The Railway Department now performs the duties of 135 public post and telegraph offices. It also deals with the goods traffic and collects the revenues of thirteen ports, in addition to

the purely railway work.

During the year eleven carriages and ninety-two trucks have been added to the rolling-stock. The practice of manufacturing all this work in the colony, except the channel-irons and steel tyres, has been followed during the past eight years, and in that time more than £100,000 worth of new work in trucks and carriages has been turned out of the Government shops of a kind which had previously been imported.

The appliances and system as a whole have undergone a steady improvement, and are in

efficient condition.

The staff is in a satisfactory state of discipline and efficiency. Damage of some importance occurred to the Wellington line from the effect of a tidal wave and storm on the 28th day of March, which stopped the traffic for ten days between Pitone and

Wellington: this will cost about £1,500 to repair.

A casualty occurred through a train being blown over during a north-west gale near the foot of Rimutaka. Fortunately no one was injured. I have taken special precautions, since my return to New Zealand, to adopt, on this section, carriages permanently counterweighted below to prevent the recurrence of such an accident. A protective wind-fence has also been erected at the most exposed portion of this line.

To show the large changes which have been made in the railways during the past eight years, and the increased responsibility of maintenance and general administration entailed by the additional stations, rolling-stock, appliances, and public accommodation, as well as by the greater length of the railways, and the large growth of traffic which has taken place, the following table

is attached:

|         | <br>Locomotives. | Carriages. | Wagons, | Tarpaulins. | Weighing-<br>machines. | Weighbridges. | Traversers. | Turntables. | Cranes. | Water-services. | Stations. | Private Sidings. |
|---------|------------------|------------|---------|-------------|------------------------|---------------|-------------|-------------|---------|-----------------|-----------|------------------|
| 1880–81 | <br>197          | 414        | 5,805   | 3,000       | 286                    | 21            | 10          | 70          | 85      | 155             | 467       | 174              |
| 1887–88 | 271              | 511        | 8,153   | 4,932       | 395                    | 51            | 16          | 90          | 170     | 274             | 664       | 251              |

The number of the American type of carriages on the lines in 1880 was only 10. We have now 198 such carriages, which have been converted or built as new carriages in the colony during nterval. The comfort of the travelling public has been very materially improved thereby. The manufacture of ten locomotives in the colony by Messrs. Scott Brothers has been com-

pleted; the engines have run their test mileage, and are now in use, and are showing fair results.

After a careful trial, extending over a long period, of Winter's block-instruments, which had been supplied to us by the inventor, as adopted on the Madras railways, it was determined to substitute this system for the one previously in use here, as it gives a more complete safeguard against

accident in working. During the past year the system has been introduced, and is working well.

Accepting an opportunity afforded by the Government, I spent five months in examining some of the Continental, English, and American railway-systems, after first attending the Railway Conference at Milan. Separate reports about this have been laid before you, which it is hoped will prove of value to the colony. I obtained from the managers and engineers of the chief railways in Belgium and England important information on the various branches of management, but I found the American practice more interesting and instructive from a colonial point of view than that of the older countries. The various branches of the work were satisfactorily attended to during my absence by the Assistant General Manager, the Locomotive Superintendent, and the Engineer for Working Railways.

The hydraulic cranes at Greymouth erected for the purpose of loading coal into steamers have been completed, and await the finishing of some filling and sidings to be started at work. This is the first introduction into this colony of the important system of hydraulic-crane-working on a large scale. The purpose of the cranes is to do the loading with the minimum of damage to the coal. Six-ton coal-boxes will be lifted from the trucks, lowered in the hold of the steamer, and emptied through a bottom door in the box, giving the coal a very small drop. It is possible that a system of hydraulic cranes would be of great advantage in the grain-sheds at Lyttelton and other places. Hydraulic-crane-working in England has been much extended of late years, and during my visit there, I was enabled to study its application. Our climate, being free from severe frost, is well adapted to the working of such plant.

Consequent upon improvements generally and extensions in the North Island I have been able to amalgamate part of the managing staff, extending the system of control at a less cost, by which, under favourable circumstances, we may anticipate improved economical results during the coming

year.

I have, &c., J. P. MAXWELL, M. Inst. C.E., General Manager, New Zealand Railways.