

(No Model.)

M. CHARLTON.
RAILROAD SWITCH.

No. 464,428.

Patented Dec. 1, 1891.

Fig. 1.

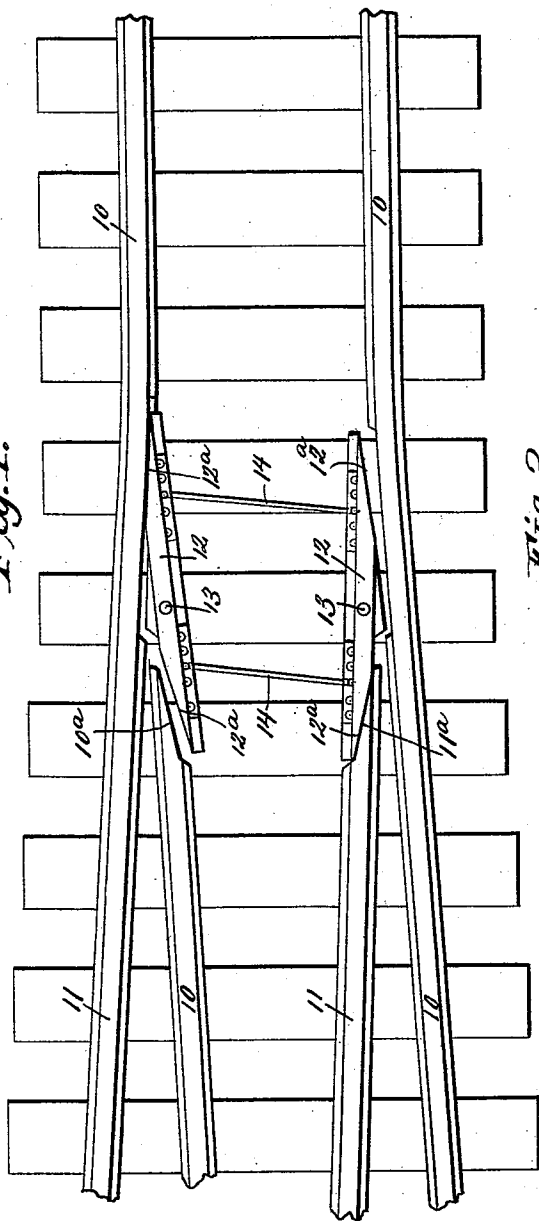
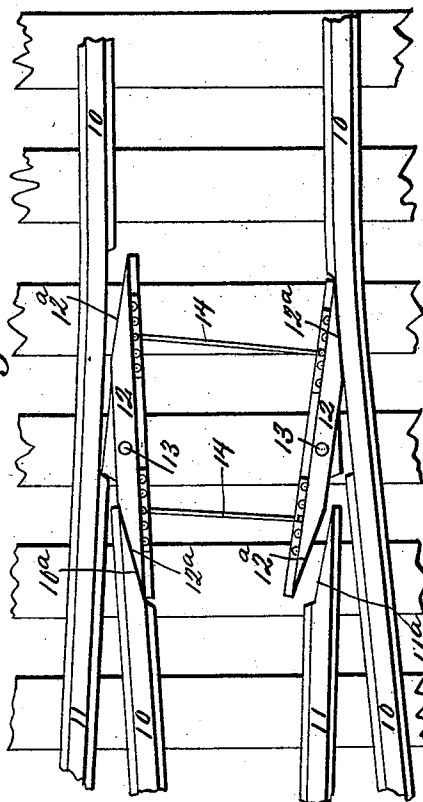


Fig. 2.



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RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 464,428, dated December 1, 1891.

Application filed August 12, 1891. Serial No. 402,482. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW CHARLTON, residing at New Haven, Fayette county, in the State of Pennsylvania, have invented a new and useful Improvement in Railroad-Switches, of which the following is a specification.

This invention relates, generally, to railroad-switches and more particularly to an improved automatic switch adapted for use in mining sections, where it is desired to switch one car upon one track and the next succeeding car upon another track, said cars being run in series in an uncoupled state. This switching has generally been done by manual power and required the constant attention of a man to turn the switch back and forth a number of times each day.

The object of my invention is to automatically switch each alternate car, thus dispensing with the service of a man, the car as it runs to its respective track operating the switch to throw the next succeeding car upon a different track.

With this object in view my invention consists in the peculiar construction of the various parts and their novel combination or arrangement, all of which will be more fully hereinafter described, and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a plan view of my improvement set to direct the car upon the main track, and Fig. 2 is a similar view with the parts set to direct the car upon the side track.

In carrying out my invention I employ a main track 10 and a side track 11, said tracks being arranged as usual, and the inner rail of the main track has its end tapered, as at 10^a, and the inner rail of the side track has its end tapered, as at 11^a. The switch-rails 12 12 are pivoted between the outer main and side rails, said rails 12 12 being provided with tapered ends 12^a 12^a, which are adapted to contact with the main and side rails, as hereinafter described. The rails are pivoted upon bolts 13 13 at points forward of their centers, and said rails are made to converge forwardly, whereby the forward ends may contact perfectly with the inner main and

side rails at the same time that the rear ends contact with the outer main and side rails, and in order to move the said switch-rails in unison I employ the cross-rods 14 14, which connect the opposite ends of said rails, as clearly shown.

My device as thus constructed provides an automatic switch which will guide each succeeding car upon a different track, the operation being as follows: We will suppose the first car of the series is to be guided upon the main track. The switch-rails are then thrown into position, as shown in Fig. 1, the rear end of one switch-rail contacting with the other side rail at the juncture of the main and side rails. The opposite or forward end of this switch-rail is out of contact with the inner rail of main track. The forward end of the opposite switch-rail contacts with the tapered end of the inner side rail, and the rear end of said switch-rail is out of contact with the outer main rail to allow the car to run upon said main rail. The first car will then move along the main rail and upon the switch-rail, and as said car moves along upon said main and switch-rails the forward end of the switch-rail will be forced back into contact with the tapered end of the inner main rail by the flange of the wheel, and the car will thus be guided upon the main track. At the same time the forward end of the switch-rail is forced into contact with the tapered end of the inner main rail the diagonally-opposite end of the switch-track is forced into contact with the outer main rail and the opposite rear end out of contact with the outer side rail, whereby the next succeeding car will be thrown upon the side rail and switch-rail, and as it moves along the switch-rail will be reversed by the flange of the wheel bearing upon the forward end of the switch-rail, which is out of contact with the inner side rail, forcing the same into contact and guiding the car upon the side track. Thus it will be seen that as each car forces the forward end of the switch-track into the proper position to guide that car it simultaneously sets the rear end of the switch-track to throw the next succeeding car upon the other track, and as the trucks are arranged in the center of these cars and the ends of the cars project some distance for-

ward and rear of the same there is ample time for the switch to be operated before the following car is upon the same.

5 I claim is—

1. The combination, with the main and side rails, of the switch-rails pivoted between the same, said switch-rails being connected with each other and adapted to move in unison
10 and contact simultaneously with the side or main rails, substantially as and for the purpose described.

2. The combination, with the main and side rails, of the switch-rails pivoted between the
15 same and adapted to form part of said main and side rails, said switch-rails being connected with each other and adapted to contact simultaneously at their diagonally-opposite ends with the main or side rails, substantially as shown and described.

3. The combination, with the main and side rails, the inner main and side rails having

tapered ends, of the switch-rails pivoted between the outer main and side rails and connected with each other, the ends of said switch-
25 rails being tapered to contact with both the main and outer side rails, substantially as and for the purpose described.

4. The combination, with the main and side rails, of the switch-rails pivoted between the
30 same at points forward of their centers, said rails converging forwardly and connected with each other near their ends, substantially as shown and described.

5. The combination, with the main and side
35 track, of an automatic switch-track pivoted between the same, the rear end of said switch being adapted to be set by the passage of a car over the forward end of the same, substantially as and for the purpose described.
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Witnesses:

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