

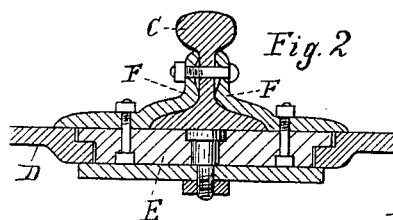
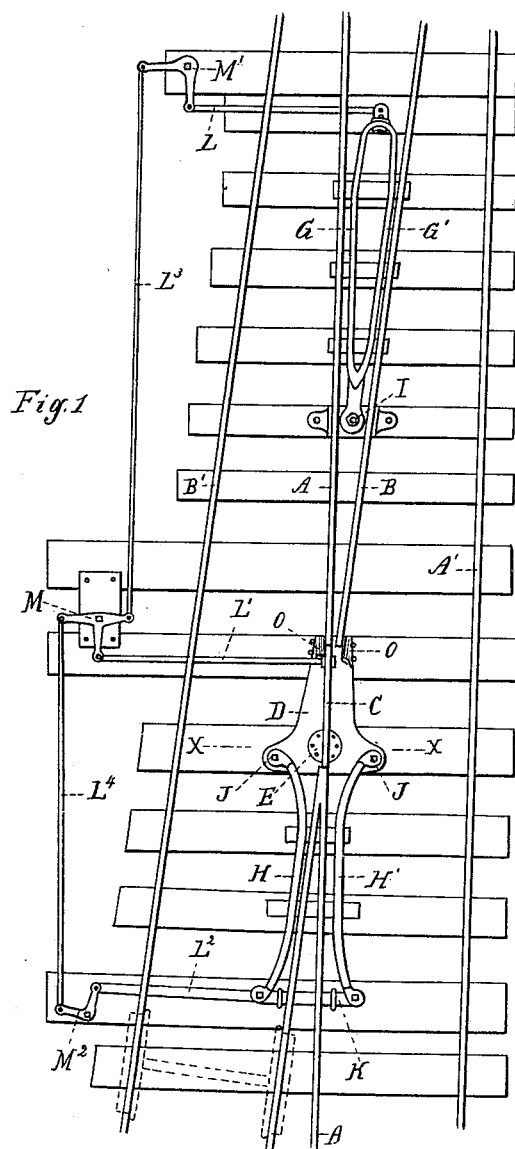
(No Model.)

W. H. SHAROOD.

SELF ACTING CONTINUOUS RAIL FROG.

No. 386,852.

Patented July 31, 1888.



Attest:
John Schuman.
P. M. Hulbert.

Inventor:

William H. Sharood.

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UNITED STATES PATENT OFFICE.

WILLIAM H. SHAROOD, OF BIRMINGHAM, MICHIGAN, ASSIGNOR OF ONE-HALF TO JOHN HANNA, OF SAME PLACE.

SELF-ACTING CONTINUOUS-RAIL FROG.

SPECIFICATION forming part of Letters Patent No. 386,852, dated July 31, 1888.

Application filed March 27, 1888. Serial No. 263,615. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. SHAROOD, a citizen of the United States, residing at Birmingham, in the county of Oakland and State of Michigan, have invented certain new and useful Improvements in Self Acting Continuous-Rail Frogs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in automatic railway-frogs.

The invention consists in the peculiar combinations and the construction, arrangement, and adaptation of parts, all as more fully hereinafter described, and shown in the drawings, in which—

Figure 1 is a plan of my improved device, and Fig. 2 is a cross-section on line *x x*.

A and A' are the main rails, and B and B' are the siding-rails. The inner main and siding rails are interrupted near their point of crossing, and the frog-rail C is pivotally secured upon a bed-plate, D, between the interrupted ends of these rails, in such manner that by vibrating it in the proper manner it can be made to register with either rail.

I preferably form the pivotal connection of this frog-rail by means of a disk or turntable, E, which turns in a suitable aperture of the bed-plate D, and to which the frog-rail C is secured by means of the rail clips F, whereby the frog-rail may be detached and replaced in case of its being worn out without disturbing the pivotal connection, all as shown in Fig. 2.

G and G' are vibrating contact bars or rails pivotally secured alongside the inner main and siding-rail at one approach to the frog, and H H' are similar contact bars or rails pivotally secured alongside the inner main rail and siding-rail at the other approach to the frog. These contact-bars are respectively connected together and placed in such relation to the inner main rail and siding-rail that the flanges of the wheels of an approaching train will laterally actuate these bars in such manner that if one of each set is crowded out

of contact with one rail the other contact-bar is thereby brought into contact (or nearly so) with the other rail.

The contact-bars G G' are preferably made in one piece, pivotally secured at the inner end at I, while the contact-bars H H' at the opposite approach are preferably in two pieces, pivotally secured at their inner ends at J, and connected together at their outer ends by a strap, K, or otherwise.

L L' L'' L''' L'''' are connecting rods or bars, and M M' M'' are crank-levers, all arranged and connected to the contact-bars and to the movable frog-rail, so as to transmit the vibrating motion of either set of contact-bars, when actuated by the wheels of the train, in such a manner as to cause the frog-rail to register with either the main or siding rail, as the case requires, to pass the train safely over the track.

The contact bars G G' and H H' are preferably made in the form of ordinary T-rails, with their inner and outer ends bent away to permit the easy approach of the wheel flanges between them and the main and siding rails. The pivotal point of the frog-rail C is preferably placed near one end thereof to obtain sufficient leverage to move the frog-rail. Suitable stops, O, are secured to the bed-plate to limit the throw of the frog rail.

What I claim as my invention is—

The combination, with the inner main and siding rail, interrupted at the point of crossing, of the movable frog-rail C, adapted to register with either rail, the vibrating contact-bars G G' and H H', placed alongside these rails at the approaches to the frog-rail, connecting-bars L, L', L'', L''', and L''', and the crank-levers M M' M'', the parts being constructed and arranged to operate substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 29th day of February, 1888.

WILLIAM H. SHAROOD.

Witnesses:

P. M. HULBERT,
JOHN SCHUMAN.