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A slip of considerable dimensions occurred on the morning of 24th November, 1930, at about 254 m. 52 ch., main line (between Ngaurukehu and Mataroa), completely blocking the line and causing considerable delay to trains.

On the 28th December, 1930, a large slip of hard papa came down on track in cutting at 257 m. 65 ch. (between Ngaurukehu and Mataroa), and derailed the leading bogie of engine of a mixed train.

On 26th and 27th November, 1930, the Otaki River was in heavy flood. The main line from 46 m. 16 ch. to 46 m. 60 ch. (near Otaki) was under water to a depth of approximately 2 ft. Apart from 22 chains of ballast being washed out, no damage was done, and there were no train delays.

A severe earthquake occurred in the Hawke's Bay District on the 3rd February, 1931, and A severe earthquake occurred in the Hawke's Day Distributions, and water services considerable damage was done to the track, bridges, dwellings, station-buildings, and water services between Dannevirke and Putorino. completely blocking traffic north of Otane. Traffic was resumed to Napier about 9 a.m. on the 5th February, 1931, and on the Napier - Port Ahuriri line about 5 p.m. on the 12th February, 1931. The line between Napier and Putorino has not yet been restored. The damage done to the property of the Department has been assessed at approximately £55,400.

On the 23rd April, 1930, a slip of about 12 tons of rock occurred on the Rewanui line, damaging

the rails and causing delay to traffic.

Two washouts occurred on the Hokitika line on the 8th October, 1930, causing traffic delays. A slip occurred at 2 m. 79 ch., Reefton line (near Kamaka), on the 15th January, 1931, causing delay to traffic.

On the 16th January, 1931, a small slip occurred on the Otira line at 47 m. (between Aitkins and

Otira), causing derailment of and damage to engine of train.

On several occasions throughout the year traffic was suspended on the Outram Branch owing to

Buildings.—Buildings have been maintained in good repair. Houses at Waiotira, Taumarere, Kaipara Flats, Karioi, Erua, and Kopuranga were totally destroyed by fire and a house at Otahuhu The boiler-house attached to the wood-mill at Otahuhu workshops was gutted and the Pintsch-gas works, Wellington, considerably damaged by fire.

Railway Improvements.—The expenditure under the Railways Improvements Authorization Account for last year was £561,016, as against £620,913 for the previous year. This amount does not include the expenditure under this account on the Auckland-Westfield and Tawa Flat deviations carried out by the Public Works Department, which amounted to £307,321; Signal Branch charges,

£144,639; and Locomotive Branch charges, £32,885.

The principal works are as follow:

Auckland New Station Building and Yard.—The new station building was completed, and plant and equipment were transferred from the old station building and, together with new equipment, The building was opened for traffic on the 16th November, 1930.

Good progress was made during the year with the platelaying and ballasting of the new yard. The whole of the yard, except that portion abutting on to Beach Road, which area has until recently been occupied by car-sidings required for operating the old station, being completed. The platelaying on this area is being pushed forward with expedition, and will be completed about the end of June, 1931.

Concreting of road access to the new station was completed, and the concreting of roads in the The road approaches to the Campbell's Point Bridge were completed. inwards yard was put in hand.

The Auckland-Westfield deviation was completed, and opened for traffic on the 16th November, 1930, and the Papatoetoe-Papakura duplication was completed and the change-over from single- to double-line working was made on the 29th March, 1931. Work on the Ravensbourne-Burkes duplication is nearing completion, and the change-over from single- to double-line working will take place early in the new financial year.

New stores buildings have been completed at Otahuhu, Woburn, and Hillside. At Palmerston North a new locomotive depot and stockyards have been provided, and extensive siding alterations and extensions carried out. The new goods-shed was completed at Wellington, and the constructional work for the combined workshops and store at Elmer Lane is almost finished.

Bridge Reconstruction Work.—The provision of new bridges at Ngaruawahia, Waikanae, Otaki,

Oroua, and Whenuakura has been completed.

Several bridges on the Thames Branch, Rotorua Branch, and North Auckland line have been rebuilt, and a number of bridges on the Main Line and Branches have had a new superstructure of rolled-steel joists provided and in others the floor beams have been strengthened.

Bridge No. 185, North Auckland line, has been replaced with twin concrete culvert.

Additions to Open Lines.—The expenditure under this account was £19,140, and the works carried out consisted of general improvements at railway settlements, station-buildings, alteration to sidings, and additions to stockyards, &c.

Expenditure.—The expenditure for the year in the Way and Works Branch was as follows:

Maintenance (charged to working-expenses), £1,150,329; new works (charged to capital), £757,679. The maintenance expenditure charged to working-expenses amounted to £346 per mile, as compared with £347 in 1929-30, £340 in 1928-29, £359 in 1927-28, £338 in 1926-27, £369 in 1925-26.

Mileage.—The mileage open for traffic on the 31st March, 1931, was 3,319 miles 7 chains. The Auckland-Parnell loop, Auckland-Westfield loop, and Eskdale-Putorino extension were opened for traffic during the year.

Portions of the Oxford Branch, Tileries-Fernhill Branch, and Glenham Branch were closed during the year.

## SIGNAL AND ELECTRICAL BRANCH.

The following is a summary of the principal activities of the Signal and Electrical Branch during

SIGNALLING.

Westfield Loop-line.—On this line, Auckland-Westfield, 9 miles 14 chains, double-line automatic signalling has been installed, and the following stations on the line have been fitted with power