

(No Model.)

F. C. WEIR.
RAILWAY FROG.

No. 398,205.

Patented Feb. 19, 1889.

Fig. 3.

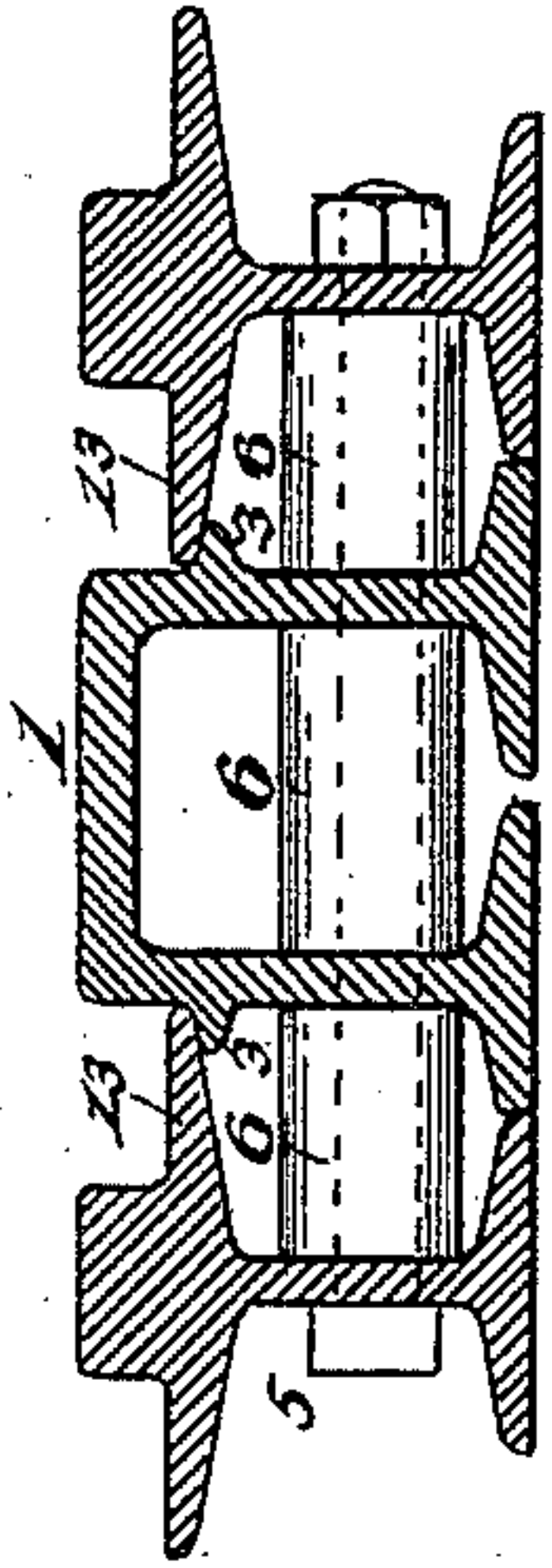


Fig. 2.

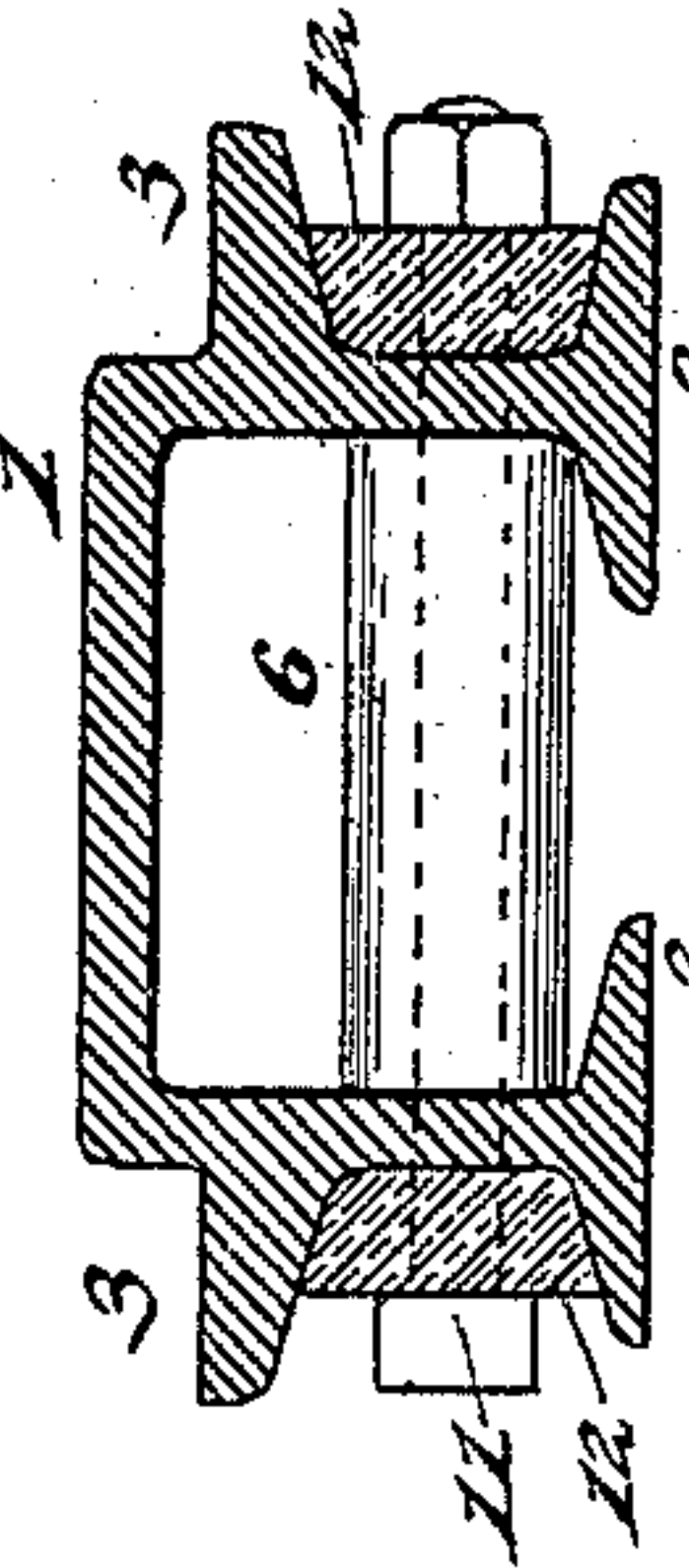


Fig. 1.

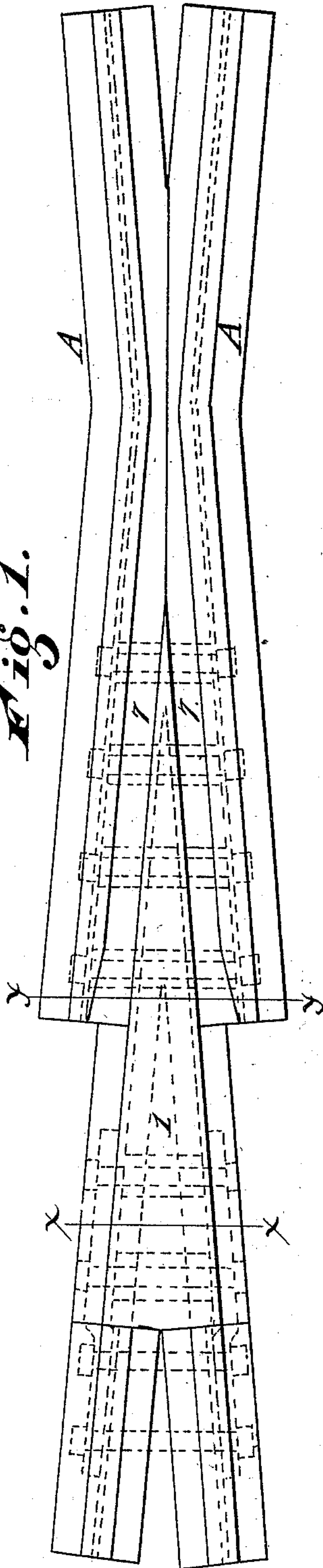
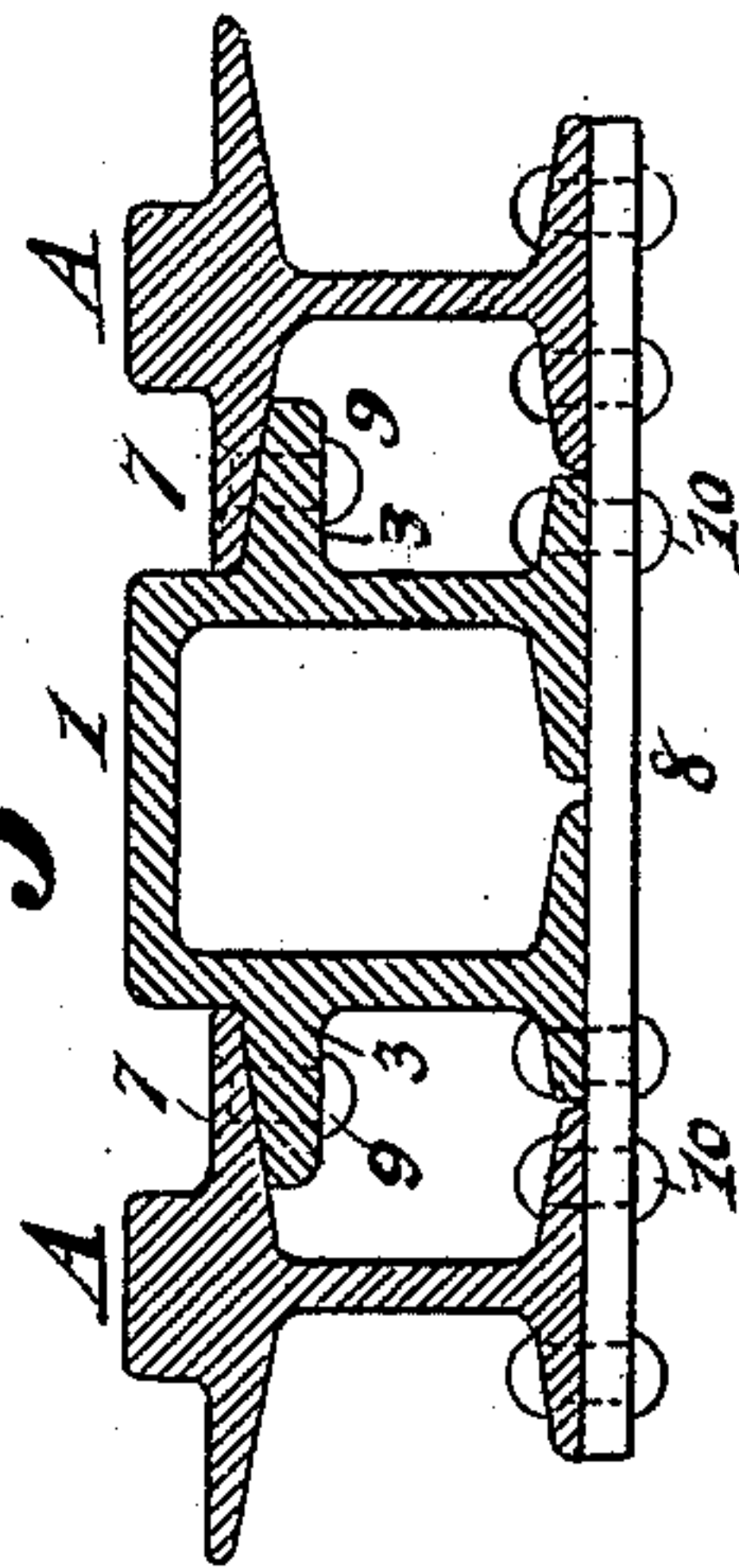


Fig. 4.



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UNITED STATES PATENT OFFICE.

FREDRIC C. WEIR, OF CINCINNATI, OHIO.

RAILWAY-FROG.

SPECIFICATION forming part of Letters Patent No. 398,205, dated February 19, 1889.

Application filed May 24, 1888. Serial No. 274,973. (No model.)

To all whom it may concern:

Be it known that I, FREDRIC C. WEIR, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Railway-Frogs, of which the following is a specification.

This invention relates to the construction of a frog of girder-rails adapted to street-railways.

The object of my invention is to provide a strong durable frog which can be cheaply and readily constructed, and one which will stand the strain and wear occasioned by the cars or loaded teams passing over the rails.

The various features of my invention will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 is a top plan view of my improvement. Fig. 2 is a section on line *x x*, Fig. 1. Fig. 3 is a section on line *y y*, Fig. 1. Fig. 4 is a modification of Fig. 3.

The point of the frog is constructed on the U-shaped casting 1, provided with flanges 2 2 for forming a base-support for said point.

3 3 represent flanges for wing-supports for the girder-rails. These flanges 3 3 form a tramway to points in rear of the guard-rails.

A A represent the guard or wing rails, which are bent to the desired angle and secured to the U-shaped point 1 by means of through-bolts 5 and thimbles or spacing-blocks 6, which are provided with holes to receive said through-bolts.

A modification of the above construction is shown in Fig. 4, in which the flanges 3 of the U-point are bent so as to under or over lap, as desired, the flanges 7 of the girder-rails A.

9 represents rivets passing through said flanges 3 and 7, for uniting said guard-rails to the U-point.

8 represents a base-plate, and 10 rivets passing through the lower flanges of the girder-rails for securing them at their base to the base-plate 8. This form (shown in Fig. 4) of connecting the rails is substantially claimed

in the application of even date herewith, Serial No. 274,911. The U-point 1 is supported laterally by the thimble or spacing-block 6 and through-bolt 11, which passes through fish-plates 12, and through the webs of the U-point and spacing-block between the same. This forms a firm lateral support for the webs of the rail. At the same time the fish-plates are allowed to project for an attachment with the main rails of the track. The flanges 3 of U-point 1 are cut off between the car-rails A A as the flanges 13 of the wing-rails form the tramway, and they are only required at this point for the support of said tramways. They might, however, be extended with full length and width, as shown in Fig. 4, and when the through-bolts 5 are employed the rivets 9 are omitted.

Having described my invention, what I claim is—

1. The point of a railway-frog, composed of U-rail 1, provided with the base-support 2 and side flanges, 3, substantially as herein specified.

2. A railway-frog composed of the U-shaped point 1 and the side flanges, 3, in combination with the guard-rails A A, secured together by rivets or bolts, substantially as herein specified.

3. A railway-frog composed of the guard-rails A, having side flanges, the U-shaped point 1, having the lateral side flanges, 3, the through-bolts 5, and the spacing-blocks 6, located on the bolts between the point and guard-rails, substantially as described.

4. A railway-frog composed of the guard-rail A A, the U-point rail 1, provided with flanges 3, the side rails being secured together by through-bolts 5, substantially as herein specified.

In testimony whereof I have hereunto set my hand.

FREDRIC C. WEIR.

Witnesses:

ROBERT ZAHNER,
J. WATSON SIMS.