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TURNING A CORNER ON THE GILBERT ELEVATED RAILWAY.

One of the problems of elevated railway construction in the narrow streets of cities, which doubtless has suggested itself to most engineers, is the leading of the structure around the corners of blocks, where a curve of very small radius becomes necessary. In order to show how this is accomplished we give the accompanying engraving, representing the turn at the corner of West 3d street and South Fifth avenue, in this city; and to further exhibit the construction of the road we add Figs. 2 and 3 (for which we are indebted to the *Railroad Gazette*), page 178, which show the mode of building adopted on the last mentioned thoroughfare. The distance between the curbs on West 3d street is about 30 feet, while the same distance on South Fifth avenue is about 40 feet. The angle to be turned is of course a right angle. Diagonally across South Fifth avenue, at the intersection of that street with West 3d street, is extended a long girder, reaching, as shown in our engraving, from corner to corner, northwesterly. From the southwest corner extends a cross girder to the middle of the long girder, and from the posts adjacent to that located on the corner extend two other girders placed at an angle. In order to obtain the curve of 90 feet radius, the longitudinal girders take a wide sweep, passing from the middle of the West 3d street structure over to the northerly side of that street, then turning almost tangent to the side of the inner arc, and then crossing over to the easterly side of South Fifth avenue before bending westerly again to regain the center of the thoroughfare.

The method of construction adopted on South Fifth ave-

nue, as shown in Figs. 2 and 3 (page 178), resembles that already described as in use on Sixth avenue, but the posts are placed on the curbstones, and the cross girders span the whole width of the carriage way. The cross girders at the columns are forty feet long and three feet six inches deep. The top and bottom chords consist of two angles four inches by four inches by half an inch, and a plate sixteen inches wide and forty feet long, reinforced by other plates. The web consists of two plates a quarter of an inch thick, stiffened by angles. The intermediate girders, track stringers, etc., are the same as on Sixth avenue.

The structure, in passing through the streets above referred to, becomes more injurious to property than at any other portion of its route. In West 3d street it incloses the entire carriage way, already narrow, cutting off light and air from the lower stories of the buildings, while the upper ones will be rendered almost uninhabitable by the constant noise of the trains passing within a few feet of the windows. The case is not much better on South Fifth avenue, one of the largest streets in the city, which now presents the aspect of a gigantic tunnel.

A Plan to Utilize a Desert.

Throughout northern Africa and the drier portions of western and central Asia the date is the staff of life to millions. The date tree flourishes where agriculture is impossible, and is the source of large profit as well as common sustenance wherever it is cultivated.

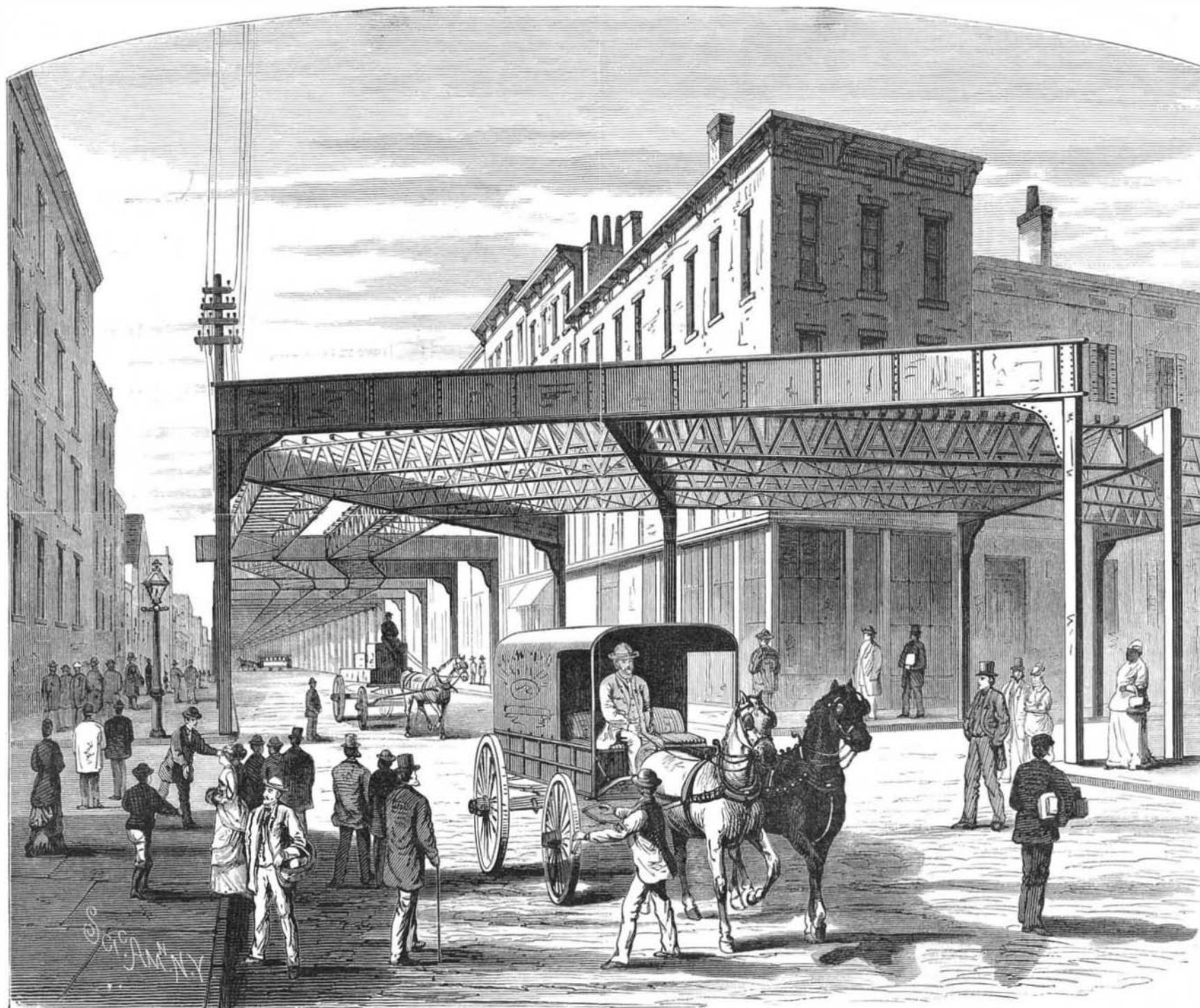
It is now proposed by our Commissioner of Agriculture at Washington to make the date a staple American product

also. The center of this new enterprise is to be the now useless desert regions of southern California and Arizona. Seed has been procured in Egypt and successfully planted, and more is coming. A recent letter from General Stone, an American officer on the staff of the Khedive, speaks very encouragingly of the project. He says: "Had I known that you desired to plant the date tree in large numbers, the quantity sent would have been very much greater, and I have now given orders for the collection of several thousand seeds in each of the northern districts where the best dates are grown."

"The provinces of Charkeyh, Garbieh, and Dakalieh, as well as the district of Roseta, all produce in their northern portions excellent varieties of dates, the cultivation of which is very profitable.

"From what I have seen of the date producing regions in this part of the world, and from what I know of the Desert of the Colorado between Carisa Creek and Fort Yuma, I am inclined to believe that the greater portion of the latter region can be made productive and very valuable by making plantations of the date palm. This tree not only does not require much water, but much water is prejudicial to it, and the climate of the Colorado Desert is singularly similar to that of some of the best date producing districts here. In any case I feel assured that all the New River portion of the Colorado Desert would grow the date tree without difficulty."

KANGAROO HIDES are an important article of export from Australia. They are said to make the most pliable leather known.



THE GILBERT ELEVATED RAILWAY, NEW YORK CITY.