## C.P.R. Earnings & Expenses.

The gross earnings, working expenses, net profits & increases over 1897 from Jan. 1, 1898, are as under :

| | Earnings. | Expenses. | Net Profits. | Increase. |
|---|---|---|---|---|
| Jan. | $1,672,372.04 | $1,156,744.45 | $515,627.59 | $142,284.49 |
| Feb | 1,494,596.98 | 1,070,929.62 | 423,667.36 | 38,844.28 |
| | $3,166,969.02 | $2,227,674.07 | $939,294.95 | $181,188.77 |

The traffic earnings for March, 1898, were $2,050,000, against $1,509,000 in Mar., 1897, an increase of $541,000.

## C.P.R. Land Sales.

| | Acres. | | Amount. | |
|---|---|---|---|---|
| | 1898 | 1897 | 1898 | 1897 |
| Jan. | 22,044 | 9,943 | $ 72,924.00 | $33,872.00 |
| Feb. | 20,550 | 8,163 | 66,399.00 | 27,573.00 |
| Mar. | 33,421 | 8,727 | 109,010.09 | 29,080.33 |

R. V. Rogers has been elected a director of the Kingston & Pembroke Ry., succeeding Sir G. A. Kirkpatrick resigned.

The report of the Wagner Palace Car Co. for the quarter ended Dec. 31 last shows : Gross earnings, $809,174; expenses, $609,422; net earnings, $199,752.

QU'APPELLE, LONG LAKE & SASKATCHEWAN RY. & STEAMBOAT CO.'S net earnings for Jan. were $3,091.39 as against a loss of $963.14 in Jan., 1897. In Feb. they were $89.55 as against a loss of $31.10 in Feb., 1897.

At a meeting of shareholders of the Columbia & Western Ry., which was recently sold to the C.P.R., held in Montreal, Mar. 11, the following directors were elected : T. G. Shaughnessy, R. B. Angus, Montreal ; G. McL. Brown, H. Abbott & R. Marpole, Vancouver. At a subsequent meeting of the directors, T. G. Shaughnessy was elected President & H. C. Oswald, Secretary.

Regarding the report that the European bond-holders of the C.P.R. expressed dissatisfaction over the position taken by the management in the rate war, Vice-President Shaughnessy recently said : "There is absolutely no foundation for such a report. Bondholders in England & Europe have expressed no dissatisfaction with our management of the C.P.R., & our position has received the support of such people. The report to the contrary is simply an American newspaper story."

## EQUIPMENT.

### Grand Trunk Locomotives.

F. W. Morse, Superintendent of Motive Power, writes THE RAILWAY & SHIPPING WORLD : "The G.T.R. system is now receiving from the Baldwin Locomotive Works 6 mogul locomotives & 4 10-wheelers, & a duplicate order from the Schenectady Locomotive Works. At present we are not building in Montreal, but may do so before the end of the year."

The 10-wheel passenger engines are illustrated on page 33. In designing these new classes of locomotives the intention has been to combine the best features of a number of recent designs ; & the details have received unusual attention, both from Superintendent Morse & from the manufacturers, & such parts have been made especially substantial, while the passenger & freight locomotives are designed for particular classes of service, yet the parts which will require repairs & renewals are the same for both engines, which undoubtedly will reduce considerably the cost of maintenance. The passenger engines have a greater total weight than the freight engines of 14,500 lbs., but less weight on the drivers by 3,000 lbs. ; the passenger engines also have larger driving wheels & a longer boiler, the latter resulting in a slightly greater heating surface for the 10-wheel locomotives. The diameter of the boiler & the dimensions of the fireboxes are the same for both classes.

The following is a list of the dimensions of both classes & of the special equipment of the engines built at the Baldwin Works :

| | Ten-wheel Pass. | Mogul. |
|---|---|---|
| Builder's class & number | 10.34 D, 326 to 329 | 8.34 D, 15 to 20 |
| Number | 992 to 995 | 901 to 906 |
| Name of builder | *Baldwin Locomotive Works. | |
| Name of operating road | *Grand Trunk. | |
| Gauge | 4 ft. 8½ in. | 4 ft. 8½ in. |
| Kind of fuel to be used | *Bituminous coal. | |
| Weight on drivers, lb | 117,000 | 120,000 |
| " truck wheels, lbs. | 37,500 | 20,000 |
| " total, lbs. | 154,500 | 140,000 |
| Wheel base, total, of engine | 26 ft. 11 in. | 24 ft. 1 in. |
| Wheel base, driving | 15 ft. 8 in. | 15 ft. 8 in. |
| " total, engine and tender | 53 ft. 9 in. | 50 ft. 11 in. |
| Length over all, engine | 42 ft. 8 in. | 39 ft. 10 in. |
| Length, total engine and tender | 64 ft. 11 in. | 62 ft. 1 in. |
| Height, center of boiler above rail | 8 ft. 9½ in. | 8 ft. 4½ in. |
| Height of stack above rail | 14 ft. 7½ in. | 14 ft. 2½ in. |
| Heating surface firebox, sq. ft. | 189 | 188.1 |
| Heating surface tubes, sq. ft. | 2,272 | 1,803 |
| Heating surface, total sq. ft. | 2,461 | 1,991.1 |
| Grate area | 33.43 | 33.43 |

WHEELS AND JOURNALS.

| | | |
|---|---|---|
| Diameter of driving wheels | 72 in. | 62 in. |
| Truck wheels, dia | 37 in. | 37 in. |
| Journals, driving axle, size | 9½ in. × 12 in. | 9½ in. × 12 in. |
| Journals, truck, size | 6½ in. × 10½ in. | 6½ in. × 10½ in. |
| Main crank pin, " | 6½ in. × 6 in. | 6½ in. × 6 in. |
| Parallel rod pin, " | 5½ in. × 4 in. | 5½ in. × 4 in. |
| Crosshead pin, " | 4 in. × 3½ in. | 4 in. × 3½ in. |

CYLINDERS.

| | | |
|---|---|---|
| Cylinder diameter | 20 in. | 20 in. |
| Piston stroke | 26 in. | 26 in. |
| " rod diam | 3¾ in | 3¾ in. |
| Main rod, length cen. to cen | 10 ft. 8¼ in. | 7 ft. 7¼ in. |
| Steam ports, length | 20 in. | 20 in. |
| " " width | 1⅝ in. | 1⅝ in. |
| Exhaust ports, length. | 20 in. | 20 in. |
| " " width. | 3 in. | 3 in. |
| Bridge, width | 1⅜ in. | 1⅜ in. |
| Valves, kind of | *Balanced. | |
| " greatest travel | 5½ in. | 5½ in. |
| " outside lap | ⅞ in. | ⅞ in. |
| " inside lap | 0 | 0 |
| " lead in full gear | ⅛ in. | ⅛ in. |

BOILERS.

| | | |
|---|---|---|
| Boiler, type of | *Extended wagon top. | |
| Boiler, working steam pressure | 200 lbs. | 200 lbs. |
| Boiler, material of barrel | *Steel. | |
| Boiler, thickness of material in barrel | 21-32 | 21-32 |
| Boiler, diam. of barrel at front sheet | 62 in. | 62 in. |
| Boiler seams, kind of, horizontal | *Butt jointed, double covering strips, sextuple riveted. | |
| Boiler seams, circumferential | *Double riveted. | |
| Thickness of tube sheets | ¾ in. front, ½ in. back. | ¾ front. ½ back. |
| Thickness of crown sheet | ⅜ in. | ⅜ in. |
| Crown stayed with | *Radial stays. | |
| Dome, diam | 31½ in. | 31½ in. |
| Tubes, number | 291 | 291 |
| Tubes, material | *Lap welded iron. | |
| Tubes, outside diam. | 2 in. | 2 in. |
| Tubes, length over tube sheets | 15 ft. | 11 ft. 11 in. |
| Firebox, length | 120 in. | 120 in. |
| " width | 40⅛ in. | 40⅛ in. |
| " depth | 76¾ f. 65 b. | 73¾ f 65 b. |
| " material | *Steel. | |
| " thickness of sheets | Crown, ⅜ in. Tube, ½ in. Sides, 5-16 in. Back, ⅜ in. | Crown, ⅜ in. Tube, ½ in. Sides, 5-16 in. Back, ⅜ in. |
| Firebox, Brick arch | *Yes. | |
| " water space, width front | 4 in. | 4 in. |
| Firebox, water space, width sides | 3½ in. | 3½ in. |
| Firebox, water space, width back | 4 in. | 4 in. |
| Grate, kind of | *Rocking. | |