

(No Model.)

S. R. BLIZZARD.
FOOT GUARD FOR RAILROAD TRACKS.

No. 462,196.

Patented Oct. 27, 1891.

Fig. 1.

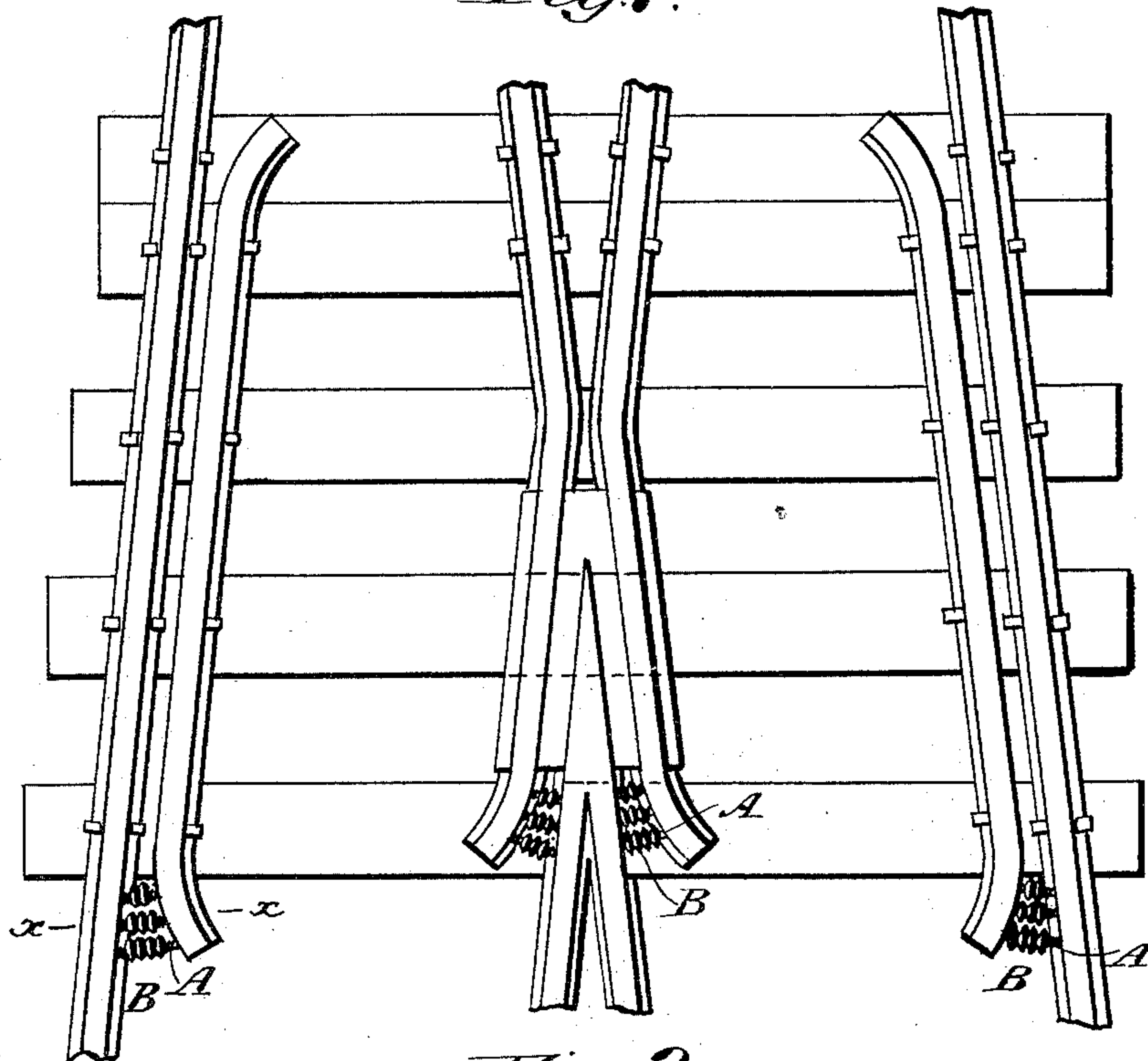


Fig. 2.

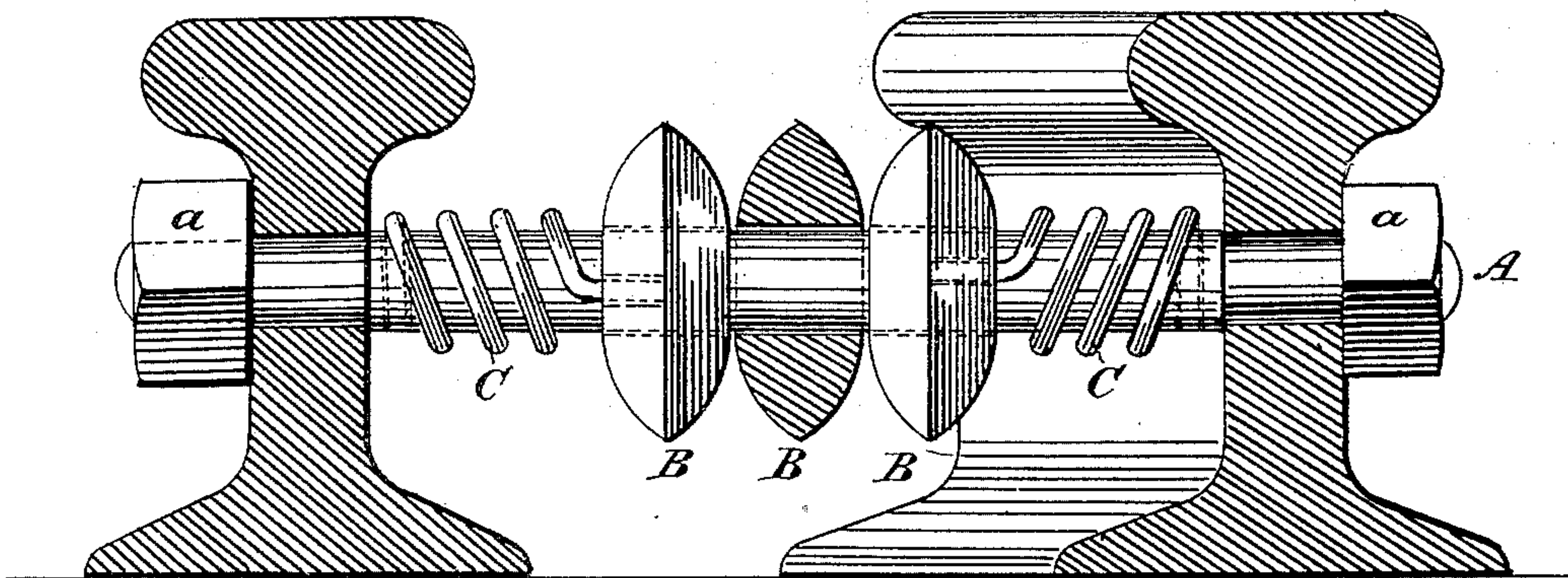
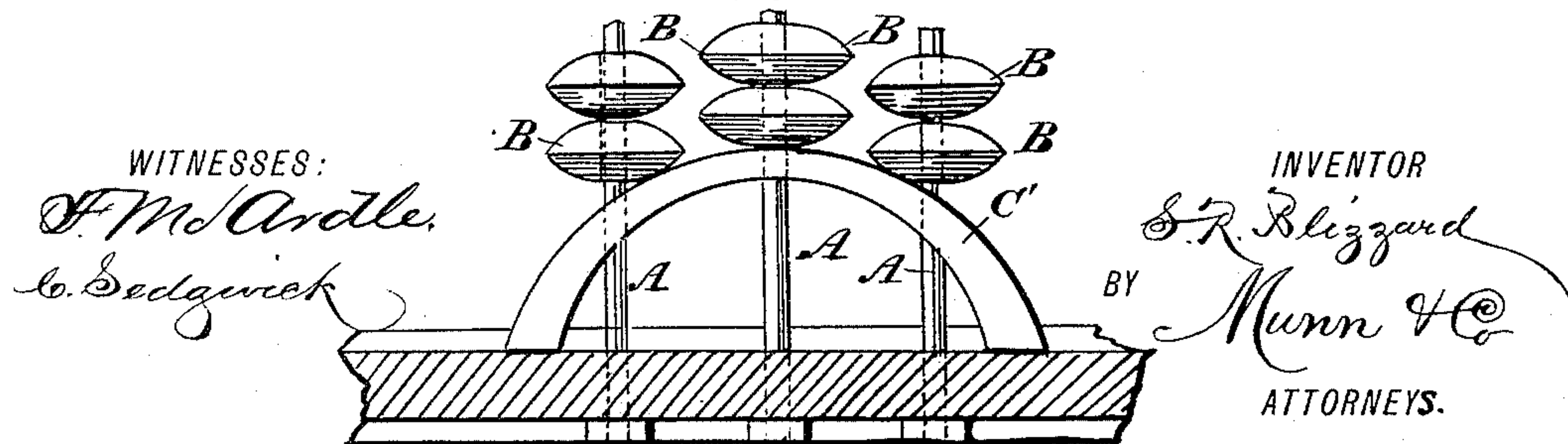


Fig. 3.



WITNESSES:

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FOOT-GUARD FOR RAILROAD-TRACKS.

SPECIFICATION forming part of Letters Patent No. 462,196, dated October 27, 1891.

Application filed May 20, 1891. Serial No. 393,425. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN R. BLIZZARD, of Lincoln, in the county of Lancaster and State of Nebraska, have invented a new and
5 Improved Foot-Guard for Railway-Tracks, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a plan view of a portion of a
10 railway-track to which my improvement has been applied. Fig. 2 is an enlarged transverse section taken on the line $x x$ in Fig. 1, and Fig. 3 is a modified form of my improvement.

15 Similar letters of reference indicate corresponding parts in all the views.

The object of my invention is to construct a guard for application to the wedge-shaped spaces between the ends of railway-frogs and
20 between guard-rails and the main rails and other places where a person's foot is liable to be caught.

My invention consists in the combination, with the rail-frog or the guard and main rail,
25 of rods passing through the rails and provided with rollers or washers and springs for pressing the rollers together, the said rollers forming a barrier to the opening of the frog or guard-rail, which will prevent the foot from
30 entering into the space between the rails.

Screw-threaded rods A are inserted in the webs of the rails and held in position by nuts a at points where the frog-rails or the guard-rails diverge. As many rods A are inserted
35 in this position as are required to guard the divergent opening against the entrance of a person's foot into the said opening. Upon the rod A are placed rollers B, which slide freely on the rod, and which are pressed outwardly away from the webs of the rails by
40 spiral springs C, surrounding the rod A, abutting against the web of the rails and inserted in holes in the outer rollers of the series.

As the locomotive and cars pass over the frog or over a portion of the main rail adjoining the guard-rail, the flanges of the locomotive and car wheels press the rollers B laterally away from the rails, thereby avoiding injury to the guard. As soon as the train has passed, the springs C return the rollers B to
45 their former position.

To prevent the car-wheels from riding upon the peripheries of the rollers B, the said rollers are provided with convex sides and V-shaped peripheries, as shown. When the
55 rollers are in their normal position, they form a sufficient barrier in the divergent opening of the rail to prevent the entrance of a foot between the rails.

In the modification shown in Fig. 3 the
60 curved spring C' is substituted for the spiral springs C, the said spring being perforated to allow the rods A to pass through it. The operation of this modification is the same as that already described.

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

1. The combination, with the divergent ends of the rails of a railway-frog or guard-rail, of one or more rods placed across the divergent space, a series of rollers placed on the said rod, and springs for holding the rollers in a central position, substantially as specified.

2. In a foot-guard for railway-rails, the combination of a rod A, a series of rollers B,
75 having V-shaped peripheries, and springs C, placed on the rod A and bearing in opposite directions upon the series of rollers B, substantially as specified.

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Witnesses:

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