

improved triple as would require a 20 lb. reduction with the old. Notwithstanding the fact that these remarkable results have been accomplished by modifying the triple valve in the manner indicated, the question is frequently asked—Why were the ports in engineer's brake valve not redesigned and enlarged to bring these conditions about? This question can be disposed of with the statement that it is the friction of brake pipe connections, etc., and not the engineer's valve, which is the controlling factor, therefore, the absolute need of having each triple valve reduce brake pipe pressure locally will at once be obvious. This is known as the quick service feature. Another feature, namely, that of retarded release is also embodied in the "K" triple valve, and provides for the very slow release of head brakes in train and the quick release of ones at the rear. This action is conducive to a gradual adjustment of slack between cars and enables engineers to release brakes upon long freight trains while running at very low speeds, and without fear of braking trains in two. Heretofore engineers would not attempt to release brakes upon long trains running at speeds of less than ten miles per hour, instead the train would be stopped, brakes released, and then started again. All here I think, have a fair idea what it means in dollars and cents to a railway company to be required to stop and start a 75 or 100 car train frequently, while moving over the various divisions. As above stated, the "K" triple valve renders this practice unnecessary, and also has the additional features of insuring uniformity in charging of auxiliaries, a more prompt release of rear brakes (in some cases 35 to 55 seconds earlier, and a greater factor of safety due, as before stated, to the fact that a 5 lb. brake pipe reduction with the "K" triple is equally as effective as a 20 lb. reduction with the older type of valve. In this connection it is a pleasure to be able to state that all of the features mentioned can be incorporated in the shell of the present or older type of valve, thousands of which are now in service upon the various railways.

Owing to the peculiar and exacting conditions confronting electric traction railways in the congested districts of our large cities during rush hours, holidays, etc., they are gradually changing their methods of operation, instead of putting on a large number of additional single motor cars, which practice has been followed for years, and it is admitted now can be carried to extremes, the tendency seems to be to run cars in trains of two or more cars, in some instances the trains consist of a motor car with trailer pure and simple, and frequently trains are made up of two motor cars. The scheme seems to have grown in popularity with the public, which is proven by the fact that in one place where trailers were tried as an experimental measure, the company was asked to restore them. For this