

The 60 "causes" assigned by reporting authorities as scheduled above are many and varied. It is quite possible that different reporting authorities have different ways of expressing the same thing, as, for instance, "wires contacting" may be synonymous with "short circuit," or, to take another instance, "span breaks" with "overstress" or "joint failure." It is hoped that the publication of this table will be of some interest to supply authority engineers in general.

As regards broken poles, 406 instances were reported for the year, of which 239, or 58·8 per cent., were New Zealand blue-gum.

For 1938 the total number of broken poles reported was 323, and it is still evident that electric-supply authorities who experimented with New Zealand blue-gum and nondescript Australian hardwoods during the past decade are now being called upon to make replacements sooner than the anticipated life of fifteen years for poles used on distribution lines.

ACTUAL MILEAGES AND SIZES OF OVERHEAD CONDUCTORS IN USE AT 31ST MARCH, 1939.

Size of Conductors (S.W.G.).	Copper.		Aluminium.		Galvanized Steel.		Galvanized Iron.		Copperweld.		Steel-cored Aluminium.		Bronze.		Total Break- ages.
	Miles.	Break- ages.	Miles.	Break- ages.	Miles.	Break- ages.	Miles.	Break- ages.	Miles.	Break- ages.	Miles.	Break- ages.	Miles.	Break- ages.	
7/22 ..	12	3	..	..	..	..	..	..	..	..	..	..	..	..	3
7/20 ..	6,786	309	..	..	..	..	..	..	..	..	..	..	..	..	309
7/18 ..	14,264	633	..	..	..	..	..	..	..	..	..	..	..	..	633
7/17 ..	3,296	37	..	..	..	..	..	..	..	..	..	..	..	..	37
7/16 ..	26,458	266	49	..	301	3	103	..	8	..	177	..	..	..	269
7/15 ..	110	4	..	..	..	..	..	..	..	..	259	..	..	..	4
7/14 ..	13,470	74	24	8	19	..	7	..	..	..	1,087	..	..	..	82
7/13 ..	1,210	1	..	..	3	..	4	..	..	..	163	..	..	..	1
7/12 ..	645	..	152	1	11	..	..	..	18	..	30	..	..	..	1
7/11 ..	4	..	..	..	..	..	..	..	..	..	73	..	..	..	..
7/10 ..	66	..	37	..	..	..	..	..	..	..	51	..	..	..	..
7/9 ..	640	..	3	..	5	..	..	..	..	..	..	..	..	..	..
7/8 ..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..
19/18 ..	407	14	..	..	..	..	..	..	..	..	..	..	..	..	14
19/17 ..	692	7	..	..	..	..	..	..	..	..	..	..	..	..	7
19/16 ..	1,849	10	..	..	..	..	..	..	..	..	..	..	..	..	10
19/15 ..	201	2	..	..	..	..	..	..	..	..	..	..	..	..	2
19/14 ..	726	3	..	..	..	..	..	..	..	..	..	..	..	..	3
19/13 ..	3,110	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19/12 ..	832	..	..	..	2	..	..	..	..	..	..	..	..	..	..
19/10 ..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
37/16 ..	67	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37/15 ..	403	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37/14 ..	120	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37/13 ..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
37/12 ..	77	..	..	..	..	..	..	..	..	..	227	..	..	..	..
66/13 ..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..
12 ..	2,403	119	..	..	2	..	86	..	12	..	..	..	..	..	119
11 ..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10 ..	9,399	403	..	2	112	1	222	..	423	12	..	..	30	..	418
8 ..	13,773	190	..	..	5,482	43	5,326	58	733	2	..	..	..	..	283
7 ..	759	12	..	..	..	..	290	..	92	..	..	..	..	..	12
6 ..	288	3	..	..	127	..	147	..	165	7	..	..	..	..	10
5 ..	..	..	..	..	..	..	..	..	7	..	..	..	..	..	..
4 ..	593	..	..	..	..	..	..	..	79	..	2	..	..	..	..
2 ..	65	..	..	..	..	..	..	..	..	..	..	..	..	..	..
0 ..	74	..	..	..	..	..	..	..	..	..	..	..	..	..	..
2/0 ..	..	..	10	3	..	..	..	..	..	..	59	..	..	..	3
3/0 ..	4	..	..	..	..	..	..	..	..	..	399	..	..	..	..
3/12 ..	155	1	14	..	9	..	..	..	..	..	..	..	..	..	1
3/11 ..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..
3/10 ..	27	..	3	..	..	..	..	..	..	..	..	..	..	..	..
3/9 ..	..	..	4	..	..	..	..	..	..	..	..	..	..	..	..
3/8 ..	..	..	4	..	1	..	..	..	..	..	..	..	..	..	1
4/16 ..	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4/14 ..	..	..	..	..	253	1	..	..	..	..	..	..	..	..	1
5/14 ..	..	..	..	..	210	1	..	..	..	..	..	..	..	..	1
6/-144 ..	..	..	..	..	..	..	..	..	..	..	19	2	..	..	2
7/-167 ..	..	..	..	..	..	..	..	..	..	..	639	..	..	..	..
Miscellaneous	83	11	161	2	..	..	2	..	12	..	58	..	..	..	13
Telephone-wires	195	..	..	..	1,060	..	906	..	2,915	..	..	..	..	..	..
Totals ..	103,334	2,102	465	17	7,596	49	7,093	58	4,366	21	3,243	2	30	..	2,249

Grand total, 126,097 miles.

No returns of conductor mileages received from Auckland and Christchurch.