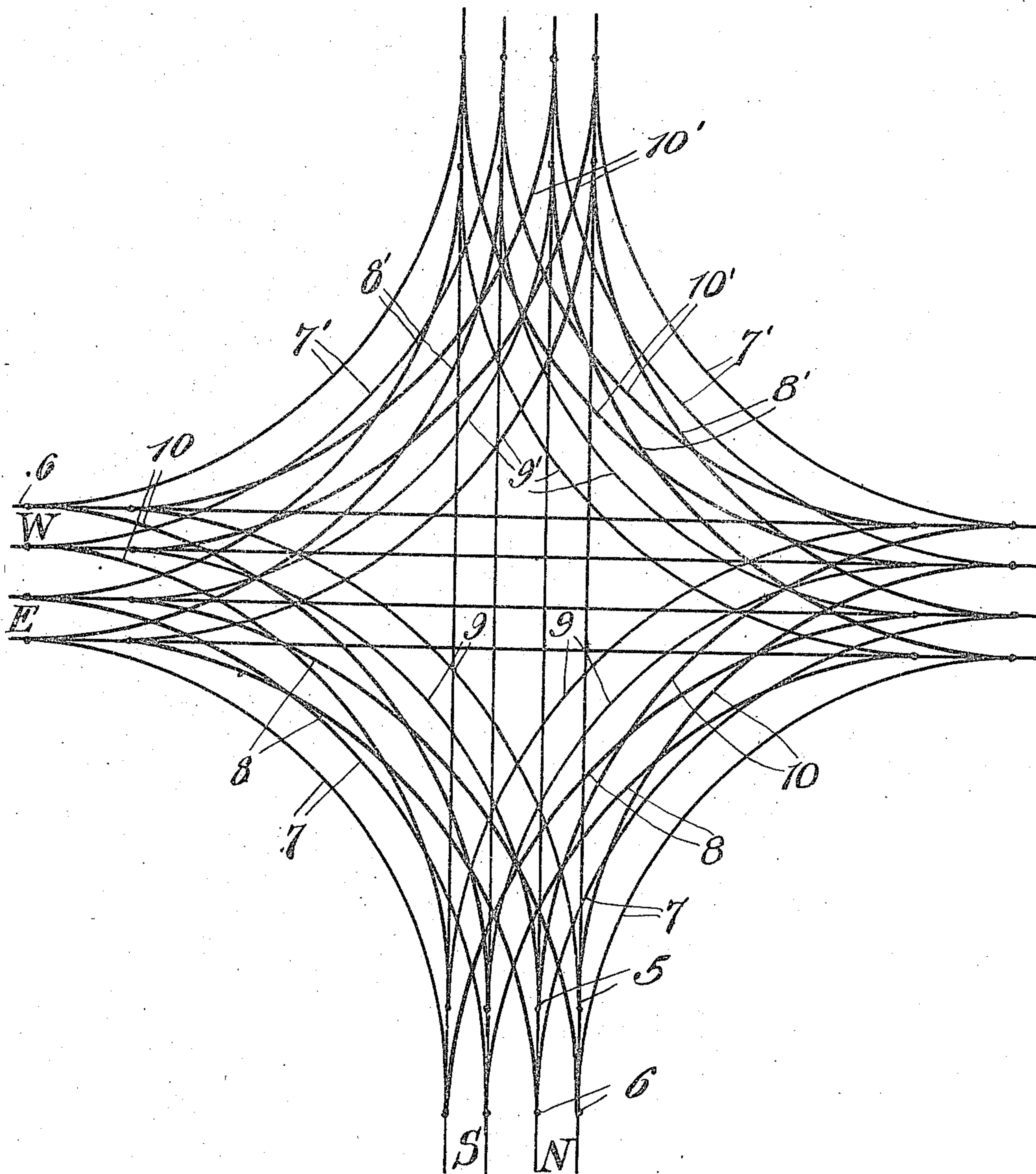


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RAILWAY CROSSING.  
APPLICATION FILED NOV. 16, 1910.

989,759.

Patented Apr. 18, 1911.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## RAILWAY-CROSSING.

989,759.

Specification of Letters Patent. Patented Apr. 18, 1911.

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*To all whom it may concern:*

Be it known that I, JULIUS CAESAR BRADSHAW, a citizen of the United States, residing at Little Rock, in the county of Pulaski and State of Arkansas, have invented certain new and useful Improvements in Railway-Crossings, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to certain new and useful improvements in railway crossings and has for its object to provide a very novel arrangement of the tracks and switches whereby cars running in any direction may be quickly switched from one track to another to change the direction of movement, without loss of time or blocking the system.

The invention has for a further object the provision of a twenty track terminal or crossing switch system whereby cars running in any direction may be switched in a number of different ways to turn the car for movement in a reverse direction or for movement upon an intersecting track, thus avoiding the possibility of collision and also eliminating delay in the running of the cars which is frequently caused by the necessity for switching the cars at the intersecting points of the tracks.

30 With the above and other objects in view, the invention consists of the novel features of construction and the combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing which represents a railway crossing, the tracks of which are arranged in accordance with the present invention.

40 In the drawing parallel intersecting main tracks are shown. These tracks are respectively designated N, S, E and W to indicate the direction of movement of the cars. In each of the tracks two sets of double-pointed switches 5 and 6, respectively, are arranged. These switches control the movement of the cars over the tracks which connect the main tracks running in opposite directions, or, in other words, which connect the north and south tracks with the east and west tracks, two sets of such switches being employed and extending in opposite directions from each of the main tracks.

55 As a practical illustration of the operation of the invention, assuming that there are two cars upon the east bound track, one

of which is a "through" car and the other of which is to be switched upon the west bound track on its return trip, the switch 6 is opened and the first car moves over the track 7 upon the south bound track and continues in this direction. The second car, after the first car has passed beyond the switches 5 and 6, is moved over the track 8 by closing the inner switch 5. This car, therefore, moves upon the north bound track beyond the switch point 6 arranged therein. The switch 6 in the north bound track being closed, the car moves over the same and the switch 5 in said track is opened so that the car moves over the track 9 and upon the rails of the west bound track. Thus the car is reversed and continues upon its return trip. This operation applies to a car moving in any direction. For instance a car on the north bound track may be reversed by opening the switch 5 to direct the car upon the track 9 from whence it moves on the west bound track beyond the switch 6. It then returns over tracks 10 after the switch 6 is opened and is directed upon the south bound track and continues its return trip. Similarly, a car running upon the west bound track may be reversed by opening the switch 6 to direct the car upon the north bound track and upon reversing the movement of the car and opening the switch 6 in the north bound track, the car may be returned upon the east bound track, as will be readily seen from reference to the drawing.

90 From the above it will be observed that there are two tracks connecting each of the main intersecting tracks with each other, the tracks 7, 8, 9 and 10 connecting the north and south tracks with the east and west tracks upon one side of the crossing, and similarly arranged tracks 7', 8', 9', and 10' also connecting the north and south tracks with the east and west tracks upon the opposite side of the crossing. There are two sets of the tracks 7, 8, 9 and 10 and also of the tracks 7', 8', 9' and 10', said tracks extending in opposite directions and connecting each of the north and south and the east and west main tracks with each other. It will thus be seen that a car may be switched from any one of the main intersecting tracks onto either of the other main tracks running at right angles thereto, thus avoiding delay in the movement of the cars over the cross- 110



ing and also permitting of the switching of two or more cars at one time.

The switches may be of any preferred construction and the tracks at their intersecting points are connected and braced by means of the castings 12 in the usual manner.

The above described arrangement of the switching tracks calls for a total of twenty tracks at the intersection of the main tracks of the system. The tracks may be properly arranged and installed at but slightly greater cost than the present system of railway track construction and permits of the handling of a large number of cars in a very expeditious manner, thus avoiding blocking or congestion of the system and of street traffic.

While I have particularly shown and described the preferred construction and arrangement of my improved crossing, it will be obvious that the same is susceptible of considerable modification without departing from the essential feature or sacrificing any of the advantages thereof.

Having thus described the invention what is claimed is:

1. A railway crossing comprising parallel intersecting main tracks, a double set of switches located in the main tracks upon one side of their intersecting point, and

switch rails connecting each of the switches in each of said intersecting tracks with one of the switches in each of the tracks extending at right angles to the same.

2. A railway crossing comprising parallel intersecting main tracks, a double set of switches located in the main tracks on each side of their intersecting points and switching rails connecting one of the switches in each of the main tracks with one of the switches in the intersecting main track upon each side of the intersecting point of said main tracks.

3. A railway crossing comprising a plurality of intersecting main tracks, a double set of switches located in each of the main tracks upon each side of the intersecting point of said tracks, and switch rails connecting each of said switches in the same main track with one of the switches in each of the main tracks running at right angles to the first named tracks, and upon each side of the intersecting point of said tracks.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JULIUS CAESAR BRADSHAW.

Witnesses:

CHAS. F. TURKIS,  
H. E. GREENFIELD.