(No Model.)

W. C. MEEKER.

RAILROAD SWITCH.

No. 370,274. Patented Sept. 20, 1887.

Fig. 1.

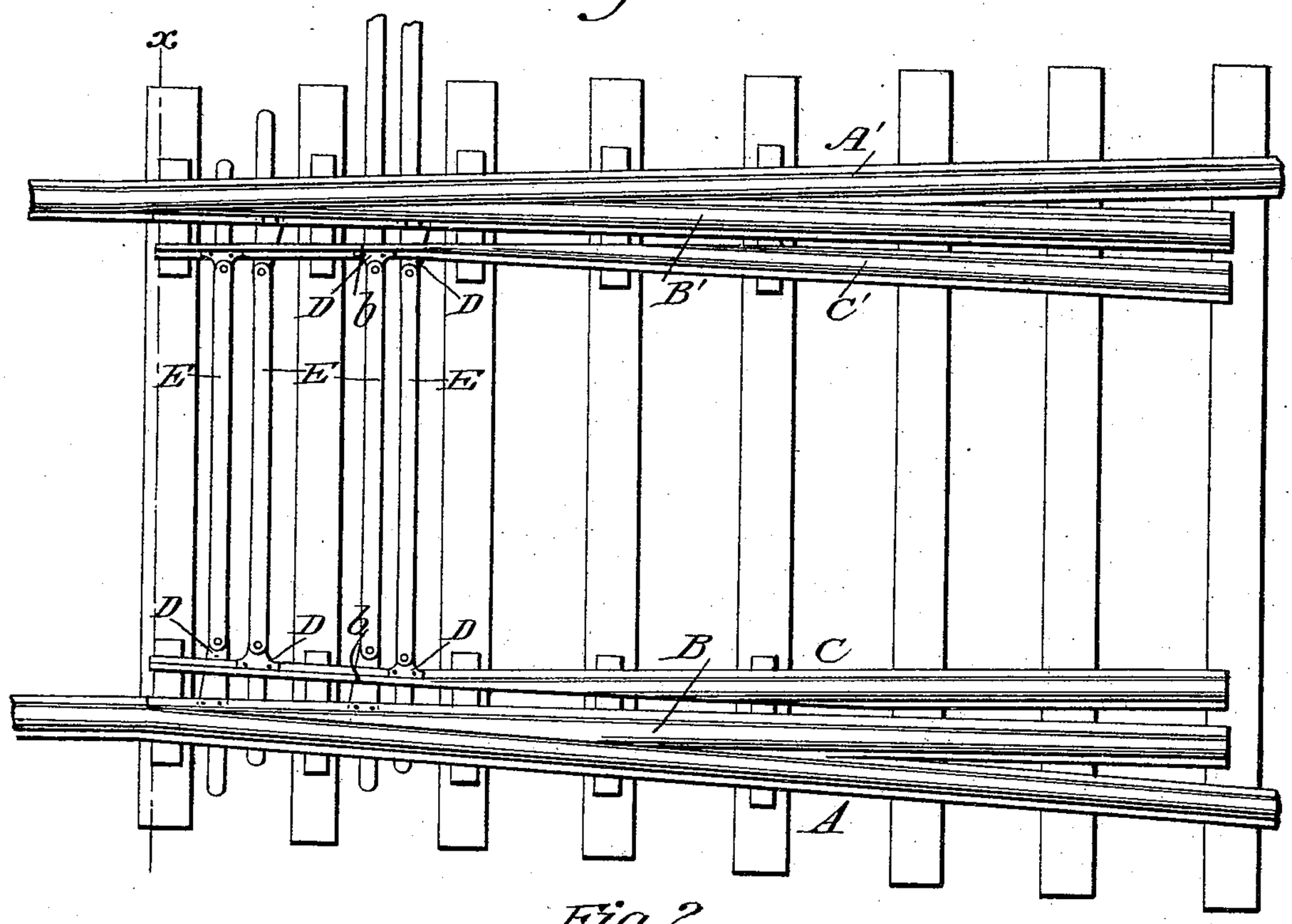


Fig. 2.

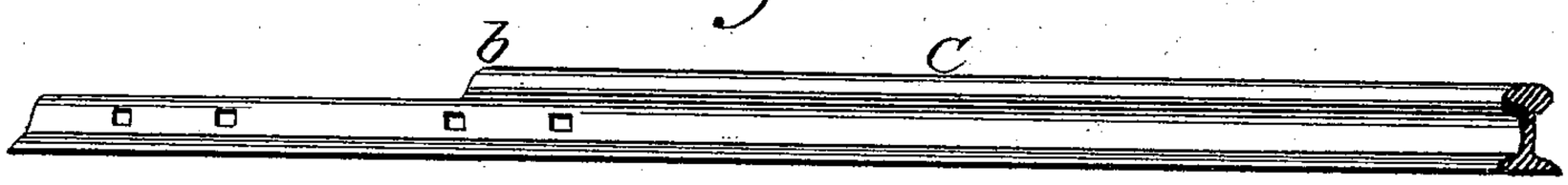


Fig. 3.

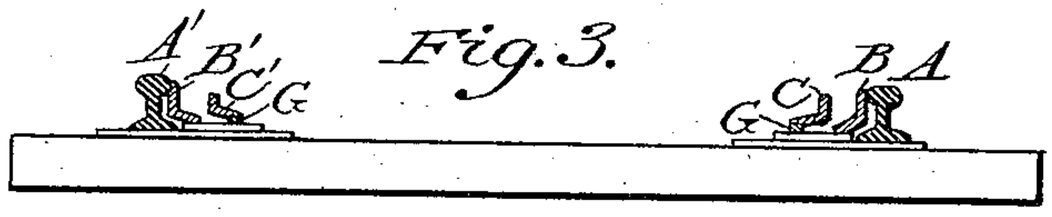
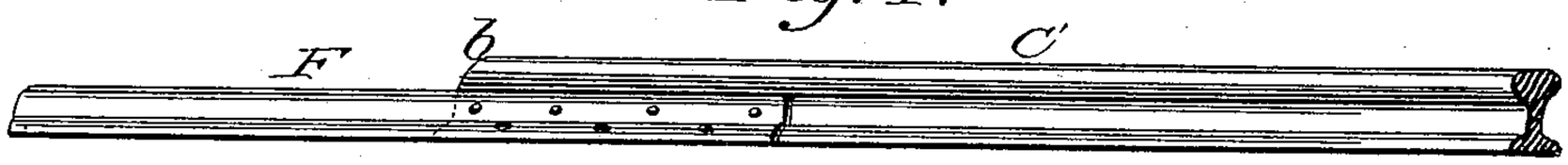


Fig. 4.



Witnesses:
Thomas R. Brown
B. Tinsell.

Inventor:
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UNITED STATES PATENT OFFICE.

WALTER C. MEEKER, OF JERSEY CITY, NEW JERSEY.

RAILROAD-SWITCH.

SPECIFICATION forming part of Letters Patent No. 370,274, dated September 20, 1887.

Application filed December 20, 1886. Serial No. 222,122. (No model.)

To all whom it may concern:

Be it known that I, WALTER C. MEEKER, a citizen of the United States of America, and a resident of Jersey City, Hudson county, State of New Jersey, have invented new and useful Improvements in Railroad-Switches, of which the following is a specification.

My invention relates to railroad split switches, and more particularly to that class known as "double-throw" or "three-way" split switches; and it consists of certain novel features and combination of parts, hereinafter fully described.

Figure 1 represents a plan view of a double-throw split switch, but with a part of the tie-rods left off. Fig. 2 is a side elevation of point-rails C and C'. Fig. 3 is a cross-section of Fig. 1 on line *x x*. Fig. 4 is a side elevation of point-rails C and C' extended by means of angle-iron.

In Fig. 1, A and A' are what are termed the "main rails," and each form one rail of the turn-out to the right and left, respectively, when said turn-outs are arranged one from each side of the main track, and they are so arranged in Fig. 1. Point-rails B and B' then become the main-track points, because when they are closed against the main rails A and A' the switch is right for the main track.

C and C' are the turn-out points, which, together with the main rails A and A', form the right and left hand turn-outs, respectively.

The point-rails B and C' are connected by the lugs D and switch-bars E, and the point-rails B' and C are connected in the same manner. The lugs or ears on points B and B', to which bars E are connected, are preferably formed of flat iron and secured to the flange of said points, and of sufficient length to allow the free movement of points C and C' over them without striking the ends of bars E, and the said connections are so arranged as to prevent any difficulty in the operation of the switch which might arise from any ordinary lateral movement of the point. To the under side of the points C and C' is secured a piece of iron or steel, G, of sufficient thickness to raise said points, so that the flanges will move freely over or on top of the flanges of points B and B', respectively.

In a double-throw split switch all the point-rails should be of the same length theoretically, but practically they should not; hence they are made with inner points about two to three feet shorter than the outer or main-track points. While this mode of construction has proved the more practical, yet it has its disadvantage in that the part of the longer points which extends beyond the shorter ones cannot be braced or held with the switch-rod, and it being the thinnest part of the point is more liable to spring and break. Now, my invention has all the advantages of the long and short points in practice, as well as those of the even points in theory, and obviates the difficulty of springing and breaking of the long points. I accomplish this by making the points B, B', C, and C' all approximately the same length, and then in planing or forming the heads of the point-rails C and C', terminating the points at *b*, or at any desired distance, shorter than the rails B and B', leaving the web and flange to continue to end of points B and B', as shown in Fig. 2, thus affording space to connect the points of rails C and C' to their opposite points, B and B', at or near the extreme ends, as shown in Fig. 1, thereby giving stiffness to the long points and prevent breaking. The same invention applies equally as well to that class of single-throw split switches which are made with a long and short point.

For convenience in altering the present long and short point switches, the short points may be extended by bolting or riveting on a piece of angle-iron, F, as shown in Fig. 4.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a three-way split switch, the rail-points B, B', C, and C', of equal length, the said points being connected, respectively, by connecting-rods E, and having the head or top of the rails C and C' removed to a sufficient length to allow the flanges of a wheel to pass over, substantially as and for the purpose specified.

2. In a three-way switch, the points C and C', having the web and base extended a sufficient distance beyond the point of rail-head to permit the connection on said web or base so extended of the rod E, in order to be attached to the opposite points, B and B', respectively, substantially as described, and for the purpose specified.

3. The point or points of a railway-switch, having the web or flange extended beyond the head a sufficient distance to admit of the connection of a bar to said web or flange so extended, in combination with a rising piece, G, substantially as shown and described.

4. The point or points of a railroad-switch, having the web or flange extended beyond the head a sufficient distance to admit of the connection of a bar to said web or flange so extended, said point or points being provided with the rising piece G, and in combination with the tie-bars E, suitably secured thereto, substantially as shown and described.

5. The point or points of a railroad-switch, having their web or flange extended beyond the head a sufficient distance to admit of the connection of a bar to said web or flange so extended, said points being provided with the rising piece G and the tie-bars E, suitably secured thereto, in combination with the points B and B′ and the lugs D, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 18th day of December, 1886.

W. C. MEEKER.

Witnesses:
JOHN L. KELLER,
BOBT. LIGHTFOOT.