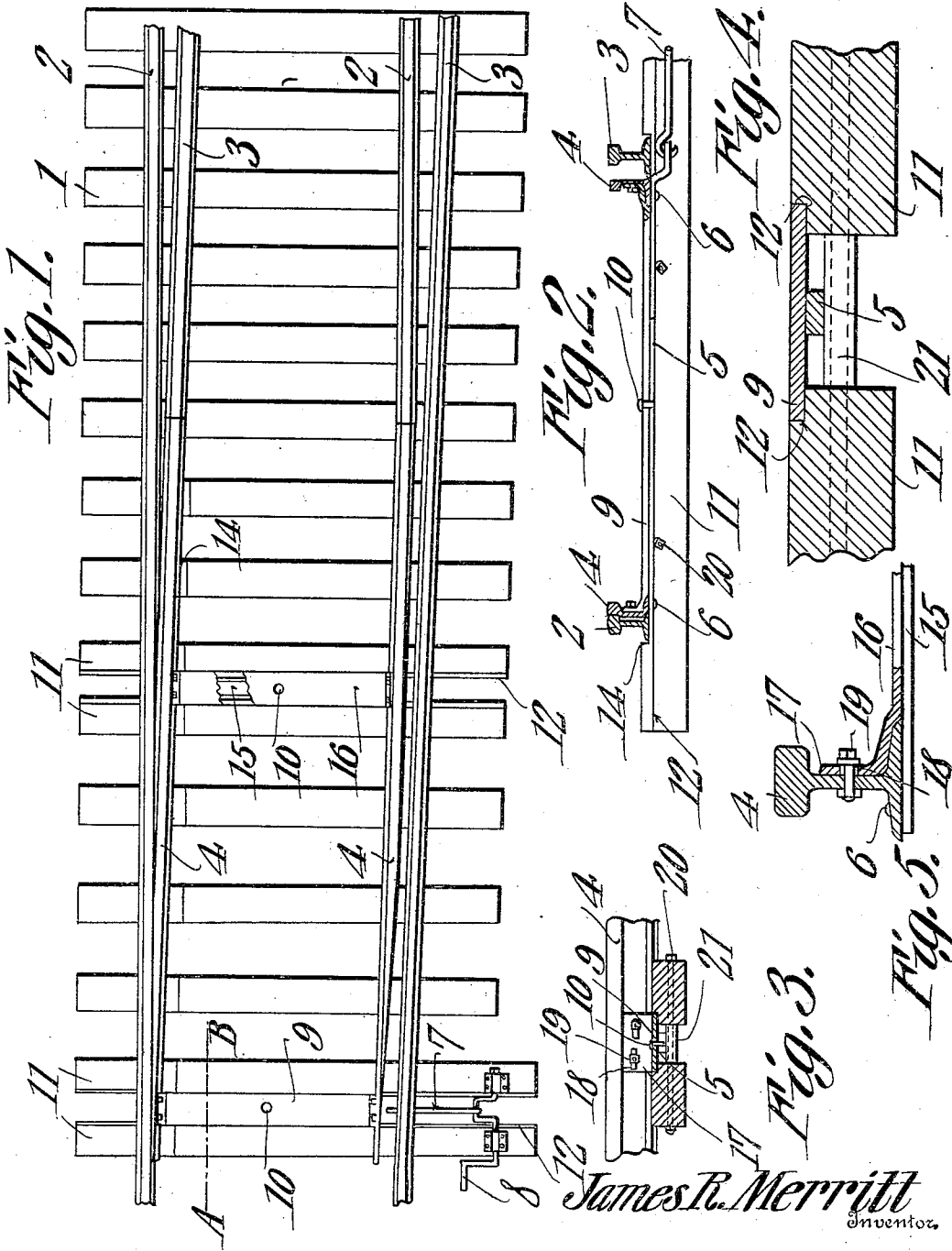


J. R. MERRITT.
RAILWAY SWITCH.
APPLICATION FILED JAN. 17, 1910.

956,644.

Patented May 3, 1910.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES R. MERRITT, OF ATLANTA, GEORGIA.

RAILWAY-SWITCH.

956,644.

Specification of Letters Patent.

Patented May 3, 1910.

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To all whom it may concern:

Be it known that I, JAMES R. MERRITT, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Railway-Switch, of which the following is a specification.

It is the object of this invention to provide a connection between switch-points, the construction being such that the bridles whereby the switch-points are immediately connected, are so housed that they cannot be accidentally engaged by an object moving along the upper faces of the ties upon which the switch-points are mounted.

With the above and other objects in view, the invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the drawings, and specifically claimed, it being understood, that within the scope of what is claimed, divers changes in the form, proportions, and minor details of the structure may be made, without departing from the spirit of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings,—Figure 1 shows my invention in top plan; Fig. 2 is a side elevation of one of the ties which are located adjacent the extremity of the switch-point, parts being shown in section; Fig. 3 is a transverse section upon the line A—B of Fig. 1; Fig. 4 is a transverse section upon the line A—B of Fig. 1, the scale of the figure being enlarged, and some portions of the device being removed in order more clearly to reveal other portions thereof; and Fig. 5 is a transverse section of the switch-point adjacent the auxiliary bridle, parts being shown in elevation.

In the drawings, the ties are denoted generally by the numeral 1, the numeral 2 denoting the main line rails. Siding rails 3 are shown, and switch-points 4. A bridle bar 5 is provided, the extremities of which are pivotally secured at 6 to the switch-points 4, adjacent the extremities of the said switch-points. One end of the bridle bar 5 extends beneath the sliding rail 3, and is pivotally united with a connecting rod 7, which, in its turn, is operatively connected with the switch-throw 8, which may be of any desired construction. Mounted upon

the upper face of the bridle bar 5, is a plate 9, secured to the intermediate portion of the bridle bar 5 by means of a bolt 10, or other suitable connecting element.

Certain of the ties, which are denoted by the numeral 11, are cut away upon their upper faces, and at their adjacent edges, to define longitudinally extending seats 12, adapted to receive the plate 9, the upper face of the said plate and the upper faces of the ties 11 being flush, the lateral edges of the plate 11 fitting closely, yet slidably, against the adjacent edges of the ties. The ties which are crossed by the switch-points 4, are notched as denoted by the numeral 14, which fact so lowers the bridle bar 5 that the plate 9 which is superposed thereon, may lie in flush relation with the upper faces of the ties. The ties 11 are connected by bars 20, of which there may be one or more, and upon these bars are mounted for rotation, rollers 21, upon which the bridle bar 5 rests, the bridle bar being thus supported for anti-frictional movement, transversely of the track.

The switch-points 4 may, if desired, be connected by an auxiliary bridle bar 15, carrying an auxiliary plate 16, the said plate 16 being mounted with respect to the ties, in the same manner as the plate 9. The ends of the plates 9 and 16 are bent upwardly, as denoted by the numeral 17, to abut against the adjacent faces of the switch-points 4. These portions 17 of the plates 9 and 16, are provided with enlarged openings 18, adapted to receive bolts 19 or other fastening means, whereby the extremities of the plates 9 and 16 may be connected with the switch-points.

In practical operation, should there be any object depending from a passing train, and sweeping the upper faces of the ties, such object will be prevented from engaging and bending the bridle bars, thereby destroying the gage of the switch-points, and causing an imperfectly working switch, likely to derail the next passing train. Not only are the bridle bars securely housed by means of the plates 9 and 16, but, owing to the fact that the said plates are flush with the upper faces of the ties, the said plates cannot become engaged by a passing object, which contingency would prove as disastrous as an engagement between such object and the bridle bars themselves.

From the foregoing it will be seen that

should a train, having a dragging brake beam or the like, pass over the device of my invention, the parts thereof will remain uninjured, and their relative positions unaltered.

Having thus described the invention, what is claimed is:—

1. A device of the class described comprising spaced ties; a switch-point slidable upon the ties; a bridle secured to the switch-point; a plate secured to the bridle and arranged to abut terminally against the switch-point, the plate being disposed flush with the upper faces of the ties and having its edges in sliding contact with the ties.

2. A device of the class described comprising spaced ties; switch-points movable thereon; a bridle connecting the switch-points; and a plate secured to the bridle and having its upper face flush with the upper faces of the ties and entirely housing that portion of the bridle which is between the ties and between the switch points.

3. A device of the class described comprising spaced ties; switch-points movable

thereon; a bridle connecting the switch-points; a plate secured to the bridle flush with the upper faces of the ties and constituting a complete closure for the area defined by the switch-points and the ties; and an anti-friction device connecting the ties and constituting a support for the bridle.

4. A device of the class described comprising spaced ties cut away upon their upper faces at their adjacent edges to define seats; switch points slidable upon the ties; a bridle connecting the switch-points; a plate secured to the bridle and slidable in the seats flush with the upper faces of the ties, the plate constituting a complete closure for the area defined by the switch-points and the ties.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JAMES R. MERRITT.

Witnesses:

R. B. KELLEY,
F. H. BERBERICH.