REPORTS FROM HEADS OF BRANCHES.

MAINTENANCE.

Mr. F. C. Widder, M.Inst.C.E., Chief Engineer, reports as follows:—

The track, structures, buildings, and appliances have been maintained in good order and repair. Permanent-way.—The relaying done during the year was as follows:—

	Miles.
Main line, 100 lb. relaid in 100 lb. material	
Main line and branches, 53 lb., 56 lb., 65 lb., and 70 lb. relaid with 70 l	b.
material	
Main line and branches, 53 lb. and 56 lb. relaid with 55 lb. material	$\cdots \frac{1}{4}$
Main line and branches relaid with second-hand 53 lb. and 56 lb. materi	$\mathbf{a}\mathbf{l}$
removed from main line	$6\frac{1}{4}$
Total relaid for year	$ 35\frac{1}{2}$

Sleepers.—The number of new sleepers placed in the track during the year was 100,634.

Ballasting.—170,000 cubic yards of ballast were placed on the track.

Slips and Floods.—From the 21st to the 23rd May, 1926, heavy rains in the Auckland District caused several slips and washouts, which interrupted traffic on the North Auckland line, and caused delays on the main line, the Thames Branch, and the Huntly-Awaroa Branch.

On the 12th June, 1926, the North Auckland line was again blocked with slips and washouts,

traffic being restored the following day

From the 13th to the 23rd October, 1926, the main line at Mercer was under water through

the flooding of the Waikato River, rendering it necessary to work trains through at slow speed. Heavy rains on the 24th-25th December, 1926, caused slips and washouts on the North Auckland line between Swanson and Kanohi, and bridge No. 30, at 25 m. 11 ch., was extensively damaged. Traffic was suspended for several days, the line not being finally cleared until the 29th December, 1926.

On the 12th May, 1926 and again on the 27th July, 1926, slips in the southern part of the Main Trunk District caused train-delays. Slips between Poro-o-taro and Taihape in the early part of August were responsible for sundry train-delays.

On the 10th October, 1926, the track north of Te Kuiti was submerged, and a subsidence of 2 ft. occurred south of Te Kuiti. On the same day the ground slipped from under the track south of Taumarunui, and several slips came down on the line further south. All slips were removed and damage made good without undue delays to the traffic.

In the Manawatu Gorge on the 24th October, 1926, a big slip came down on the track. The clearing of the debris was a difficult task, and the line was not reopened for traffic until the 29th

November, 1926.

In July, 1926, the Foxton line was extensively damaged over a distance of four miles by floods, and was closed to traffic for three weeks.

Abnormal rain on the 30th April, 1926, caused flooding in the Summit yard.

Big floods occurred in the Wairau River, Picton Section, on the 13th May and the 5th October, 1926, and on the 24th March, 1927. In the 5th October flood the railway-bridge was washed out for a distance of 240 ft., and the line was not restored until the 21st December, 1926.

The Canterbury District suffered severely from floods and slips during the past twelve months, the main damage being as follows:-

- (1) The continued washing-out of the embankment at Omoto, which necessitated the erection of a new bridge.
- (2) The carrying-away of four piers of No. 1 bridge, Blackball Branch.(3) Damage to bridge No. 79, Reefton line.

(4) The scouring of piers of bridge No. 26, Cheviot Branch.

(5) Washouts between Cora Lynn and Arthur's Pass.

- (6) The scouring of the embankment at Chaney's, owing to the overflowing of the Waimakariri
- (7) Washouts at 2 miles, Westport Section, owing to overflows of Buller River.

3,725 tons of stone were used for protective works in the Canterbury District.

A slip on the Lawrence Branch blocked traffic from the 19th till the 24th September, 1926. Slips on the Otago Central interrupted traffic for short periods on several occasions.

The storm damage throughout the year was worse than is generally experienced, and the restoration of the tracks and bridges has involved heavy expenditure.

Bridges.—These have been maintained in good order. A large number of bridges have been overhauled and repaired. Many timber bridges which required alteration were replaced by steel structures. Bridge-strengthening to allow heavier engines to run has continued on a number of lines, and the work was completed between Dunedin and Oamaru.

Water-services.—These have received necessary attention. The installation of electric plant at various watering-stations has reduced the cost of pumping, and increased storage has been provided at several stations where it was required.