

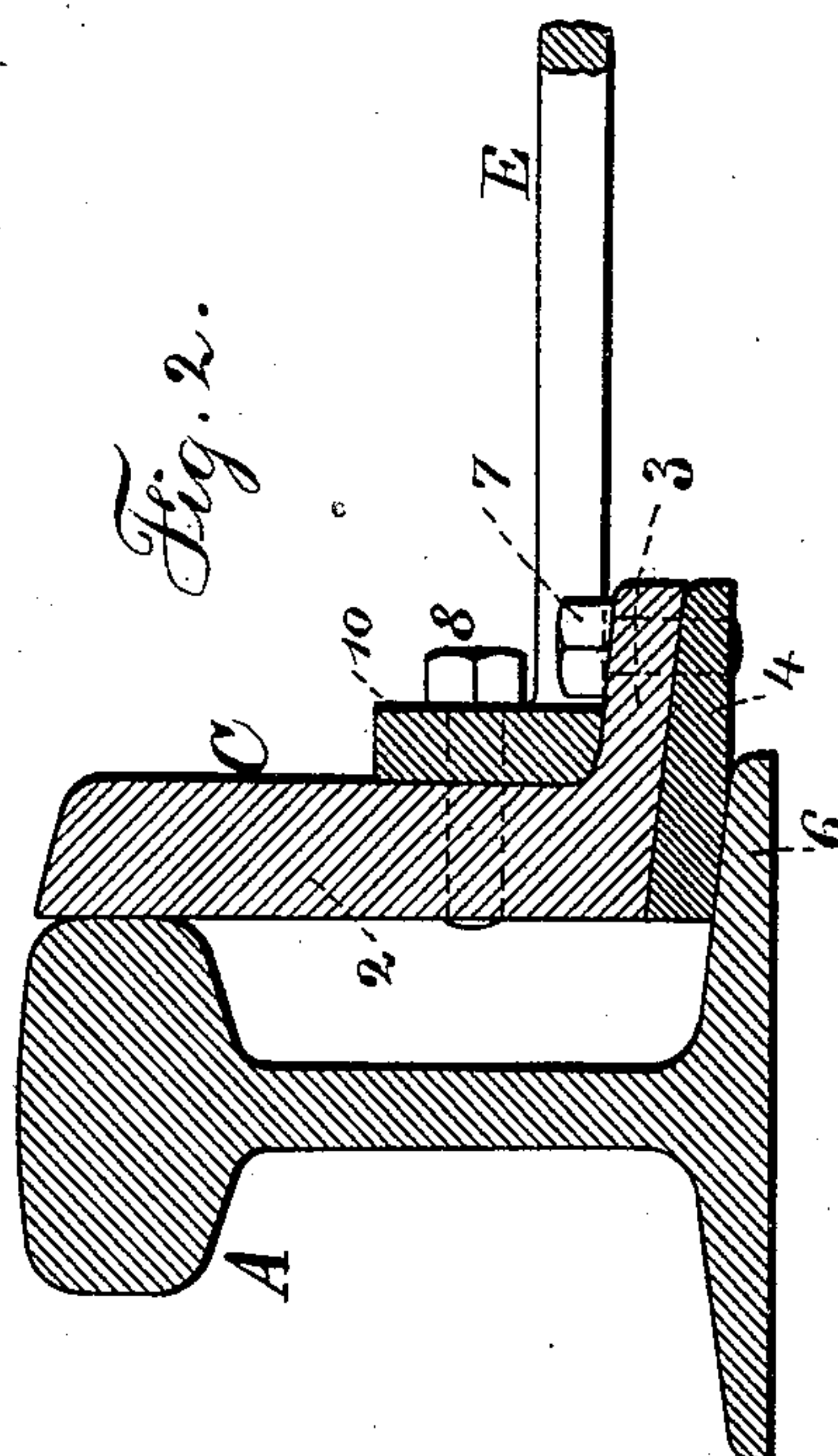
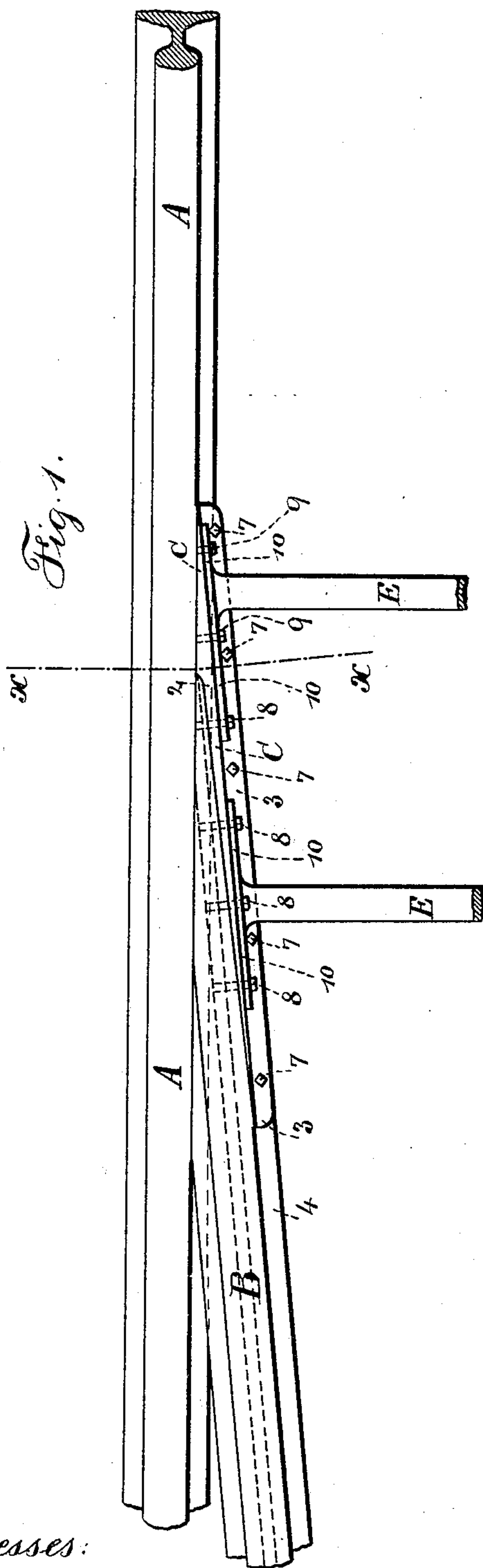
(No Model.)

T. G. PALMER.

POINT FOR SWITCH RAILS.

No. 397,306.

Patented Feb. 5, 1889.



Witnesses:
J. Stait.
Chas. H. Smith

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UNITED STATES PATENT OFFICE.

TIMOTHY G. PALMER, OF SCHULTZVILLE, NEW YORK.

POINT FOR SWITCH-RAILS.

SPECIFICATION forming part of Letters Patent No. 397,306, dated February 5, 1889.

Application filed November 17, 1888. Serial No. 291,115. (No model.)

To all whom it may concern:

Be it known that I, TIMOTHY G. PALMER, of Schultzville, in the county of Dutchess and State of New York, have invented an Improvement in Points for Switch-Rails, of which the following is a specification.

Switch-rails have heretofore been made with a beveled or wedge-shaped end to come in contact with the side of the main rail in railway-tracks, for changing the direction of the wheels passing along the track and causing the same to pass upon the switch. In switches of this character the point or end of the switch-rail is subject to considerable wear and concussion from the passing wheels and the point rapidly becomes injured, and the entire switch-rail has to be replaced.

The object of my invention is to provide a removable point for the end of the switch-rail, so that such point may be made of steel or other durable metal, and the point can be taken off and replaced with facility whenever the same becomes worn.

In the drawings, Figure 1 is a plan view representing one rail of the main track and one of the switch rails or bars adjacent thereto with my improved point upon the same, and Fig. 2 is a section in larger size at the line *xx*.

The main rail A is of ordinary character and forms one side of the track, and the switch-rail B is applied between the rails of the track, and is to be moved toward or from the main rail A in any convenient manner, and the entire switch, except my improved removable point, is similar to those that have heretofore been made use of.

The end of the rail B is beveled at the desired angle, so that the beveled portion will lie against one side of the main rail A, and my improved switch-point C is made with the vertical flange 2 and a horizontal flange, 3, that rests upon the flange 4 of the switch-rail B, and it is to be understood that this flange 4 is allowed to continue to the extreme end of the removable switch-point C; but the head and stem of the switch-rail B terminate at or near the line *xx*, Fig. 1, and the vertical portion 2 of the removable switch-point continues beyond the line *xx*, and it is beveled at one side to set closely against the rail A, and the wheels as they run upon the track A

pass upon the top edge of the flange 2 and continue along upon the same until they finally rest upon the top of the switch-rail B.

It is usual to allow the flange 4 of the switch-rail B to rest upon the flange or base 6 of the rail A, as indicated in Fig. 2, so as to form a firm support for the switch-rails at this end of the switch, and in order to connect the removable point C with the switch-rail B, I make use of the vertical bolt 7, passing through the flange 3 into the flange 4, and also bolts 8, that pass through the flange 2 into the body of the switch-rail B, and it is usual to connect the moving ends of the switch-rails B together by cross-bars E. I make use of such cross-bars E, and upon the ends thereof are the T-heads or flanges 10, through which the bolts 8 pass, and it is also preferable to make use of the bolts 9, that pass through one of the flanges or T-heads 10 into the vertical flanges 2 of the removable switch-point C, near the end thereof.

It is now to be understood that this removable switch-point receives the concussion of the wheels as they pass from the main track upon the switch-rails, and that the removable point can be unbolted from the switch-rail and a new point substituted whenever it becomes necessary to change such switch-point; but in so doing it is unnecessary to make any change in the switch-rail itself, and these switch-rails usually are adapted to wearing as long as the rails of the main track, except at the points where they become battered and injured, as before expressed, my removable point allowing for the removal of the injured portion and the introduction of the new point, thus effecting a saving and lessening the time occupied in repairing the switches.

I claim as my invention—

1. The combination, with the switch-rail B, of a removable point having an inclined side adjacent to the main rail of the track, and bolts for connecting the removable point to the switch-rail, substantially as set forth.

2. The combination, with the switch-rail B, of a removable point, C, having a vertical flange, 2, one side of which is beveled and adapted to set against the main rail of the track, and a flange, 3, resting upon the flange 4 of the switch-rail, and bolts for securing the

removable switch-point to the flange and body of the switch-rail, substantially as set forth.

3. The combination, with the switch-rail B and the tie-rods E, having T-heads, of the re-
5 movable switch-point C, adapted to rest upon the flange 4 of the rail B, and the bolts 7, 8, and 9, for connecting the removable point to the switch-rail and for connecting the bars E

to the removable point and switch-rail, substantially as set forth.

Signed by me this 9th day of November, 1888.

T. G. PALMER.

Witnesses:

GEO. T. PINCKNEY,
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