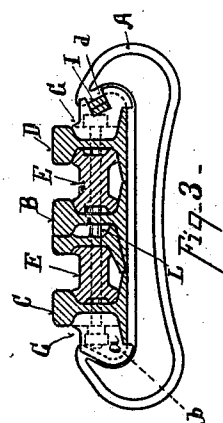
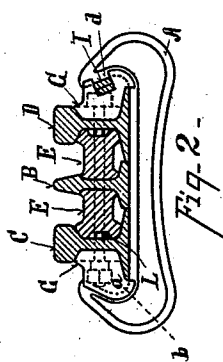
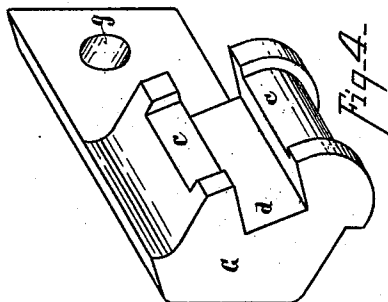
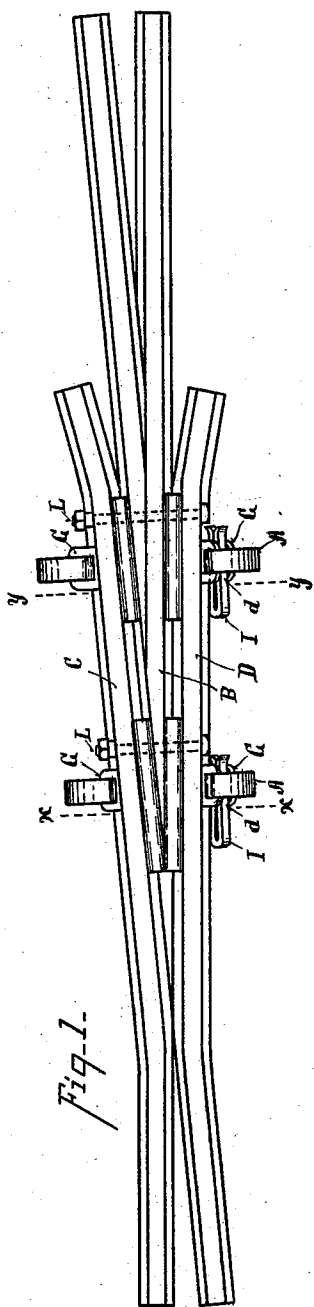


(No Model.)

F. C. WEIR.
CLAMP FOR RAILWAY FROGS.

No. 507,863.

Patented Oct. 31, 1893.



Witnesses
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UNITED STATES PATENT OFFICE.

FREDERIC C. WEIR, OF CINCINNATI, OHIO.

CLAMP FOR RAILWAY-FROGS.

SPECIFICATION forming part of Letters Patent No. 507,863, dated October 31, 1893.

Application filed March 21, 1893. Serial No. 467,048. (No model.)

To all whom it may concern:

Be it known that I, FREDERIC C. WEIR, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Clamps for Railway-Frogs, of which the following is a specification.

My invention relates to a clamp frog.

The object of my invention is to provide a firm, strong and durable clamping device which allows the parts of the frogs to be easily put together and taken apart, and yet insures a firm and durable connection of the parts.

The various features of my invention are 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 perspective view of the filling block.

A represents the clamps which are made in the form shown, enlarged on cross section line *a, b*, so as to get the maximum strength for the minimum amount of material.

B represents the point rail; C, D, the wing rails; E the spacing blocks between said rails to keep them in proper alignment.

G represents filling blocks placed between the hook of the clamp and outside rails; each one is a counterpart of the other, and they are constructed as shown in Fig. 4. Said filling blocks are each provided with a recess *c* for receiving the hook of the clamp, and one of said blocks with a recess *d* to receive the tightening key.

g represents an orifice for the through bolt L.

The parts are put together as follows: The rails are placed in position with the filling blocks E between the rails. The clamp and filling blocks G are placed in position and slipped on over the forward end of the frog and moved together into position; then the through bolt L is passed through the filling block G, and through the rails, and secured

by a nut; then the taper key I is driven in which locks the clamp firmly into engagement with the filling blocks and unites all the parts together in a rigid manner.

I prefer to use a split key and secure it in position by opening the end of the split key after it is driven in, thereby insuring the rigidity of the parts. The through bolt assists the key in holding all the parts in position against longitudinal strains forward in direction of the point; strains in the reverse direction are resisted by the tapering of the wing rails and the fit of the abutting parts. By means of this wedge lock I am enabled to make a very strong and durable frog without any liability of movement or displacement of the parts due to the strains to which such frogs are ordinarily subjected.

Having described my invention, what I claim is—

1. In combination with the rails and clamps of a railway frog, the filling block G provided with a recess *c*, receiving the jaw of the clamp, the recess *d*, and tightening key I engaging said recess, substantially as specified.

2. A filling block for a railway frog provided with recess *c* adapted to engage and hold the jaw of the clamp, the bolt orifice *g*, and the recess for receiving the taper key, substantially as specified.

3. In combination with the railway frog, one or more clamps, A, filling block G secured longitudinally by the through bolt L and by the jaw of the clamp, engaging with the recess, substantially as specified.

4. In combination with a railway frog, clamp A, filling block G bolted to the rails and secured to the clamp by means of the taper key driven into the recess *d* for drawing the clamp to lock it to the filling blocks and rails, substantially as specified.

In testimony whereof I have hereunto set my hand.

FREDERIC C. WEIR.

Witnesses:

T. SIMMONS,
C. W. MILES.