

GERMAN ACCIDENT STATISTICS.

The German Street and Interurban Railway Association (Verein Deutscher Strassenbahn-und-Kleinbahn-Verwaltungen) has prepared an interesting summary of electric railway accidents in Germany during the years 1905 to 1909, inclusive, for exhibit at the International Exposition of Hy-

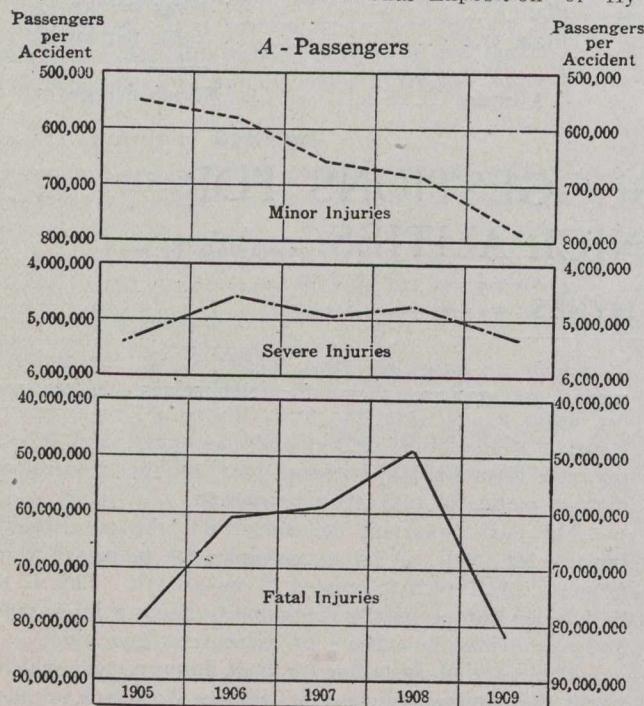


Fig 1.—Accidents per Passenger from 1905 to 1909.

giene, which is being held in Dresden. The following is an abstract of the data presented, together with a selection of the most striking charts, the originals of which were prepared in color. The report states that the total route length of

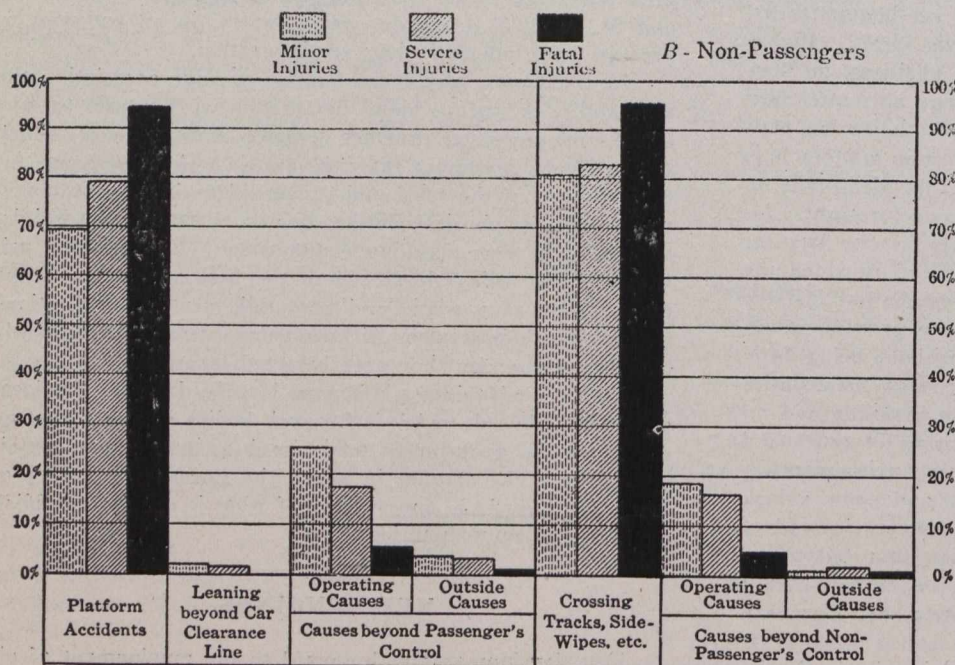


Fig 2—Causes of Accidents to Passengers and Non-Passengers.

the street railways in Germany amounts to 4,000 km (2,480 miles), of which 3,875 km (2,403 miles) are electrically operated. The members of the association operate 3,772 km (2,339 miles). The accident statistics cover the operations

of lines having a route length of 3,658 km (2,278 miles), equivalent to 95 per cent. of all the electric street railway mileage in Germany.

The statistics, as gathered by the association, show that injuries are more frequent to passengers than to pedestrians and other non-passengers, but that a greater proportion of the non-passenger accidents are fatal. Thus the percentage of slight injuries was practically equal for both classes, but 6 per cent. of non-passengers' injuries resulted in death as compared with 1 per cent. of passengers' injuries.

Fig. 1 shows the fluctuations and the number of passengers carried per accident during the five years from 1905 to 1909, inclusive. It will be noted that there has been a great reduction in the number of minor injuries. On the other hand, the severe accidents and fatalities have increased. A set of similar curves (not reproduced) shows that there have been no important changes in the number and classes of accidents to non-passengers on the basis of mileage operated.

Fig. 2 is a chart which shows by differently sectioned areas the division of responsibility for accidents, the proportion of each class of accident and the results to the person injured. In the case of passengers an overwhelming percentage of accidents was due to negligence in boarding and leaving the cars, although some were also caused by leaning beyond the clearance lines of the windows and platforms. Most of the accidents to non-passengers resulted from either negligence in crossing the track or from side-wipes on devil strips, etc. Of every 100 fatal accidents to passengers ninety-four were due to carelessness of the passenger, four to the railway and two to causes beyond the control of both.

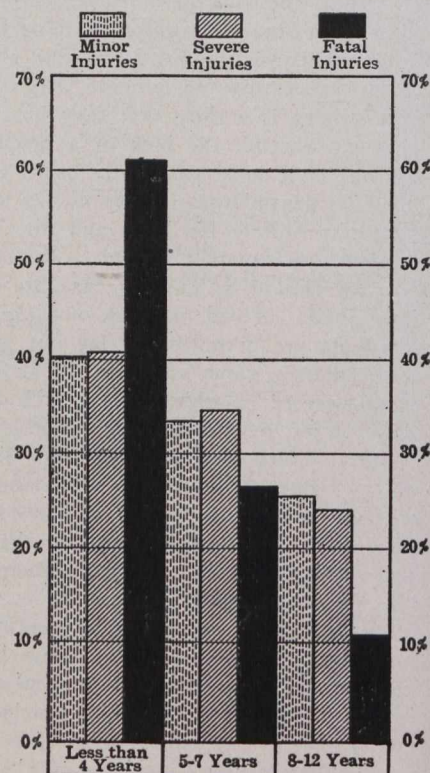


Fig. 3—Accidents to Children.

parties. In the case of non-passengers the responsibility for fatal accidents averages as follows: Non-passengers, 94.8 per cent.; railway, 4.5 per cent., and other parties, 0.7 per cent.