Fig. 3 is an analysis of accidents to children caused by trespassing on the tracks. This chart indicates that by far the greater percentage of fatal accidents occurs to children of less than four years of age. In fact, the deaths in this classification of accidents exceed either the minor or severe injuries by 20 per cent. or more. These tragic figures are cited to prove the need of giving children some safer play-grounds than the public highways. Similar curves (not reproduced) show that the greatest proportion of platform accidents to adults and of accidents to adult non-passengers occur to people between the ages of twenty-six and forty.

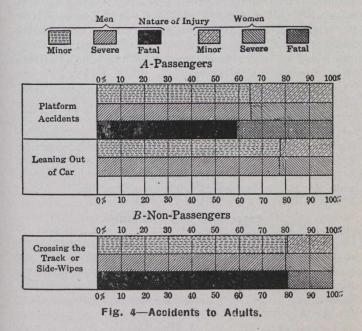


Fig. 4 shows a division of accidents to adult passengers and adult non-passengers arranged according to sex. The comparatively large proportion of boarding and alighting accidents to women may be explained perhaps by the circumstances that in Germany a limited number of street railway passengers may stand on the platforms, but no one is allowed to stand inside the car. Consequently there is a temptation for a platform passenger, who is standing near the step, to alight before the car stops, and in this women are well known to be less expert than men. In general, however, women are far more cautious than men in avoiding accidents, as is shown by the general comparisons in Fig. 4.

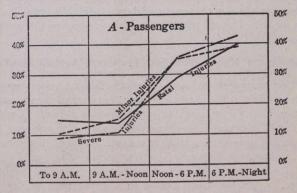


Fig. 5-Time of Accidents to Passengers.

With respect to the distribution of accidents to passengers and non-passengers according to the time of the year, it is a remarkable fact that in both cases the smallest number of accidents occur during the dangerous winter months of December to February. This leads to the conclusion that the presence of ice and snow makes the necessity for caution so apparent to passengers that the number of accidents

is actually less than in months with more favorable weather. So far as the non-passengers are concerned the reduction in accidents during the winter months can be ascribed largely to less travel on the streets. The heavy passenger death rate from September to November is accounted for by fog and rain which causes people to lose their footing in getting on or off the cars.

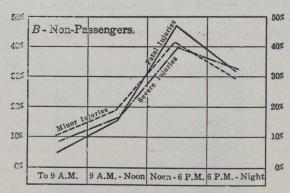


Fig. 6-Time of Accidents to Non-Passengers.

Figs. 5 and 6 show the proportions of accidents to passengers and non-passengers respectively for different hours of the day. In both classes most of the accidents occur in the afternoon and evening. It is not clear why this should be so in the case of passengers, but so far as non-passengers are concerned it may result from the greater crowding on the streets in the late hours of the day.

In addition to these accident charts others were presented detailing the nature and percentage of each kind of injuries. The charts were accompanied by a description of the efforts made by the street railways of Germany to equip their cars with safety apparatus and to train their employees in accident prevention. It was stated that on an average not more than one-fourth of the accidents to non-passengers could have been avoided or ameliorated by the use of fenders or wheelguards. The report concludes with an appeal to the public to co-operate in the reduction of accidents by the exercise of greater care in boarding and in leaving cars and also in crossing street railway tracks.

## A STANDARD PORTLAND CEMENT SPECIFICATION.

A standard Portland cement specification for all United States government work is being looked into by a special committee of government engineers, which has been meeting during the past summer. This committee was appointed to draw up a tentative specification by a conference of government engineers, that first met in Washington, D.C., on June 17, 1911. The draft of this specification was submitted later to the conference and proved acceptable in most particulars. The committee was then instructed to consult with the American Society of Civil Engineers, the American Society for Testing Materials and other similar bodies as to the practicability of developing a uniform specification that might become a generally accepted standard throughout the United States. Such consultation is now in progress. The committee is composed of A. P. Davis, Chief Engineer, U.S. Reclamation Service; J. C. Plant, Supervising Architect's Office; Captain W. R. Rose, Corps of Engineers, U.S.A.; Lieut. C. A. Carlson, Corps of Civil Engineers, U.S.A.; S. S. Voorhees, Bureau of Standards; A. E. Phillips, Superintendent of Sewers, District of Columbia, and R. J. Wig, Brreau of Standards.