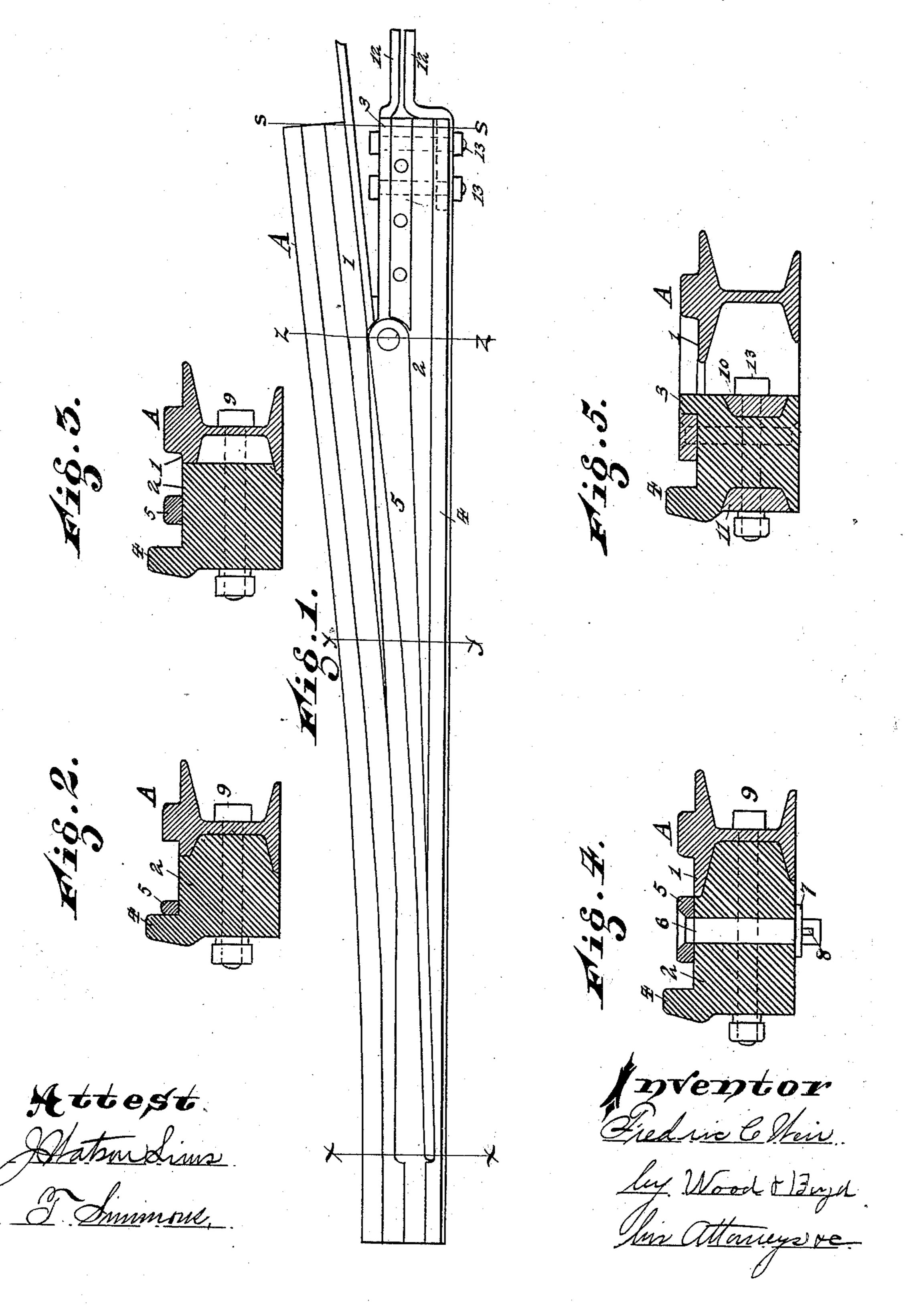
F. C. WEIR.

STREET RAILWAY SWITCH.

No. 398,204.

Patented Feb. 19, 1889.



United States Patent Office.

FREDRIC C. WEIR, OF CINCINNATI, OHIO.

STREET-RAILWAY SWITCH.

SPECIFICATION forming part of Letters Patent No. 398,204, dated February 19, 1889.

Application filed May 24, 1888. Serial No. 274,972. (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 Street - Railway Switches, of which the following is a specification.

My invention relates to the construction of a tongue-switch of girder-rails, such as are employed for street-railways. I prefer to employ center girder-rails, but do not limit myself to the use of center-bearing girder-rails.

The object of my invention is to provide a switch of center girder-rail and a built-up rail formed of the casting secured to said girder-rails and forming a strong durable switch-point, all of which will be fully set forth in the description of the accompanying drawings, making a part of this specification, in which—

Figure 1 represents a top plan view of my invention. 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 section on line z z, Fig. 1. Fig. 5 is a section on line s s, Fig. 1.

A represents a center girder-rail having its flange 1 cut off to form the desired taper.

2 represents a spacing and guard block. It is provided in the rear of the tongue with the 3° flange 3 and on the opposite side with the flange 4, the space between these flanges 3 and 4 being sufficient to allow of the movement of the tongue and form a flange for the car-wheels.

5 represents a switch-tongue secured to the casting 2 by a pivot-bolt, 6.

7 represents a washer, and 8 the key for fastening the bolt in place. The tongue is movable back and forth in the space between 40 the girder-rail A and the flange 4. The rail A is secured to the spacing and guard block 2 by means of through-bolts 9.

In order to attach the girder-rail to the

casting 2, I provide fish-plates 10 and 11, which are bent to form a yoke, 12, in rear of 45 said casting, as shown in Fig. 1. These fish-plates are secured by means of bolts 13 to the spacing and guard block 2 and form fish-plates for girder-rails attached between them.

By using the spacing and guard block 2 for 50 the support of the tongue-switch I obtain a strong durable support, and it serves as a spacing and support block for the outside guard of the switch-point and an abutment to which the girder-rail is firmly secured by 55 through-bolts, preventing the enlargement or spreading of the points of the frog. This form of construction is adapted to the springtongue as well as the hinged tongue.

Having described my invention, what I claim 60

1. A switch-point composed, substantially, of the girder-rail and guard and spacing block 2, provided with guard-flange 4, and secured together by means of through-bolts, substan- 65 tially as specified.

2. A switch-point composed, substantially, of the girder-rail and spacing and guard block 2, provided with flanges 3 and 4, secured together by through-bolts 9, substantially as 70 herein specified.

3. In combination with the girder-rail A and guard and spacing block 2, the fish-plates 10 and 11 for connecting the girder-rail to said casting-block 2, substantially as specified.

4. In combination with the girder-rail A, guard and spacing block 2, provided with flange 4, the switch-tongue 5, pivoted to said guard and spacing block, substantially as herein specified.

In testimony whereof I have hereunto set my hand.

FREDRIC C. WEIR.

Witnesses:

ROBERT ZAHNER,
J. WATSON SIMS.