

MEMORANDUM by MR. JAMES ROSS, GENERAL MANAGER of the NORTH AMERICAN RAILWAY CONTRACTING CO.

The North American Railway Contracting Co. took a contract to complete the construction of the railway in the end of February, 1883. Mr. James Ross was appointed manager of construction and of all work west of Winnipeg, succeeding the late Mr. J. C. James, whose untimely death occurred on the 27th of February. The company awarded a contract to Messrs. Langdon, Shephard, and Co., for the grading, bridging, track-laying, and surfacing from the end of the track to Calgary, a distance of 255 miles; besides the completion of the last season's work from Swift Current, a farther distance of 76 miles, which included building culverts, finishing bridges, dressing up, and surfacing the track. The engineering staff consisting of nine locating parties and fourteen construction parties left Winnipeg early in April. Some of the former travelled more than 500 miles over the prairies in carts, and over the mountains on pack-horses, before they reached the scene of their operations. Surveys in the Selkirk Range were not commenced until the 10th of July. A special system was organised for keeping the general manager of construction informed of what was going on in the immense district under his charge, and especially for communicating with locating parties. This was the perfecting and extension of last year's courier mail service.

The Railway Company determined to reduce the grades from the top of the west bank of the River Saskatchewan to a point near the summit of the Rocky Mountains, to 40 feet per mile instead of the maximum grade of 52·80 feet per mile used in 1882. At the same time they wished the track to reach the summit of the mountains in the current season. On the located line of 1882 the most suitable gradient had been applied, involving very heavy mountain-work and a tunnel $\frac{1}{2}$ mile long. No information was available as to other parts of the country, and Mr. Ross and many of his staff had never been so far West before. Shortly after the engineering parties had left the end of the track, 555 miles west of Winnipeg, the courier service was organised to run a distance of 280 miles, extending the service westwards as the track-laying advanced. Each courier was equipped with a pony-saddle and mail-bag. One man was assigned to every 40 miles; the time allowed to cover this distance was eight hours; and at