## Level-crossing Automatic Alarm-bells.

Thirteen level crossings have been equipped with automatic warning-bells at the following places: 160 miles 57 chains, near Ongarue; 264 miles 20 chains, near Taihape; 202 miles 56 chains, and 202 miles 18 chains, near Hawera; 151 miles 63 chains, near Westmere; 2 miles 47 chains, 2 miles 29 chains, and 1 mile 68 chains, near Wanganui; 146 miles 10 chains, near East Town; 110 miles 56 chains, near Napier; High Street, Rangiora; 182 miles 41 chains, near Hillgrove; 227 miles 39 chains, near Upper Port Chalmers. The present number of level crossings fitted with warning-bells is 58.

Auto-flag visual warning-signals (Wig-Wag) have been installed at the following level crossings to work in conjunction with the warning-bells which were in use: 2 miles 25 chains, near Kingsland; Queen Street, Levin; Main South Road, Temuka; 227 miles 39 chains, near Upper Port Chalmers.

## Expenditure.

Particulars of expenditure for the Signal Branch for the year ending 31st March, 1922, are as follows:—

| New works—                  |            |        |           |         | £          | s.     | d.   |
|-----------------------------|------------|--------|-----------|---------|------------|--------|------|
| Signalling and interlocking | ng         |        |           | • •     | <br>21,633 | 3      | 0    |
| Electric-tablet working     |            |        |           |         | <br>450    | 6      | 3    |
| Telegraph and telephone     | facilities |        |           |         | <br>14,430 | 10     | 1    |
| Electric light              |            |        |           | • •     | <br>3,471  | 7      | 9    |
| Electric motors, &c.        |            |        | • • •     |         | <br>12,528 | 3      | 3    |
| Level-crossing alarms       |            |        |           | • •     | <br>2,172  | 7      | 6    |
| Automatic signalling        |            |        |           |         | <br>33,052 | $^{2}$ | 10   |
|                             |            |        |           |         | ·          |        |      |
|                             |            |        |           |         | £87,738    | . 0    | 8    |
|                             |            |        |           |         |            |        |      |
| Maintenance—                |            |        |           |         | £          | 8.     | d.   |
| Signalling and interlocking |            |        |           |         | <br>28,886 | 3      | 6    |
| Signals at level crossings  |            |        |           |         | <br>1,470  |        | 11   |
| Telegraph and telephone     |            |        |           |         | <br>11,543 | 11     | 4    |
| Lines, &c., maintained by   | y Post an  | d Tele | graph Dep | artment | <br>1,558  | 5      | 6    |
| Electric block and tablet   | working    |        |           |         | <br>15,941 | 1      | $^2$ |
| Electric light              |            |        |           |         | <br>10,099 | 17     | 3    |
| Electric power              |            |        |           |         | <br>859    | 7      | 6    |
| Electric motors, cranes, f  | ire-alarms | s, &c. | • •       | • •     | <br>2,424  | 0      | 7    |
|                             | ٠          |        |           |         | £72,782    | 16     | 9    |
|                             |            |        |           |         |            | -      |      |

## LOCOMOTIVE.

Mr. E. E. Gillon, Chief Mechanical Engineer, reports as follows:-

The plant, locomotives, tenders, carriages, brakevans, wagons, machinery, and tools have been maintained in good working-order during the year.

Locomotives.—On the 1st April, 1921, there were 608 engines in service, and on the 31st March, 1922, there were 637 engines. One second-hand tank engine was sold and written off stock. Thirty new engines were added to stock, all being Pacific type simple-superheated tender engines, Class AB, three of which were built in the Government railway workshops, the balance, twenty-seven, being portion of the contract with the North British Locomotive Company (Limited), of Glasgow.

In the Government railway workshops to date 194 engines have been built, and twenty-four old locomotives have been rebuilt. During the year 641 locomotives passed through the workshops, the details of work done being as follows:—

| Particulars.                |    | Number and Type.                                  |                    |                  |                  |                     |        |
|-----------------------------|----|---|--------------------|------------------|------------------|---------------------|--------|
|                             |    | Four- cylinder Balanced- Compound Tender Engines. | Tender<br>Engines. | Tank<br>Engines. | Fell<br>Engines. | Single<br>Fairlies. | Total. |
| Number passed through shops |    | 55  | 268                | 305              | 7                | 6                   | 641    |
| Built new                   |    |   | 3                  |                  |                  |                     | 3      |
| Erected new                 |    |   | 27                 |                  |                  |                     | 27     |
| Re-erected                  |    |   |                    | 6                |                  |                     | 6      |
| Thoroughly overhauled       | ٠. | 32  | 62                 | 60               | 4                | 1                   | 159    |
| Heavy repairs               |    | 7   | 52                 | 66               | 2                | 1                   | 128    |
| Light repairs               |    | 16  | 124                | 173              | 1                | 4                   | 318    |
| Painted •                   |    | 29  | 52                 | 69               | 5                | 2                   | 157    |
| Paint touched up            |    | 19  | 167                | 78               | 2                | 4                   | 270    |

Included in the above are two engines for private lines and two engines for Public Works Department.

In addition to the engines repaired in the railway workshops, six engines were thoroughly overhauled by Messrs. A. and G. Price (Limited), Thames.