

car can be cheaply & neatly constructed & easily managed, I would use it on such routes as those referred to as traffic feeders for the cars, & I would be prepared to convey one or more persons by these vehicles to church or weddings, or any other place or service, more speedily, cleanly & promptly than the liverymen now do such work.

In concluding, I am satisfied that the possibilities of electric railway traffic are practically inexhaustible, & that when the traffic & entertainment managers of these roads hold their next convention it will be the convention of men standing at the beginning of a great & successful movement, such as few other undertakings can expect to attain.—Street Railway Journal.

The Lewiston Suspension Bridge.

The suspension bridge which is being built across the Niagara River just above Queenston, Ont., & Lewiston, N.Y., is on the site of the old suspension bridge built in 1851 & 1852, which was destroyed by a gale in Feb., 1864. Many will remember having seen the cables swinging from the towers any time in the last 35 years. The new bridge is building for the Queenston Heights Bridge Co. of Canada & the Lewiston Connecting Bridge Co. of New York state. It is being built primarily to carry an electric railway, which will make it possible to complete a belt line around the Gorge. The principal dimensions of the new bridge are: Span from tower to tower, 1,040 ft.; span of stiffening truss, 800 ft.; width, center to center of trusses, 28 ft.; width of roadway, 25 ft. The bridge will carry a single track for electric cars, with a roadway on either side. No footwalks are provided, inasmuch as there will be very little travel of that sort over the bridge. The flanking span on the New York side will be 34 ft. 6 in. long, & that on the Canadian side 19 ft. 6 in. The towers on the New York side are 26 ft. high, & those on the Canadian side 18 ft. On the New York side the towers were placed 28 ft. back from the edge of the bluff, & on the Canadian side 15 ft. Much of the stone of the old towers was used in the foundations of the new ones. The inscription stones in those towers were saved & placed in the new towers. There will be 4 cables, each made of 14 2½ in. steel wire ropes. These ropes are part of the cables of the upper suspension bridge at Niagara Falls. These cables were so long that it has been possible to cut them in two & use them for the new bridge, but to get sufficient length about 75 ft. at each end of each cable will be made up of eye-bars. The versed sine of the cables will be 87 ft., & they will be anchored in the solid rock about 150 ft. back from the edge of the bluff.

From the dimensions given it will be seen that the truss stops 120 ft. short of the tower at either end, & here the traffic will pass from the fixed flanking spans on to the suspended structure. At each of these points a rocker bent is introduced, supported on a shoe below & going up to the cables above. This bent is hinged at the shoe, the end of the truss & the cables.

The clear height of the bridge above high water will be 65 ft. The cables will weigh 200 tons, & about 800 tons of metal will be used in the superstructure. The bridge will be designed to handle the heaviest trolley cars & to carry a uniformly distributed load of 40 lbs. to the sq. ft.

There will be considerable incidental masonry in connection with the work. Face walls have been built along the approaches to save the shale from weathering. On the New York side the face wall is about 19 ft. high at the highest point & runs down to 2 ft. Its length is 800 ft. Other walls will be built on the east end of the New York approach for a distance of 150 ft. & over all these a growth of vines will be encouraged.—Railroad Gazette.

British Columbia Electric Railway Co.

Earnings and expenses for December:

GROSS EARNINGS.	1896-7.	1897-8.	INCREASE
Railway—Vancouver	\$4,475	\$5,866	\$1,391
Victoria	6,098	7,419	1,321
Westminster	4,844	5,824	980
Lighting—Vancouver	9,608	15,265	5,657
Victoria	5,550	7,268	1,718
Total gross earnings	\$30,575	\$41,642	\$11,067
Working expenses	\$20,615	\$23,989	\$3,374
Net profits	\$9,960	\$17,653	\$7,693
Aggregate Gross Earnings from April 1 to Dec. 31	\$216,316	\$307,829	\$91,513
Aggregate Net Profit from April 1 to Dec. 31	\$67,582	\$126,487	\$58,905

The aggregate gross earnings and net profit for 1896-97 are from April 15 only.

Maritime Province Lines.

Dartmouth.—The town council is asking power from the Nova Scotia Legislature to issue \$150,000 of bonds for the purpose of operating an electric street railway in the town & vicinity. A bill will also be submitted empowering the issuing of bonds for \$50,000 to establish an electric light plant for lighting the streets and public buildings.

The Halifax Electric Tramway Co. has increased its capacity to a large extent. It has increased its track & overhead equipment by completing single track loops, double tracking sections & putting in several new turnouts. It has increased its rolling stock by adding 2 box cars, with all latest improvements, such as electric heaters, electric headlights, etc.; 2 open bulkhead cars, 2 box trailers & 1 snow sweeper. These cars were all built by Rhodes, Curry & Co., at Amherst, N.S. During the year just closed the Co. purchased adjoining property & erected an additional brick car shed, 60 by 100 ft., in the basement of which are the Co.'s stables. The offices have been enlarged by a brick addition, & in the station a large quantity of new machinery has been put in, including the latest alternating machines, rotary transformers & tandem compound engines. Mechanical stokers are being installed. During the past year alternating incandescent arc lights have been introduced throughout the city. The Co. has over 14,000 incandescent lamps installed, over 300 arc lamps & 100 alternating arc lamps. There are also a great many motors for manufacturing & elevator purposes. The number of regular employees is about 150, although this number is largely increased from time to time as the work demands.

Moncton St. Ry.—B. F. Pearson, a director, & F. Huntress, Manager of the Halifax Electric Tramway Co., recently visited Moncton, a local paper stating that their visit was in connection with a proposition to take over the Moncton line. Mr. Huntress recently advised us that they were requested to make a report on the Moncton line & to see if some arrangement could be made to extend it & to put it on a better footing, but that nothing had resulted when he wrote.

Yarmouth, N.S.—The street railway is said to be making considerable improvements in its cars & to have ordered several up-to-date motor cars.

Lines in Ontario.

Belleville Traction Co.—The extensions & improvements proposed to be made by this Co. last year were not carried out, as the issue of \$70,000 5% 20 year 1st mortgage bonds was not successful. The Co. hopes to be in a position to go on this year with the work, which will include an extension of the line

from Front St. west to the cemetery, and to a park adjoining it. (May, '98, pg. 80.)

Cornwall Electric Street Ry. Co.—Under a judgment recently given by Chief Justice Armour, in the action of the trustees for the bondholders, the Sun Life Assurance Co., of Montreal, against this Co., the road has passed into the possession of the bondholders, for the present at all events, & is being operated by them. The claim of the Sun Life against the Co. was for bonds of the par value of \$100,000 with interest. They are 1st mortgage 5% 20 year bonds. The whole issue was taken by the Sun Life, & the trustees proceeded owing to the interest being in default. According to the statement of the Ry. Company issued in Sep., 1898, the total assets amounted to \$234,956.10. This, however, is believed to be somewhat in excess of the real value. The capital stock of the Co. issued & taken up amounted to \$117,000, out of an authorized capital of \$150,000. A large share of this stock is held in Montreal, & a good portion of it is said to be in the broker's offices. The officers of the Sun Life state that the judgment of the court will cut out all shareholders & unsecured creditors, & that they will have no claim whatever upon the Co. This means that the stock will not be worth more than the value of the paper upon which it is engraved.

One of the leading shareholders of the Ry. Co. ridicules the idea of the unsecured creditors being left out in the cold, & states that it is not by any means certain that the shareholders will be cut off, as the judgment lately handed down by Judge Armour, & under which the Sun Life claims it can squeeze out the present stockholders of the Co., & the various creditors, was merely a decision as to whether the Co. had the legal right to have the mortgage deed specially designate whether or not it covered the property acquired since the time of its execution. The shareholders claim that the decision is a very vague one, & in fact, implies a doubt as to whether the defendants in the case were legally privileged to carry on such action or not, & further states that the judgment is anything but decisive. For this reason some of the stockholders decided to appeal from the decision. It is claimed by the directors of the Ry. Co. that a short time ago, wishing to make further extensions in Cornwall, & to complete an amalgamation with the Gas & Electric Light Companies, which would place the road on a dividend payment basis, an arrangement was drawn up with the holders of the bonds to provide further funds for these extensions, & it would likely have been put into effect had not the mortgagors stipulated that they could not be responsible for the unsecured creditors of the Co. Among the latter were some of the principal stockholders, who had stood by the road in its infancy, & whom the Co. considered should be protected. The bondholders objected to this, with the result that several of the principal creditors brought action against the Ry. Co., & instituted a seizure on some of the Co.'s rolling stock & other properties acquired after the execution of the mortgage. It was then decided to test the validity of the legal action, as to the proper interpretation of the mortgage deed. This action, it is contended, can have no effect whatever on that which has been instituted on the Ry. Co. by its creditors, which comes up some time in March.

Mr. Talbot, of the Sun Life office in Montreal, is in charge of the road for the present. It has 7 miles of track & an equipment of 6 motor cars, 2 trailers, 1 freight locomotive & 1 sweeper. The line was built in 1886.

Galt, Preston and Hespeler.—At the 7th annual meeting, Jan. 31, the following were elected:—President, H. McCulloch; Vice-President, M. Todd; Sec.-Treas., W. H. Lutz; other directors J. W. Leonard, J. D.