

the strongest twisted wire and nine inches in diameter. The present bridge has eight cables, four on each side, each about two inches in diameter. The bridge will be well made, I doubt not, but whether it will be well travelled is another question. Money will suffice for the former, but something more is requisite for the latter, and something which I hardly think the company will supply. I meant *pluck* for the passengers; for however pleasant "riding on a rail" may be on *terra firma*, this fitting on a stick, whether a broom stick or an iron stick, two hundred feet over an abyss blacker and fiercer than Acheron, for a good long furlong or two is a different matter."—*Railway Journal*.

Opening of the Buffalo and Brantford Railroad.

The Buffalo and Brantford Railroad, as originally designed, has at length been completed and cars are now running over it. This road was projected several years since and a reconnoissance made of the route by Mr. Wallace, who found it to be not only an entirely practical one, but one highly favorable.—For sometime after this the enterprise slumbered, and no steps were taken to enter upon it in earnest. A little over two years since the project was revived, in the first instance, we believe, by the citizens of Brantford. This action on their part was prompted, in a measure, by that of the Directors of the Great Western road in deciding upon Paris, six miles beyond, as the point through which the road should pass. Men of energy took hold of it, and succeeded in obtaining a considerable amount of subscriptions to the stock, principally by the municipalities along the line. They visited Buffalo, and the matter was laid before our citizens, and by them favorably considered. The result was a subscription on the part of the city, of one hundred and fifty thousand dollars to the capital stock. This secured the completion of the road, and the services of our then Mayor, James Wadsworth, Esq., in the Directory, and subsequently as President of the Company.

When the enterprise was first entered upon, it was under a general Plank Road Law—the provisions of which were constructed to authorize the construction of a railroad. This, however, was denied, by some, and the road encountered a powerful opposition from Sir Allan McNab, and others in the interest of the Great Western Road.—Eventually, however, the Provincial Parliament confirmed and enlarged the franchises of the Buffalo and Brantford Company by a special charter. Thus fortified, they went forward. A financial measure of much importance, not only to this road but to all others in the Province, was about this time adopted—a measure of wisdom in its conception, and of great beneficial results in its operation. The municipalities, town and county, had voted to issue the debentures, for internal improvement purposes, to a large amount. These could not be negotiated except at a ruinous discount. Parliament passed an act by which these were taken by the government and its debentures to the same amount issued. These commanded a premium. The par value of the municipal debentures was paid over, and the premium transferred to a sinking fund for their redemption. They all bore six per cent. interest; but the municipal authorities raise eight per cent.—The difference going to the sinking fund.—The Buffalo and Brantford company pay their six per cent on the debentures issued for their benefit as they have also done on the bonds issued by the city; and the dividends will go in the same direction when the road is in full operation. This measure enabled them to raise funds; without which it would have been difficult to realize them.

The road from the Niagara River to Brantford is not far from seventy-five miles in length. It is constructed on a gauge of five feet six inches—uniform with all the roads in Canada. This is a convenient width—preferable on the whole, to the wider or narrower gauge. The country through which it passes, is an unusually level one—offering but few engineering obstacles in the whole distance. There are but two considerable gradients in the whole line—one of about forty feet to the mile, west of Dunnville, and another of about thirty feet, between Caledonia and Brantford. Compare this with a single section of the Great Western, as it goes out of Hamilton. For three continuous miles there is a grade of sixty-five feet to the mile, and for the next four miles, of forty-five feet to the mile. It will be seen, therefore, that the grade on the Buffalo and Brantford Road, offers no impediments to high speed or heavy freightage. In addition to this, seventy-one miles of the seventy-five are straight lines, and there is no curve

with a radius of less than two miles and a half. There are but a few inconsiderable embankments, so that if a train should happen to run off the track, but little damage could result. The cost of the road, absolutely and comparatively, is much in its favor. With a rolling stock consisting of ten first class locomotives—two of which equal the "Racer" and the "Richmond," on the Central—twelve elegant passenger coaches, and baggage cars sufficient to do a large business—the cost has been but \$19,000 per mile. This is much cheaper than any other road that has been constructed;—and the Great Western cost \$60,000 per mile. This difference is owing to the nature of the surface over which the roads pass.

That the opening of this road is to be of great benefit to Buffalo, will, we think, soon be shown. The section of Upper Canada which it penetrates and opens to us, is but little known to our citizens. From the difficulty of access, it has hitherto been an almost *terra incognita*. In point of soil or climate it is equal to any part of the State of New York. And, as a wheat growing region the Grand River Valley is not surpassed by that of the far famed Genesee. The country immediately bordering upon the Road, is not a good representative of the district—as it avoids as far as practicable, the improved lands, in order to secure the right of way on more favorable terms. It passes through three large villages between here and Brantford, and six miles beyond is Paris, with extensive hydraulic power, and a population of between three and four thousand. At this point the Brantford road intersects the Great Western—both running into the same depot—thus being in communication with Detroit, and enabled to land passengers here from the west, two or three hours in advance of the Great Western route.

It may be as well to mention here, as a part of the history of the road, that the original plan has been enlarged, and that it is to be extended to Goderich, on Lake Huron, eighty-five miles farther, and one hundred and sixty upon Buffalo. The contract for the Western Division has been entered upon and much of the grading already done, and it is contemplated to have the "iron horse" put through from one Lake to the other by the first of November 1854. The gradation is already far advanced, and is in the hands of energetic contractors who will push it forward with all possible despatch. When this is completed, a man may start in New York one morning, and wake up in Makinaw the next. The distance from Buffalo to Goderich, being one hundred and sixty miles, can be easily run in five hours.—*Buffalo Courier*.

Prizes Awarded at the New York Crystal Palace.

Below we give a list of the prizes awarded to Canadian competitors at the New York Crystal Palace. There were in all one hundred and fifteen silver medals granted, of which the greatest number fell to the United States. France received 51; Great Britain 9; Germany 5, and Switzerland, Australia and Italy one each. Of the bronze medals, the United States has 505, Great Britain 143, France 153, Germany 106, Prussia 30, Belgium 10, Switzerland 29, Holland 12, Austria 18, Italy and Sardinia 44, British America 26, &c. As a contemporary very justly remarks—"Had better arrangements been made, we have no doubt that Canada would have figured much more prominently in the prize list." And we have no doubt, that had sufficient information been diffused to inspire confidence in the undertaking, that Canada would have been very much better represented. The following is the list of the 26 premiums awarded to Canada and the Lower Provinces:—

Bell, Messrs. Quebec, Canada East, for specimens of Earthenware.

Peter, C. H. Riviere Ouelle, Canada East, for general excellence of specimens of Leather, from the Ouelle River, from the skin of the porpoise.

Indians of Loretto, Canada, for general excellence of specimens of dressed and undressed Deer and Moose skins, prepared by themselves.

Van Brocklyn, Winter & Co., Canada West, for a Threshing and Separating Machine.

Globensky, Miss., Laclune, Canada, complete set of Embroidery for Furniture.

Goldes, Rev. J. F. Hamilton, Canada West, Berlin Wool Carpet.

Bouchard, J. B. Madame, St. Villiere, Canada, Counterpane and knitted Linen Curtains.

Knight, Wm. St. John's, Newfoundland, for Model of Seal Fishery.

Thompson, Miss Kate, Toronto, rose point Lace Collar.