cars, whereas this figure has now been increased to three hundred and eighty, which includes one hundred per cent. of the compartment sleepers and observation cars, eighty-five

TABLE SHOWING INCREASE IN ELECTRICALLY LIGHTED CARS, 1911 TO 1914

Railway Company	Number of Cars equipped 1911	Number of Cars equipped 1914	Increase in cars Equipped
Pullman Company.....	2,400	5,800	3,400
Pennsylvania R. R., E..	902	1,924	1,022
Pennsylvania R. R., W.	516	714	198
N. Y. C. & H. R.....	202	1,007	855
N. Y., N. H. & H.....	350	410	50
Lehigh Valley.....	81	384	303
Great Northern.....	480	650	190
Total in United States..	10,925	18,572	7,647
Canadian Pacific Ry....	68	359	291
Grand Trunk.....	34	164	130
Grand Trunk Pacific....	..	72	72
Canadian Northern.....	14	226	212
Total in Canada.....	116	821	705

NOTE: Figures of other roads not included.

Fig. 1.

per cent. of the modern sleepers and sixty per cent. the total numbers of diners, the remaining gas lighted cars of these classes are being converted as the cars receive general repairs. The large increases on the Pennsylvania, New York Central and Hudson River, and N. Y., N. H. & H. Railways are probably due to the tunnels by which they enter New York City, gas or oil lighted cars not being permitted to enter either of these terminals. From the foregoing figures it is apparent that there is a strong demand for electric lighting in our passenger cars, and also that the railway companies are meeting it in a liberal spirit.

I will next endeavour to explain the methods adopted in lighting cars by electricity, and I will divide them in three main systems, namely, Straight Storage System, Head End System and Axle System, and a brief description of each may not be out of place. First, I will take the Straight Storage System which is the simplest. This equipment consists of a set of storage batteries contained in battery boxes under each car, the batteries being connected to the lamps by the usual wires and controlled by a single switch or switches. This is certainly