

exhibitors, and hence we find him in charge of the Canadian machinery at the Chicago show. James Clarke is not only gifted with an instinctive knowledge of mechanical work, but what makes his knowledge valued or appreciated by his friends, he is absolutely without egotism or pomposity. We are sure he will do credit to his important position.

THE MODEL ELECTRIC RAILWAY.

The *Street Railway Journal* contains, under the above title, an article by W. Y. Soper. Mr. Soper is a member of the firm of Ahearn & Soper, of Ottawa, and his essay is so practical and pointed that we give it for the benefit of interested readers:—

Given a good roadbed, modern cars equipped with efficient electrical apparatus and affording rapid transit, is anything additional necessary to constitute a model electric street railway? These elements are important, but they are only the substructure upon which the system itself is built, and as the latter in all its visible details of daily operation is what most nearly concerns the travelling public to whom we look for patronage, it should receive our constant consideration and untiring attention.

The horse car was called the poor man's carriage, and the manner in which some horse roads were operated seemed to indicate the opinion of the management that for the poor man anything at all on wheels was good enough.

The advent of the electric system has changed all this.

In the modern electric car, elegantly upholstered, spacious, comfortably heated in winter, and electrically lighted at night, the poor man has found a carriage more luxurious than any he ever envied; while the rich man, knowing a good thing when he sees it, has disposed of his horses, and joins his neighbor in enjoying the advantages of electric rapid transit.

Having won the patronage of all classes of the public, it should be the aim of the street railway company to merit and retain that patronage.

In the oft quoted recipe for making hare soup the first mentioned qualification is to catch your hare. In the efficient management of a model electric railway the first necessity is to secure your superintendent, and, like the hare, he should be a good one. He should be able to handle employees intelligently and with firmness, and to command their respect and fealty without familiarity. He should be wide awake to the hourly and oft changing demands of the traffic, and should weigh carefully all suggestions from any source tending towards the improvement of the service.

Next to the superintendent, and as regards the operation of outside service, of equal importance, is an active, wide awake inspector, whose duty it should be to see that the details described further on in this article are strictly adhered to. The inspector should be always in the field, that is, on and off the cars here and there and everywhere, and, if he is the right man, he will find his time fully occupied. He will quickly regulate the service of the cars, when by accident or otherwise they may have become irregular and out of schedule time. He will be on hand at the closing hours of theatres (when conductors and motormen, who, although uniformed, are human, and are anxious to reach the car house) to see that accommodation is provided for passengers over the company's various routes. He will know of the departure and arrival of excursion trains,

and will miss none of them. He will do everything that the management look to him to accomplish, and will think of and execute much more. Such men will keep the system up to the high standard demanded from electric railways of to-day, and that has been attained by at least a few of them.

Some of the principal features of these railways the writer proposes to describe.

The cars are vestibuled, and are the most modern and elegant that can be procured, and are always new—that is, they look new. They are put through the paint shop every spring, and emerge resplendent in renewed gilt lettering and varnish. They attract attention and excite comment, comment from those to whom we look for our daily nickels, and who are quick to appreciate an evident desire to furnish them with only the best. So much for the exterior. The interior is not disappointing. Finished in polished cherry, with heavy polished brass trimming, and upholstered in Wilton carpet, they are, in truth, parlor cars. Four bevelled plate glass mirrors are in every car, two in each end (one's own reflection is never uninteresting to one's self). At one end of each car, over the door, is a small clock, kept always in correct time by the inspector. These clocks represent only a small outlay by the company, and are greatly appreciated by the travelling public. They form one of the little features that "catch." Upon the car floor is a strip of matting made to order and fitting neatly. The feeling of comfort to passengers afforded by this addition to the equipment of the cars can be appreciated only by experience. Electric heaters are in all closed cars, and are in circuit at all times that the temperature renders their use necessary. The cars are not permitted to become uncomfortable. Previous to the adoption of electric heaters the company had used coal stoves, with their necessarily attendant evils of being too warm upon some days and not warm enough upon others; fires occasionally out during hours of running, and relighted to the annoyance and half suffocation by smoke of the passengers; ashes strewn around the car floor, and the conductor's hands and clothes always untidy from acting as fireman. "But the cost of current!" exclaims the economical management. True, heat cannot be obtained without expenditure; and it may, although the writer doubts it, cost more to heat electrically than by coal; but you are not carrying imperishable inanimate produce, you are carrying intelligent, discriminating, and, if imposed upon, resentful, human beings, and the question is, do you carry a greater number of passengers by adopting such improvements as they have a reasonable right to expect? Solomon never saw an electric car; knew nothing about electric heaters, economical or otherwise, but he apparently had in mind the fact that even economy may be overdone to the detriment of receipts, when he said: "There is that scattereth and yet increaseth; and there is that withholdeth more than is meet, but it tendeth to poverty." Furnish your patrons with a miserable service, not sufficiently equipped in its minor points—in other words, withhold the sprats, and you will soon find that you catch few mackerel.

A broom is carried on each car, and it is the conductor's duty to see that the steps and platforms are at all times cleanly swept. No torn papers or scraps of any kind are allowed to remain upon the floor of the car. The upholstering is frequently beaten in order that no dust may accumulate, and that it may look fresh and clean. The windows are clean—not a