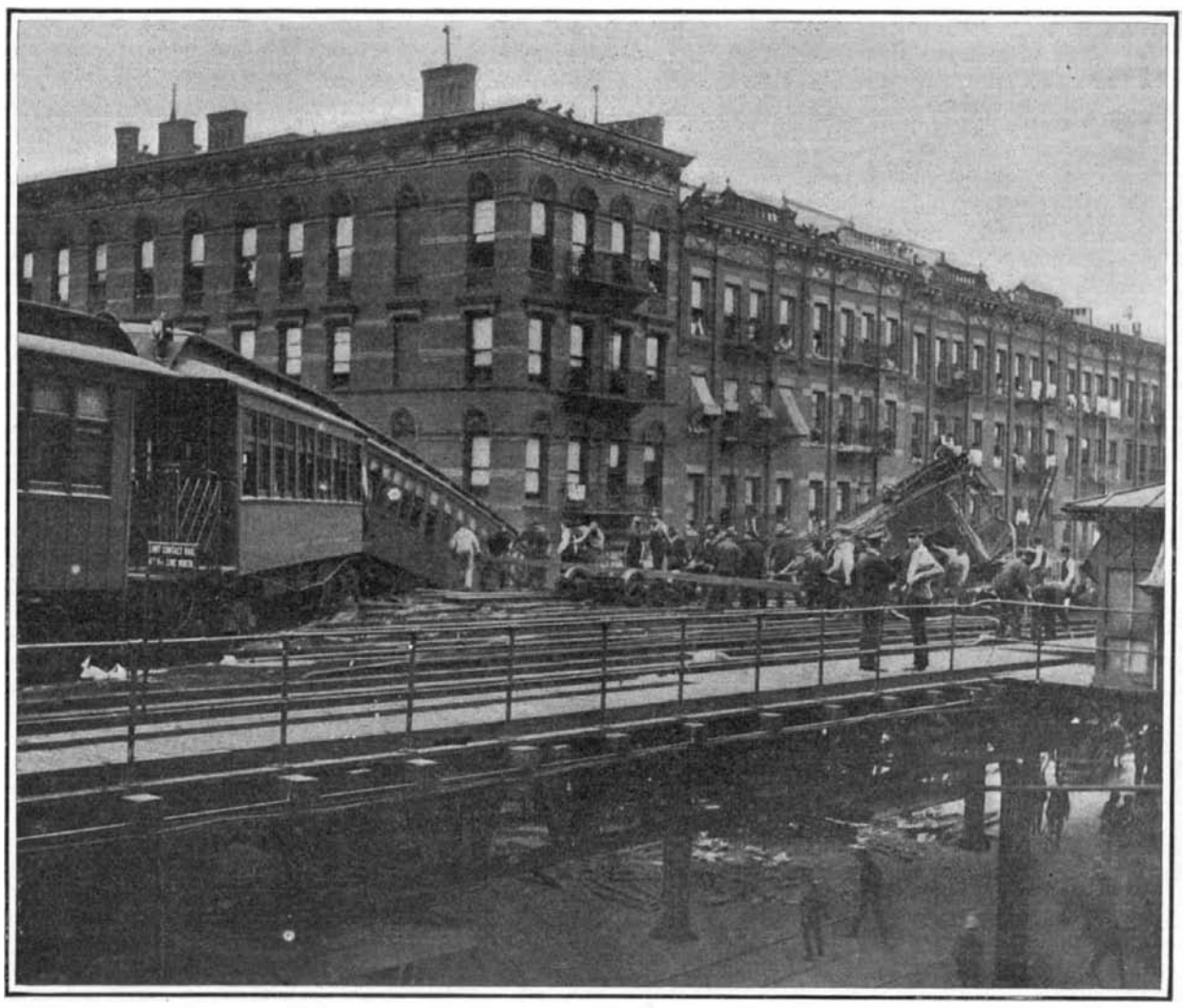
THE ELEVATED RAILROAD WRECK IN NEW YORK.

The recent fatal accident on the elevated railroad in this city was due to the fact that a train that was running at a speed of twenty to thirty miles an hour attempted to pass around a curve on which the safe speed was only eight or ten miles an hour. In spite of the heavy guard rails on the inside and outside of the rails the tremendous centrifugal thrust caused two of the cars to climb the track and plunge over the edge of the elevated structure. At the point where the accident happened, at 53d Street and Ninth Avenue, there is a junction of the Sixth Avenue branch of the elevated with the Ninth Avenue branch. The cars curve off from the avenue into the cross street with the characteristic abruptness of all such elevated railway curves. As this curve has to be carried across the Ninth Avenue tracks, it is impossible to superelevate the outside rails, since to do so would bring them several inches above the level of the Ninth Avenue tracks and produce a dangerous hump in the same. A curve with similar conditions exists at 53d Street and Sixth Avenue. Evidently, from what has been said, the trains that take either of these curves should be run at a much slower speed than they can on curves that are properly superelevated. The trains that are intended for Sixth Avenue are switched into 53d Street by a man who is stationed in a signal cabin at the point where the Sixth Avenue branch begins. It is his duty to watch the colored disks which are carried at the front end of each train to indicate whether it is to run down Ninth Avenue or Sixth Avenue, and set the switches accordingly. On this particular occasion a Ninth Avenue train, apparently with its disks properly set, came rapidly down the grade from 59th Street station, but through some error was switched onto the sharp curve into 53d Street. The first car, which was a heavy motor car, swayed over heavily as it struck the curve, but passed safely around and was brought to a stop not far from the wrecked train. The second car, however, was what is known as a "trailer," that is, a light car without motors, and it jumped the track almost as soon as it passed onto the curve, wrenched loose from the heavy motor car ahead, breaking the couplings, drove ahead diagonally across the Ninth Avenue tracks, swung completely around, and fell over onto the sidewalk below. As it fell, the car rolled completely over so that it struck roof down, one end of the car resting on its roof on the elevated structure, and the lower end resting upon the crumpled-up wreck of the roof and the front of the car, on the street below. The car, and in fact the whole train, was densely crowded with working people, who, as the car struck the street, were flung to the forward end, where most of the fatalities occurred, a dozen lives being lost and some two score being more or less seriously wounded.



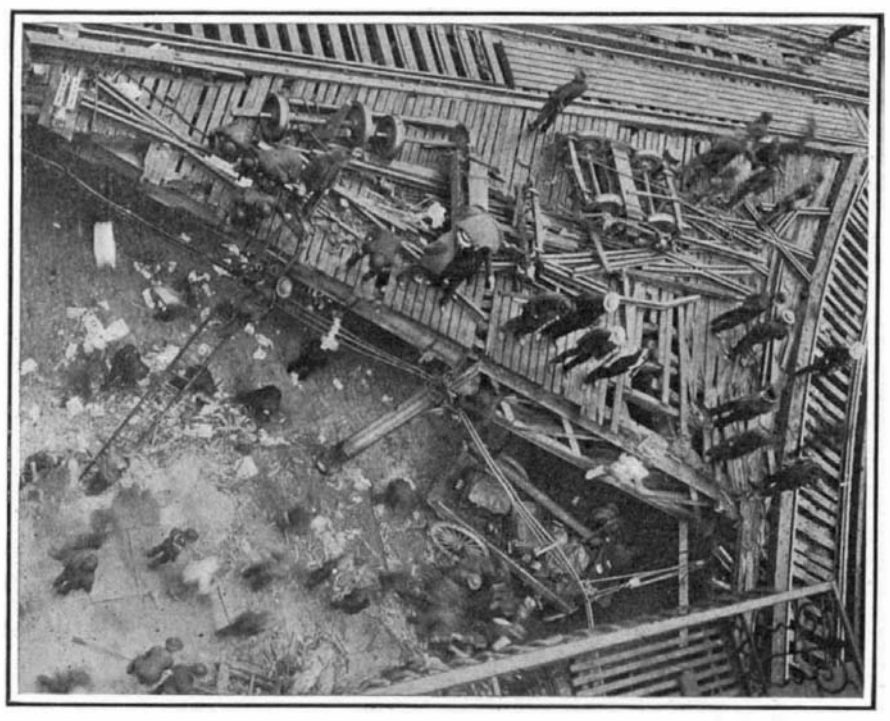
View Looking Southeast, Showing to the Upper End of the Second Car, and the Position of the Third and Following Cars of the Train.

The third car was carried forward by the momentum of the train directly against the northwest corner of the adjacent building, where it came to rest with its front platform about on a level with the fire escape of the second floor of the building, and its rear half resting on the elevated structure, in the position shown in one of our engravings. The people in this car escaped by climbing from the platform to the fire escape, from which they made their way to the street. The other cars to the rear remained on the track and suffered no injury, not even the glass in the windows being broken. This is accounted for by the fact that the instant the coupling between the first car which rounded the curve and the second car was broken, the brakes were automatically set throughout the whole train, and this, coupled with the resistance of the two wrecked cars as they crashed across the guard rails and tracks, served to bring the rear half of the train to a stop so gradually that no injuries resulted either to the passengers or the cars themselves.

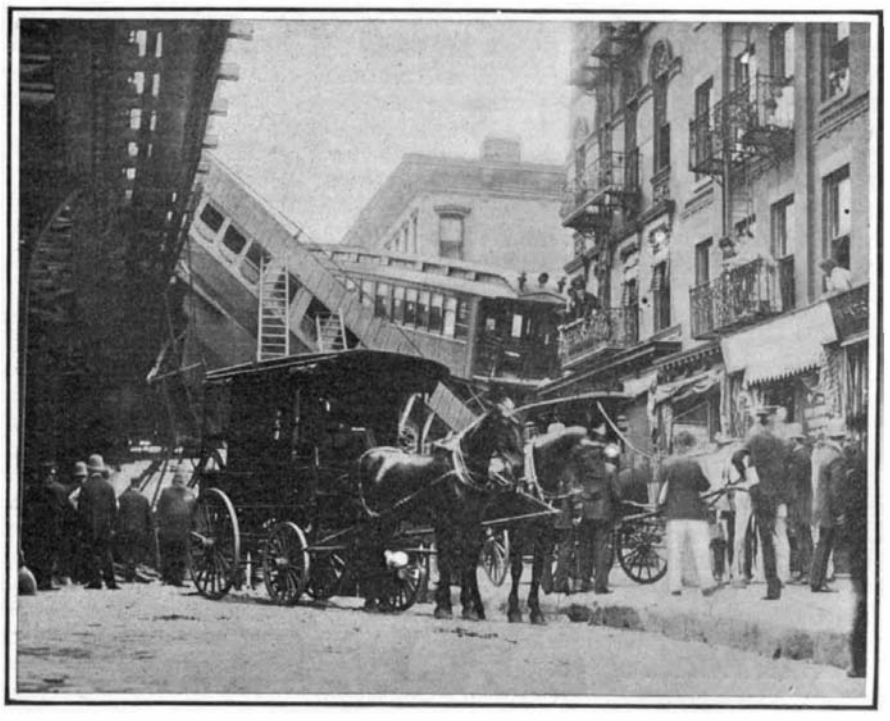
When the second car turned over and fell to the street the upper structure, such as the roofs and sides, was completely wrecked, the roof being practically opened out its entire length. The car was one of the lighter pattern built when the elevated was a steam railroad; and although it was amply strong to resist the stresses of ordinary operation, it proved to be an utter death trap when exposed to the rough handling of this derailment. Herein we find another argument for the rapid introduction of all-steel cars. Had this second car been of the same type as the heavy steel motor cars of the Subway, it would probably have kept the track, or, if it had been derailed and thrown to the street, it would have maintained its form sufficiently to have prevented much of the terrible loss of life. It has been proved over and over again that all-steel freight cars will pass through a derailment or a collision and retain their shape so that they are easily repaired and put in service again, while the wooden cars in the same collision will be broken up beyond recovery. In the presence of this disaster, we cannot but feel that another urgent call is being made for the rapid substitution of steel for wooden cars in passenger service.

Electrification of Swiss Standard-Gage Railways.

It is said that the Oerlikon Machine Works, of Oerlikon, Switzerland, and the Siemens-Schuckert Works, of Berlin, have arrived at an agreement according to which these two firms will take up jointly the study of the problem of the electrification of the Swiss standard-gage railways, as well as execute any business transactions in connection therewith.



View Showing the Ninth Avenue Uptown Track, the Curve of the Downtown Track Leading to 53d Street, and the Sidewalk upon Which the Second Car of the Train Landed.



The Overturned Car is Shown with One End on the Viaduct and the Other on the Street. The Second Car of the Train is Resting Half on the Viaduct with Its Front End Against the Building.

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