(No Model.)

J. T. RICHARDSON.

Railroad Switch.

No. 229,754. Patented July 6, 1880.

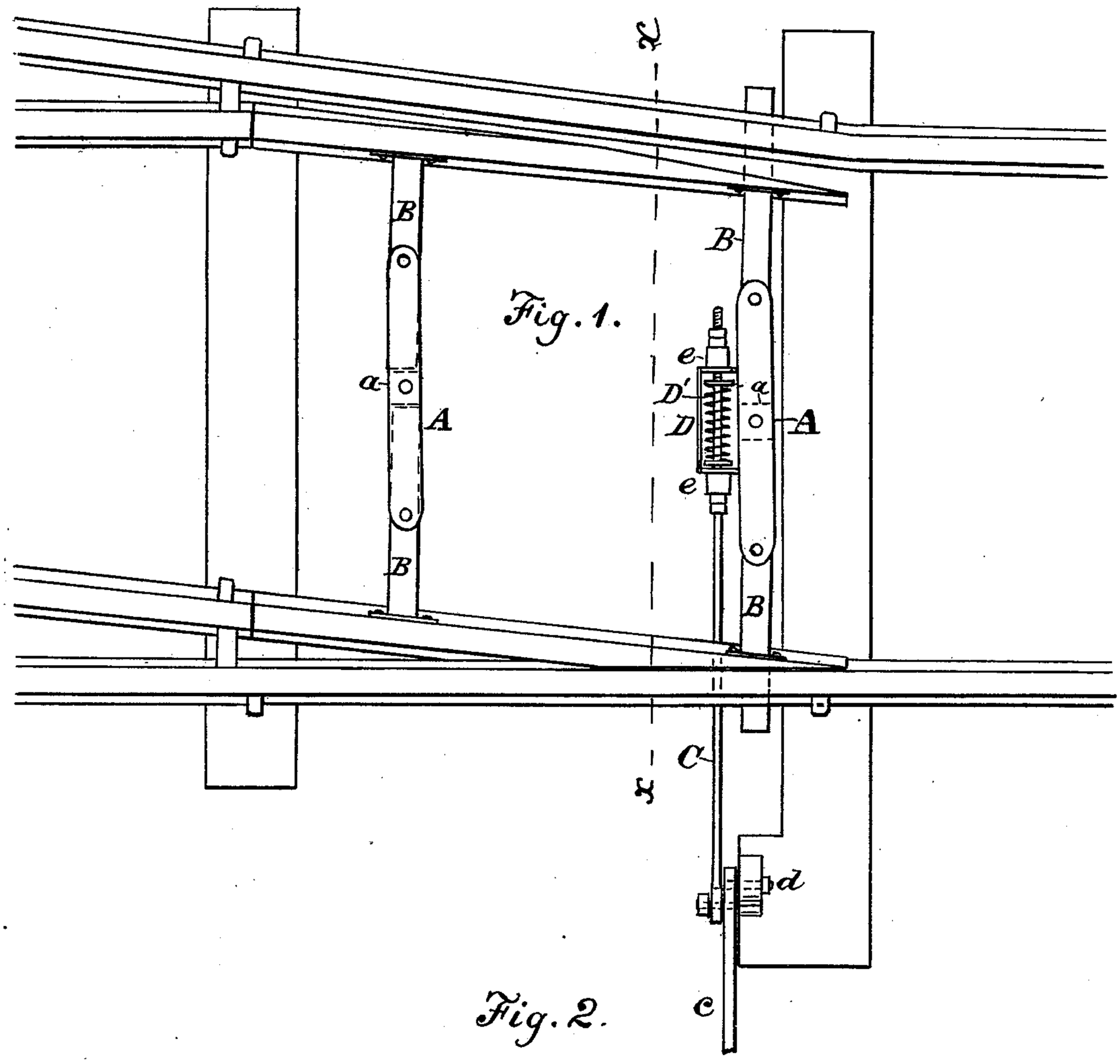

Fig. 1.

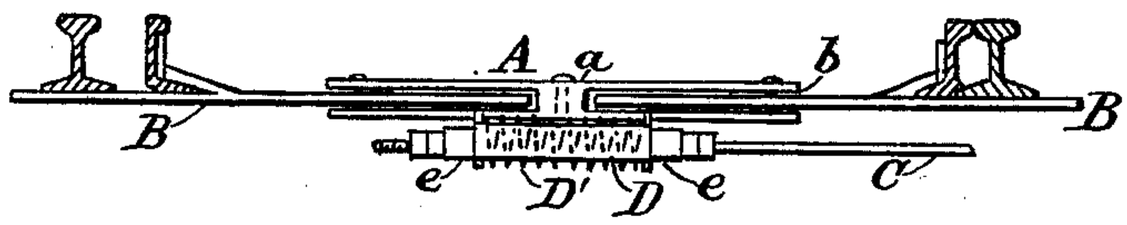

Fig. 2.

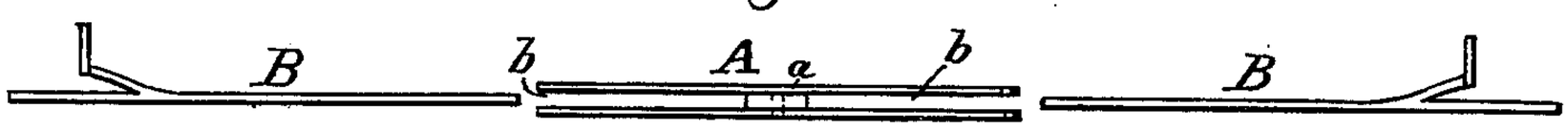

Fig. 3.

Witnesses:
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UNITED STATES PATENT OFFICE.

JOHN T. RICHARDSON, OF HARRISBURG, PENNSYLVANIA, ASSIGNOR TO PENNSYLVANIA STEEL COMPANY.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 229,754, dated July 6, 1880.

Application filed May 21, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. RICHARDSON, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a plan view of my improved railroad-switch. Fig. 2 is a transverse section taken in the plane *x x* of Fig. 1, and Fig. 3 is a view of a central brace and connecting-bars detached from the point-rails.

Like letters in all the figures of the drawings indicate like parts.

This invention has reference to the jointed connections for securing the movable point-rails of a railroad-switch; and it consists of a central transverse brace formed with slots extending out each way from the solid middle portion thereof, with connecting-bars rigidly attached at one end to the point-rails and extending into the said slots and pivoted to the ends of the said brace, so as to form a stiff-jointed connection vertically between the point-rails, and thus cause them to maintain an upright position, and at the same time allow the connecting-bars a free play in the slots of the brace during the movement of the point-rails, as will be hereinafter more particularly explained.

A A are central parallel braces, consisting each of two plates riveted to a center piece or block, *a*, to form the slots *b b* on each side of the piece. (See Fig. 3.)

B B are the connecting-bars, which are rigidly attached, by means of T-shaped ends and rivets, to the webs of the point-rails, and made to extend into the slots of the braces as far as the center pieces, *a*, and secured by pivots to the ends of the braces, which, in connection with the bars, form stiff-jointed connections vertically between the point-rails, thus preventing any lateral yielding or turning over of the point-rails, and causing them to maintain a steady upright position during their movement or otherwise, and at the same time allowing the bars a free horizontal movement in the slots of the braces, according to the movement of the point-rails.

C is the usual operating switch-rod, connected with a lever, *c*, having its fulcrum at *d*.

D′ is a spring-holder attached to the lower edge of a brace, and provided with sleeves *e e*, through which and a spiral spring, D, the rod passes, screw-nuts being placed on the rods to regulate the tension of the spring.

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

1. A railroad-switch having a central transverse brace formed with slots extending each way from the solid middle portion, with connecting-bars rigidly attached at one end to the point-rails and extending into the said slots and pivoted to the ends of the brace, substantially as and for the purposes set forth.

2. The parallel braces A A, consisting each of two plates riveted to a center piece, *a*, to form the slots *b b*, in combination with the connecting-bars B B, attached at one end to the point-rails and pivoted to the ends of the braces, substantially as set forth.

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

JOHN T. RICHARDSON.

Witnesses:

GEO. W. PARSONS,

M. L. HARRINGTON.