

away. This meant an output of 1,400 cubic yards loose measurement, or 1,500 cubic yards place measurement.

With the following wage:—

Superintendent	\$4.00
Shovelmen	3.00
Pitmen	1.50
Motormen	3.00
Trainmen	1.50
Dumpmen	1.50

We have a labor cost for operating per day as follows:—

Superintendent	\$4.00
Shovel crew:—	
Two shovelmen	6.00
Two pitmen	3.00
Spotting cars:—	
One motorman	3.00
One signalman	1.50
Transporting (two trains):—	
Two motormen	6.00
Two trainmen	3.00
Dump:—	
Two men	3.00

Total\$29.50

To this must be added charge for power, plant charges, repairs and track work. When the haul increased in length additional trains were added, so that the shovel was still kept busy loading the cars.

On some days the output fell to eighty carloads or less. With this output, namely, 800 cubic yards place measurement per day, the unit labor cost was:—

Superintendence	\$0.005
Loading	0.017
Transporting	0.011
Dumping	0.004

Total\$0.037

The above show low records of cost for steam shovel work, but they make evident the economical features of excavating with a shovel of this type, as small and inexpensive crews are employed, and a comparatively large output can be obtained by using the best methods of operating.

ORDERS OF THE RAILWAY COMMISSIONERS OF CANADA.

Copies of these orders may be secured from the Canadian Engineer for a small fee.

5067—July 22—Authorizing the C.P.R. to change the line of its railway—Regina, Saskatoon and North Saskatchewan branch.

5068—July 22—Granting leave to the Bell Telephone Co. to erect, place, and maintain its wires across the P.M.R.R. at public crossing three quarters mile south of Oldcastle Station, Ont.

5069—July 22—Authorizing the C.P.R. location of station at Rapide de l'Original, P.Q.

5070—July 22—Authorizing the C.P.R. to open for the carriage of traffic that portion of the double tracks of the Smith's Falls Section of its line of railway between St Anne's and Vaudreuil, a distance of 3.96 miles, and that portion from Kemptville Junction to Smith's Falls.

5071—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 117.68 on the White River Section of its line of railway.

5072—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 40.8 on the Newport Section of its line of railway.

5073—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 24.56 on the Chapleau Section of its line of railway.

5074—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 31.2, Emory Creek, on the Cascade Section of its line of railway.

5075—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 55.86 on the Chapleau Section of its line of railway.

5076—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 51.54 on the Nipigon Section of its line of railway.

5077—July 23—Authorizing the C.P.R. to reconstruct Bridge No. 15.6, Yamaska River, on the Newport Section of its line of railway.

5078—July 23—Granting leave to the Central Telephone Association to erect, place, and maintain its wires across the track of the C.P.R. at three different points in Ont.

5079—July 17—Ordering the G.T.R. to agree on joint freight tariffs with O. & N.Y.R. between stations on its line of railway and the G.T.R.

5080—July 24—Rescinding order of the Board of the 15th of July, 1908, granting leave to the N.B. Tel. Co. to erect, place, and maintain its wires across the tracks of the C.P.R. near McAdam Junction, N.B.

5081—July 24—Granting leave to the Bell Telephone Co. to erect, place, and maintain its wires across the track of the C.N.O.R. at public crossing $1\frac{1}{4}$ miles north-west of James Bay Junction, Ont.

5082—July 21—Granting leave to T. N. McFadden, Pickering, Ont., to erect, place, and maintain a telephone wire across the land and tracks of the G.T.R. at Rosebank, Ont.

5083—July 24—Granting leave to the N. B. Telephone Company to erect, place and maintain its aerial wires across the tracks of the C.P.R. between stations Edmunston, N.B.

5084—July 24—Authorizing the Temiscouata Railway Company to construct a deck plate girder span, structure No. 10, at mileage 21 $\frac{3}{4}$, where its railway crosses highway in the Province of Quebec.

5085—July 24—Granting leave to the Leeds & Grenville Independent Telephone Company to erect, place and maintain its aerial wires across the G.T.R. tracks at road leading from Algonquin to Brockville, between 6 and 7th Concessions, Township of Elizabethtown, Ont.

5086—July 24—Authorizing the C.P.R. to construct, maintain and operate a branch line or spur from point on centre line of the main line of the said branch to the premises of Thomas Abriel, Nakusp, B.C.

5087—July 22—Authorizing the G.T.R. to construct the Midland branch of its line of railway across two highways in the town of Lindsay, Township of Ops, Ont.

5088—July 23—Authorizing the C.P.R. to construct branch line or spur to the premises of Dr. Wyman, in the parish of Kent, County of Carleton, N.B.

5089—July 24—Authorizing the G.T.R. to operate their trains across drawbridge between Hamilton and Niagara Falls, Ont., without being brought to a stop.

5090—July 28—Authorizing the G.T.R. to construct, maintain and operate a spur to the premises of the Gurney Foundry Company, Limited, in the County of York, Ont.

5091—July 28—Authorizing the C.N.Q. Ry. to construct spur to the works of the Lakefield Portland Cement Company, parish of Pointe aux Trembles, County of Hochelaga, P.Q.

5092—July 30—Authorizing the Malahide and Bayham Telephone Co-operative Association to cross tracks of G.T.R. between Lots 15 and 16, 11th Concession, Township of Bayham, County of Elgin, Ont.

5093—July 28—Authorizing the C.P.R. to construct, maintain and operate a spur across a portion of the 6th St., 5th St., and a lane in block 25, in the town of Grand Forks, B.C.

5094—July 28—Amending Order No. 4766, dated the 27th day of May, A.D., 1908, ordering the C.P.R. to install bell at the crossing where its line of railway crosses Dorchester Street, Quebec, P.Q., extending time until July 31st, 1908.

5095—July 28—Directing the C.N.R. to erect and maintain such fences, gates and cattle guards along the portion of its line of railway, between Roblin and Togo and Togo and Runnymede, which shall be suitable and sufficient to prevent cattle and other animals from getting upon its railway.

5096—July 28—Granting leave to the G.T.P. Railway Company to operate that portion of its line from a point opposite Saskatoon, Sask., to Scott, Sask., a distance of about 115 miles.