

Another alloy wire called cadmium copper, which has the same tensile strength as bronze, but which is much superior in conductivity, is now available and has been introduced by the Department. This wire will take the place of bronze wire for new work on subscribers' circuits and short toll-lines, and ultimately, when the bronze wire in service has reached the end of its useful life, will be used to replace it entirely. The introduction of cadmium copper wire will bring about an improvement in transmission efficiency and some reduction in initial costs.

The length of various items of telephone-exchange plant in existence on the 31st March, 1935 and 1936, respectively, was as follows :—

—	Pole-line.	Single Duct Line.	Cable.			Wire.				
			Under-ground.	Aerial.	Sub-marine.	In Under-ground Cable.	In Aerial Cable.	Sub-marine.	Open Aerial.	Under all Headings.
	Miles.	Chains.	Chains.	Chains.	Chains.	Miles.	Miles.	Miles.	Miles.	Miles.
In existence on 31st March, 1935	15,383	44,645*	96,845*	37,618	1,266	391,922*	46,601*	1,926*	107,689*	548,138*
Erected during year	191	1,747	3,605	170	..	10,973	183	..	2,194	13,350
Dismantled during year	45	..	536	578	..	2,373	627	..	654	3,654
In existence on 31st March, 1936	15,529	46,392	99,914	37,210	1,266	400,522	46,157	1,926	109,229†	557,834

* Revised figures. † Includes 151 miles of earth-working circuit.

The percentages of the total wire-mileage in underground, aerial, and submarine cables and open aerial wire respectively for the year ended 31st March, 1936, are as under :—

Telephone-exchange wire in underground cables	71·5 per cent.
Telephone-exchange wire in aerial cables	8·5 „
Telephone-exchange wire in submarine cables	0·4 „
Telephone-exchange open aerial wire	19·6 „

TELEPHONE STATISTICS.

A comparison of statistics in respect of the telephone system is made in the following table, which shows annually since 1927 the number of exchanges, the total wire-mileage, the revenue, and the total number of telephone-stations, together with the number of telephones for each 1,000 of population of the Dominion :—

Year.			Number of Exchanges.	Miles of Wire.	Revenue.	Number of Telephone-stations	
						Total.	Per 1,000 Population.
1927	..	..	342	440,253	£ 995,071	137,307*	95·48
1928	..	..	344	463,356	1,057,177	144,552*	99·40
1929	..	..	351	495,470	1,135,795	152,541*	103·72
1930	..	..	349	513,096	1,206,714	161,323*	108·37
1931	..	..	349	528,568	1,238,649	161,739*	107·04†
1932	..	..	349	556,735	1,218,072	160,779*	105·45
1933	..	..	349	559,890	1,169,512	155,560*	101·21
1934	..	..	349	560,509	1,164,711	155,059*	100·18
1935	..	..	349	548,186†	1,190,773	159,170*	102·06
1936	..	..	348	557,834	1,252,964	166,565*	105·85

* Includes approximately 4,000 non-exchange stations. † Decrease owing to temporary loss of subscribers due to Hawke's Bay earthquake. ‡ Revised figures.