors reported the road rapidly progressing, and that there is every probability of its being opened for traffic to Fredericton on the 1st January next, and to Woodstock and the border of Maine in June next. The treasurer acknowledged receipt of cash from the Province, the city St. John, and from shareholders amounting to about \$430,000, of which \$392,000 has been paid to the contractors, \$10,000 for material and expenses, leaving some \$28,000 in the treasury towards meeting a liability of some \$60,000. Sleepers for the whole road have been procured and the most of them distributed along the line. Upwards of 2,000 tons of rails have been purchased in England, a portion of these being on the ocean and the balance ready for shipment. Two locomotives and a quantity of rolling stock have been procured in the United States, the bonds of the company having been taken in exchange. Over eleven hundred laborers are employed on the road.

The share lists show that the larger portion of the subscribers have responded to the several calls for payments, and that those who seem desirous of repudiating are few and their subscriptions small. The calls on the city corporation for its stock have been promptly met.

The following gentlemen were elected directors for the ensuing year:—Messrs. Wm. Parks, Major W. B. Robinson, F. T. C. Burpee, Alex. Jardine, and L. Carvel. Wm. Parks, Esq., was unanimously re-elected president; Charles N. Skinner, Esq., solicitor; and T. Robinson, Esq., secretary and treasurer.

THE WELLAND RAILWAY.—The annual meeting of this company was held on July 2, London. Mr. B. B. Wade in the chair.

The revenue account showed that the receipts on the railway for the year 1867, amounted to £14,099. The working expenses amounted to £13,717, and the loss on American currency £1,019, making £14,736, showing a deficiency or loss on working the railway of £637. The total receipts for propeller or steamboat service

during the year amounted to £7,094. The expenses of working them amounted to £8,787, and the discount on United States' currency to £1,999, together—£10,786, showing a loss on working the (propellers) steamboats for the year 1867 of £3,692, which, added to the loss on working the railway, amounted to £4,329. The expenditure on capital account amounted to £329,608. The report of the Managing Director stated that the decrease in the grain traffic over the line had been 1,569,554 bushels, representing £9,215 loss in receipts as compared with 1866, and also a decrease of 12,605 barrels of flour as compared with the quantity carried in 1866. The earnings of the company's steamboats for the past year, as compared with 1865, showed a decrease of £12,007.

The Chairman explained that the stagnation of trade, the deficiency of grain traffic, the low rates, and the loss on American currency, accounted for the loss on working the traffic during the year 1867. They had reason to hope that they would have a fair year's traffic for 187; the depreciation of the United States' currency was not so much as in 1867. Every effort was being made to work the line to the best advantage. The receipts up to the end of May last, showed an increase of £2,000, and hopes were entertained that by the end of the season the receipts would be larger than they were in 1866; which was the best year for traffic they ever had.

After some observations by Mr. Ogilvie and Mr. S. D. Bidder, the report and accounts were adopted, the retiring Directors, Mr. T. Brassey and Major Kitson, were re-elected, and thanks to Mr. Sinclair, the auditor, and to the chairman, concluded the proceedings.

RICHARDSON GOLD MINING COMPANY.—At the annual meeting of the Richardson Gold Mining Company, the following Directors were elected: F. McAnany, Reuben Patterson, Anson Northrup, George D. Dickson, Belleville; James Moir, of Montreal.

ONTARIO FARMERS' MUTUAL INSURANCE COMPANY.—At a meeting of the Directors of the above company, held in Whitby, on the 7th of July, for the election of officers for the ensuing year, J. B. Bickell, Esq., Warden of the County of Ontario, was re-elected President; and John Willis, Esq., Vice-President.

Mining.

DR. HUNT'S OFFICIAL REPORT ON THE NOVA SCOTIA GOLD REGION.—Dr. Hunt's report to the Director of the Geological Survey has appeared. It appears to be a condensation of the reports of Mr. Michel and the *Mining Gazette*. We give some extracts:

The gold of Nova Scotia is remarkable for its great purity, different assays showing a fineness of from 966 to 982 thousandths, so that its value is about twenty dollars the ounce.

With regard to the distribution of gold in the lodes of Nova Scotia, Mr. Michel reports as follows:—"In sinking a shaft upon a lode we must expect to pass through some portions rich, and others poor and even barren. The arrangement of the metal in the lode also offers great variations; sometimes is disposed in a single layer in the middle, and at other times in several layers parallel to the walls. These layers of disseminated gold are limited in their extent, and it is often only at some distance from their limits that we meet with other similar layers. I observed in very many cases that the visible gold was generally most abundant in the portions of the lode adhering to the slate, which is generally the foot-wall, and often itself highly auriferous."

"If the results obtained during the last few years in Nova Scotia show that the veins are irregular in richness, they demonstrate their continued richness in depth. I saw specimens rich in visible gold, extracted from depths of 105; 156; 180 and 215 feet respectively, in the districts of Mount Uniacke, Renfrew, Wine Harbour, and Sherbrooke, and I am aware that a shaft on the Tudor vein at Waverly yields at the depth of 185 feet quartz affording more than an ounce of gold to the ton. Such veins as these just mentioned, which, with a great

regularity of form and position have presented alternations of poor and rich quartz to the depths already cited, will probably be found to offer similar variations to much greater depths. To abandon a working on account of a momentary impoverishment of the lode, as has too often been done in this region, is therefore, unwise; and in a large enterprise, where mining is carried on in several veins at a time, the richness of some of these may always be counted upon to compensate for the temporary poverty of others. I am of the opinion that an unnecessary discouragement has had as much to do with the failure of certain gold mining enterprises in Nova Scotia as the want of scientific knowledge and the neglect of proper preparations, and that many of those now abandoned as unprofitable, will be again taken up with advantage."

"The mining in this region is, in some cases by open workings, but more generally by means of shaft, and of drift or galleries communicating with them. These shafts serve at the same time for the miners, for the raising of the mineral, and for the drainage and ventilation of the mine, except in those cases where a separate ventilating shaft becomes absolutely necessary. The shafts, rectangular in form, are vertical or inclined according to the dip of the lode, of which they include the whole thickness; and their timbering, which varies according to the greater or less solidity of the walls, is done as the sinking advances. When a certain depth has been attained, galleries or drifts for the extraction of the mineral, are opened to the east and west, along the direction of the lode. The working is thus carried on by successive stages, the sinking of the shaft being continued so that its base is always lower than the lowest drift: In the removal of the contents of the lode, which is done by successive steps, or what is called *stopping*, two methods are adopted. In the one, called *overhand stopping*, the vein is taken down by working from below upwards; while the other, called *underhand stopping*, the mineral is extracted by excavations from above downwards. In the latter method, the whole of the material removed is taken up to the surface, while in the former, the waste and refuse, maintained in place by scaffolding, serves to fill up the space, sustain the walls, and facilitate the continuance of the work. This method of overhand stopping, however, has the disadvantage that the sorting of the mineral has to be made in the drifts, with the risk of losing more or less of the small fragments, often very rich, which become lost in the piles of rubbish. To avoid the loss in overhand stopping, it is in some places customary to spread clothes or leather over the debris. When, however, the vein is removed by underhand stopping, the whole material is raised to the surface, and it is easy to collect the smallest particles of mineral. Hence this latter method is almost universally followed in the Nova Scotia gold mines, and has replaced the method of overhand stopping, which had been in some cases resorted to for a time."

"The machinery for raising the mineral from the shafts is very simple: a windlass over the mouth of the shaft, worked by one or two men, suffices for works of little depth, while for greater ones, a whim with one or more horses is employed. These arrangements suffice not only for bringing up the mineral, but for raising and lowering the miners when there are no ladders in the shaft, and also for the removal of water in buckets, in the case where this is not allowed to accumulate in a well, to be removed by a pump worked by steam or horse power."

"In the gold-bearing quartz mines of Spanish America, it is customary, before stamping the mineral, to calcine it in heaps, where it is arranged in alternate layers with wood, which being kindled, burns for from twelve to twenty four hours. The object of this calcination is to get rid of the sulphurets often present, which interfere with the amalgamation, and to render the quartz more friable and easily pulverised. This process, however, is said to have been abandoned in California, and is not used in Nova Scotia, although in several places furnaces for calcination are seen. The reason assigned for this are, by some, that the quartz is