

G. W. PAINE.
Railway-Switches.

No. 152,405.

Patented June 23, 1874.

Fig. 1.

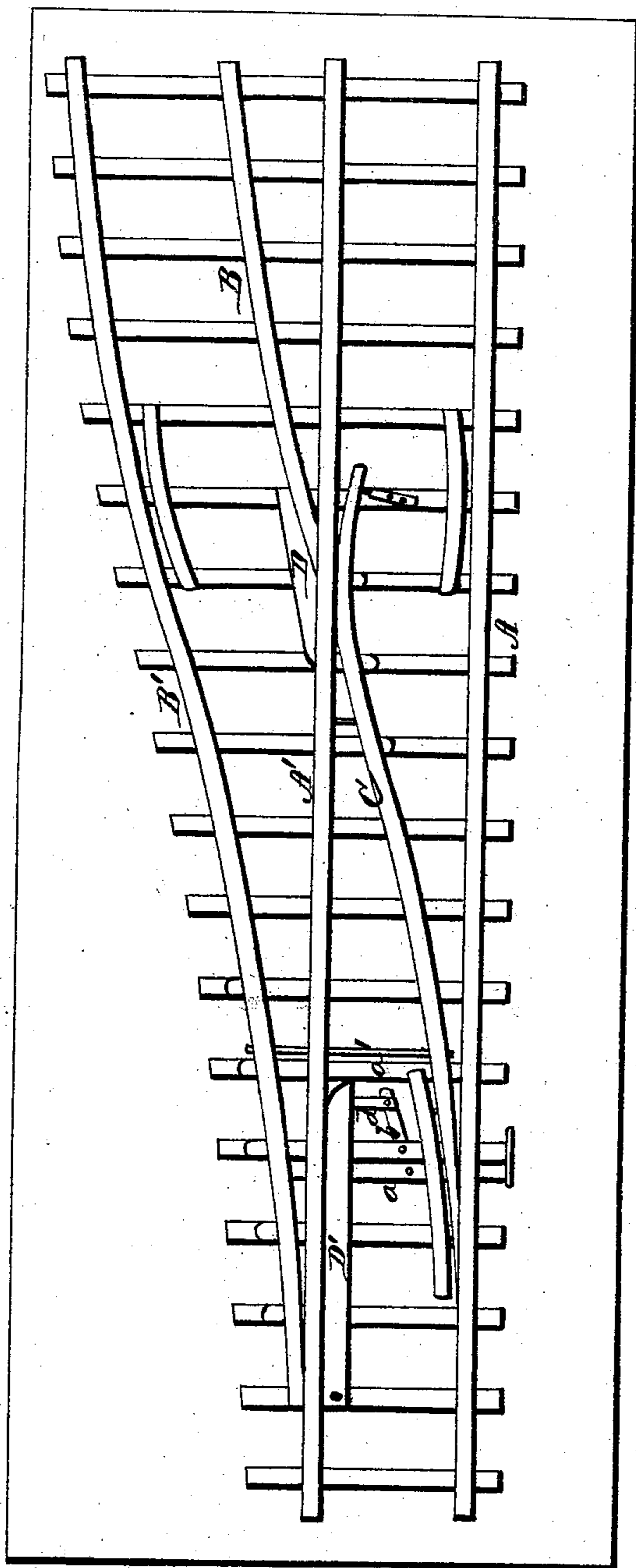
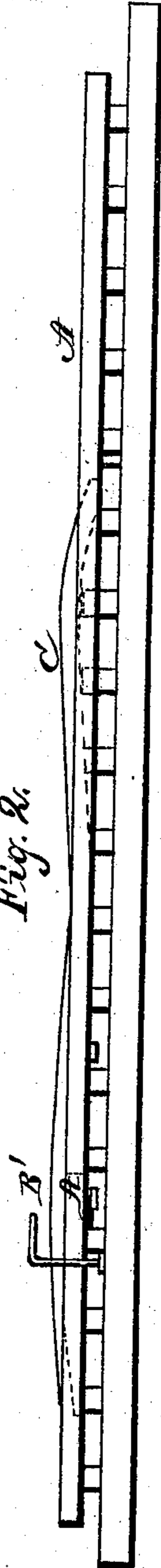


Fig. 2.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE W. PAINE, OF CALERA, ALABAMA.

IMPROVEMENT IN RAILWAY-SWITCHES.

Specification forming part of Letters Patent No. **152,405**, dated June 23, 1874; application filed April 20, 1874.

To all whom it may concern:

Be it known that I, GEORGE W. PAINE, of Calera, in the county of Shelby and in the State of Alabama, have invented certain new and useful Improvements in Railroad-Switch; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a railroad-switch, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view, and Fig. 2 a side view, of my invention.

A A' represent the rails of the main track, B B' are the rails of the side track, and C is the switch-rail between the main rails A A'. At the point where the side rail B comes in contact with the main rail A' is placed a beveled block or bar, D, along the outer side of the rail A' and inner side of the rail B; and the end of the switch-rail C at this point is elevated on an incline sufficiently to carry the flanges of the car-wheels over the top of the rail A'. Hence, when a car is to turn into the side track, the wheel is carried, by the inclined switch-rail C, over the main rail A', and it then passes down the incline D till the tread of the wheel comes on the side rail B. In like manner the end of the rail B' is ele-

vated on an incline to carry the car-wheel flange on that side over the main rail A', and on the inner side of said main rail at this point is a beveled or inclined block or bar, D', for the same purpose as the block D. The ends of the rails B' and C are connected by means of rods or bars *a a'*, and the bar *a* is connected with any suitable switch apparatus.

On one of the ties is pivoted a bar, *b*, one end of which is pivoted to the bar *a*, and the other end, by a rod, *d*, connected with the end of the inclined bar D', the other end of said bar being pivoted to one of the ties. When the switch is closed, as shown in Fig. 1, the block or bar D' is held close to the inner side of the rail A'; but by opening the switch the bar D' is at the same time turned so that its high end will be sufficiently removed from said rail A' to allow the flange of the wheel to pass between them. By this construction the main rails may be left entirely unbroken, and no frogs are needed.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with unbroken main rails A A', of the inclined elevated side rails B B', beveled pivoted block D', block D, switch-rail C, and bars *a b d*, all substantially as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of March, 1874.

G. W. PAINE.

Witnesses:

C. C. OLIVER,
JOHN BROWN.