

On dangerous portions of the line, as also during stormy weather, special inspections are made at the discretion of the ganger. The average number of men employed in line gangs per mile is as follows :—

Section.	Number of Men per Mile.	Number of Miles per Man.
Main lines, North Island	0·667	1·500
Main lines, South Island	0·647	1·545
Branches, North Island	0·578	1·729
Branches, South Island	0·507	1·970
Average main line and branches, North Island	0·622	1·615
Average main line and branches, South Island	0·577	1·758
Average for New Zealand	0·600	1·686

It is not the practice on the New Zealand railways to employ flying gangs in connection with the maintenance of branch lines where the train service is light, and we think consideration might with advantage be given to this.

A normal gang consists of a ganger and three surfacemen, and the average length for such a gang is approximately $6\frac{3}{4}$ miles.

Relaying, Sleepering, and Ballasting.

The relaying programme is on the basis of an approximate annual mileage to be undertaken to keep the track up to standard. The present programme is 100 miles of relaying per year. Track worn to the limit, or where corrosion necessitates renewal, is first dealt with; then track necessitating heavier metals owing to the use of heavy engines; and then track where the traffic makes it advisable to raise the standard.

During the twelve months ended the 31st March, 1924, $81\frac{3}{4}$ miles of line were relaid, while 235,372 sleepers were used in connection with relaying and renewals, and 202,414 cubic yards of ballast. A comparative statement for the period 1915 to 1924 follows :—

Twelve Months ended 31st March.	Relaying.						Sleepers.	Ballast.
	100 lb.	70 lb.	55 lb.	Second-hand.	Total.	Exclusive of Second-hand.		
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Number.	Cub. Yard.
1915	..	$70\frac{1}{4}$	14	$11\frac{1}{4}$	$95\frac{1}{2}$	$84\frac{1}{4}$	228,644	371,835
1916	..	$36\frac{1}{2}$	9	12	$57\frac{1}{2}$	$45\frac{1}{2}$	158,223	406,544
1917	..	$21\frac{1}{2}$	$7\frac{1}{2}$	1	30	29	92,419	239,002
1918	..	$13\frac{1}{4}$	..	..	$13\frac{1}{4}$	$13\frac{1}{4}$	93,480	164,807
1919	$\frac{1}{2}$	$5\frac{3}{4}$	..	$\frac{3}{4}$	7	$6\frac{1}{4}$	79,485	88,918
1920	..	5	..	$1\frac{3}{4}$	$6\frac{3}{4}$	5	82,968	86,805
1921	..	20	$1\frac{1}{4}$	$\frac{3}{4}$	22	$21\frac{1}{4}$	105,579	89,866
1922	$\frac{1}{2}$	33	$8\frac{3}{4}$	$\frac{1}{4}$	$42\frac{1}{2}$	$42\frac{1}{4}$	145,734	173,911
1923	$\frac{1}{2}$	$26\frac{1}{4}$	$17\frac{1}{4}$	$4\frac{1}{4}$	$48\frac{1}{4}$	44	172,746	161,553
1924	..	62	$9\frac{1}{2}$	$10\frac{1}{4}$	$81\frac{3}{4}$	$71\frac{1}{2}$	235,372	202,414

Relaying Gangs.—The usual strength of a relaying gang is twelve men, and their principal work is the relaying of the track, but they sometimes perform special work in connection with yard-construction. Rails are stacked at convenient places up to 20 chains apart alongside the track where relaying is in progress.