

SKINNER & GIFFORD.  
Railroad Frogs.

No. 139,271.

Patented May 27, 1873.

Fig. 1.

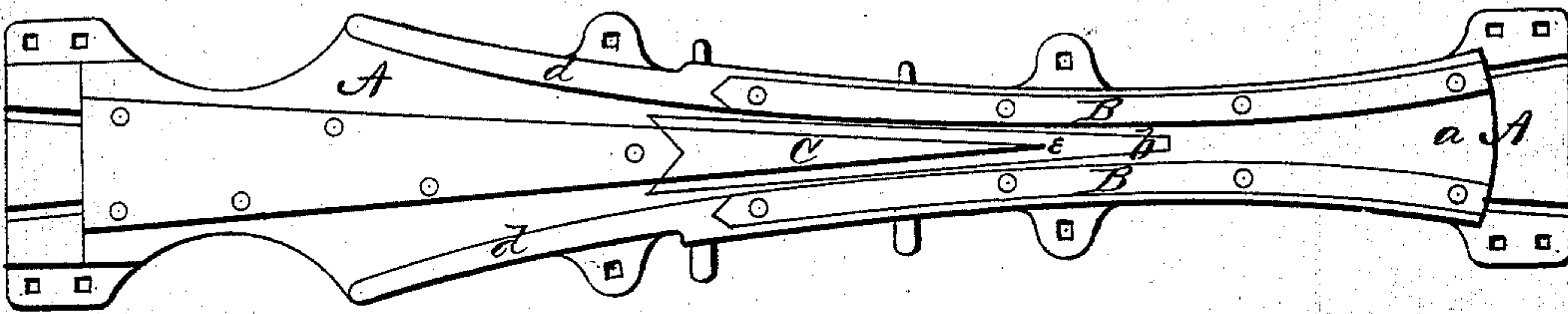
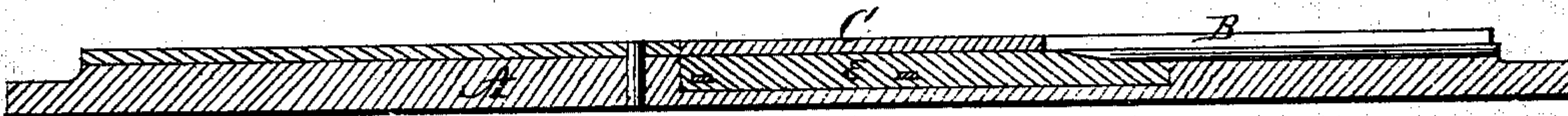


Fig. 2.



Witnesses  
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# UNITED STATES PATENT OFFICE.

HENRY J. SKINNER AND SAM. J. GIFFORD, OF DUNKIRK, NEW YORK.

## IMPROVEMENT IN RAILROAD FROGS.

Specification forming part of Letters Patent No. **139,271**, dated May 27, 1873; application filed March 20, 1873.

*To all whom it may concern:*

Be it known that we, HENRY J. SKINNER and SAM. J. GIFFORD, of Dunkirk, in the county of Chautauqua and State of New York, have invented certain new and useful Improvements in Railroad Frogs; and we do hereby declare that the following is a full, clear, and exact description thereof that 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 the letters of reference marked thereon, which form a part of this specification.

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

In the accompanying drawing, Figure 1 is a plan view, and Fig. 2 a longitudinal vertical section of our railroad frog.

A represents the bed of the frog. B B are the rails; C the point; and *a* the channels through which the flange of the wheel passes. The bottom of the channel *a* is rounded, corresponding in shape with the flange of the wheel, which is thereby enabled to force ice and snow from the channel, and also to bear part of the weight, and keep the tread of the wheel from bearing with full force on the point C as it comes to it. The channel *a* has a narrow throat at *b*, which gradually throws the wheel forward to clear the point, preventing wear. The track or rails B B are on a perfect or true curve, and are provided with long wing-guards *d*, to prevent the wheel

from striking at that end, and gradually draw the wheel into the channel. The point C is welded to a bed-piece, *e*, and this is fastened to the bottom or bed A of the frog, said bed or bottom A having round or square recesses in the under surface to receive the rivet-heads, leaving a smooth surface to rest on the ties.

The general shape and form of the frog as shown and described make it impossible for the flange of the car-wheel to directly strike any point of the frog, thus preventing wear and accidents, the wheel going onto the frog gradually.

We are aware that a railroad frog having rails made upon a curve is not new, and we do not therefore broadly claim such device; but

Having thus fully described our invention, what we do claim and desire to secure by Letters Patent, is—

In a railroad frog the channel *a* rounded to conform to the shape of the flange of the wheel, and partially support the same, and the gradually-rising point from *b* to *e* used in connection with the curved rails B B, having the narrow throat at *b*, all constructed and arranged as and for the purpose specified.

In testimony that we claim the foregoing we have hereunto set our hands.

HENRY J. SKINNER.  
SAM. J. GIFFORD.

Witnesses:

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