

C. H. JACKSON.
Railway-Frog.

No. 217,536.

Patented July 15, 1879.

Fig. 1.

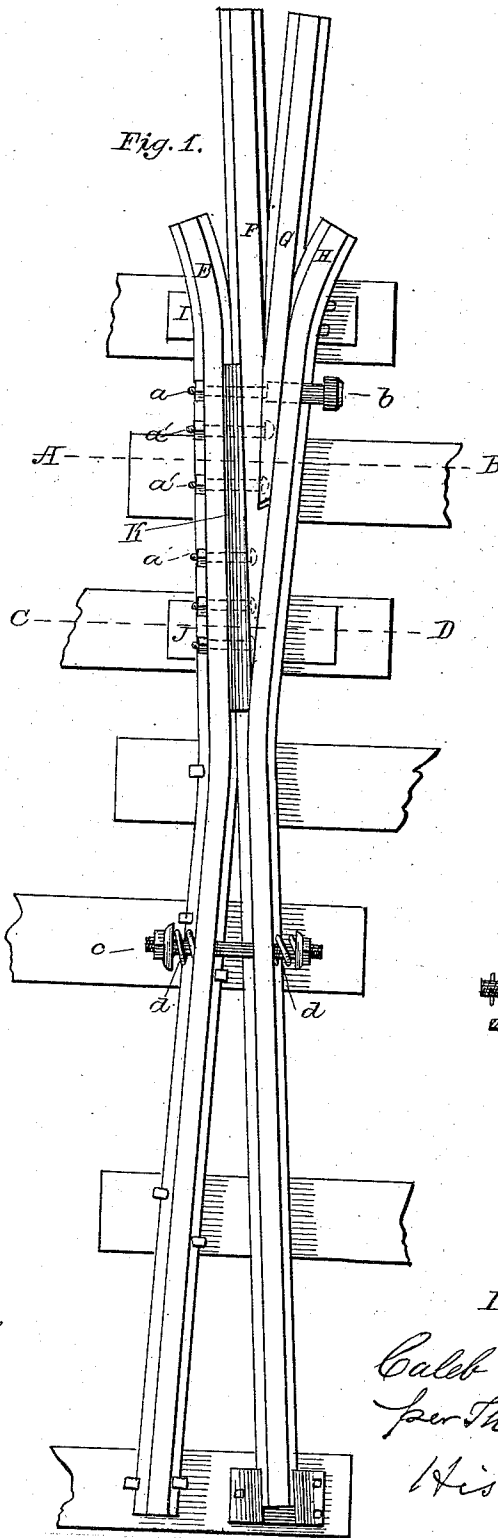


Fig. 2.

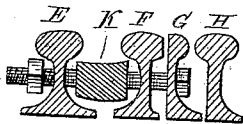
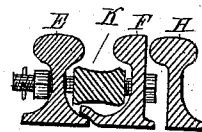


Fig. 3.



Attest:

R. F. Barnes

Clarence Poole

Inventor:

Caleb H. Jackson
per Theophilus Weaver,
His Atty.

UNITED STATES PATENT OFFICE.

CALEB H. JACKSON, OF HARRISBURG, PENNSYLVANIA.

IMPROVEMENT IN RAILWAY-FROGS.

Specification forming part of Letters Patent No. **217,536**, dated July 15, 1879; application filed March 11, 1879.

To all whom it may concern:

Be it known that I, CALEB H. JACKSON, of the city of Harrisburg, county of Dauphin, and State of Pennsylvania, have invented a new and useful Improvement in Railway-Frogs, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a plan or bird's-eye view of my invention. Figs. 2 and 3 represent sectional views thereof, taken through the dotted lines A B and C D, respectively.

The object of my invention is to furnish a superior railway-frog without the usual bed-plate, having sufficient strength for all purposes required, and possessing a degree of elasticity, and consequently composing a structure of great durability, in such combination of its conjoined fixed parts with a spring-rail that trains may be passed in various directions over it without the attention of a switch-operator.

The rail E performs the duty of a guard for the frog. F represents the frog-point, having the throat-filling K between it and rail E, and it also has its flange set up on the flange of rail E, as shown in Fig. 3. The three parts E, K, and F are firmly bolted together at close intervals, as by bolts marked *a a'*.

The piece G is dovetailed into the frog-point proper, as shown, and is also joined by said bolts *a a'*, to form a part of the immovable structure of the frog. The said parts are so framed or applied together that they support each other not only laterally, but also verti-

cally and longitudinally, and hence they are laid directly on the cross-ties without the usual bed-plate, which heretofore has been an item of considerable additional cost in frog-making.

The spring-rail H is made in the usual manner, a peculiar heavy bolt, *a*, serving to limit its throw and holding it against jumping up, and a bolt, *c*, and coiled-spring devices at *d d* serving to actuate it to hug the conjoined parts E F G K. Spring-rail H, with its parallel, admits a train in a different direction from that passed over rail E and its parallel.

I do not broadly claim in this application the feature of the overlying flanges of the point-rails resting on or set upon the flanges of the wing-rails of the frog structure, as such is shown and claimed in my application filed January 17, 1879, and issued February 7, 1879.

Having thus fully described my invention, what I regard as new and useful is—

The elastic frog structure composed of the fixed rail E, single throat-filling K, and frog-point F, having its flange set up on the flange of rail E, and being supported by stiff part G, all bolted together at *a a'*, in combination with spring-rail H, all adapted for service without the usual bed-plate, substantially as set forth.

In testimony that I claim the foregoing as my invention I have hereunto set my hand and seal, in presence of witnesses, this 10th day of March, 1879.

CALEB H. JACKSON. [L. s.]

Witnesses:

THEOPHILUS WEAVER,
WILLIAM BATTIS.