C. H. JACKSON.
Railway-Frog.

No. 217,536. Patented July 15, 1879.

Fig. 1.

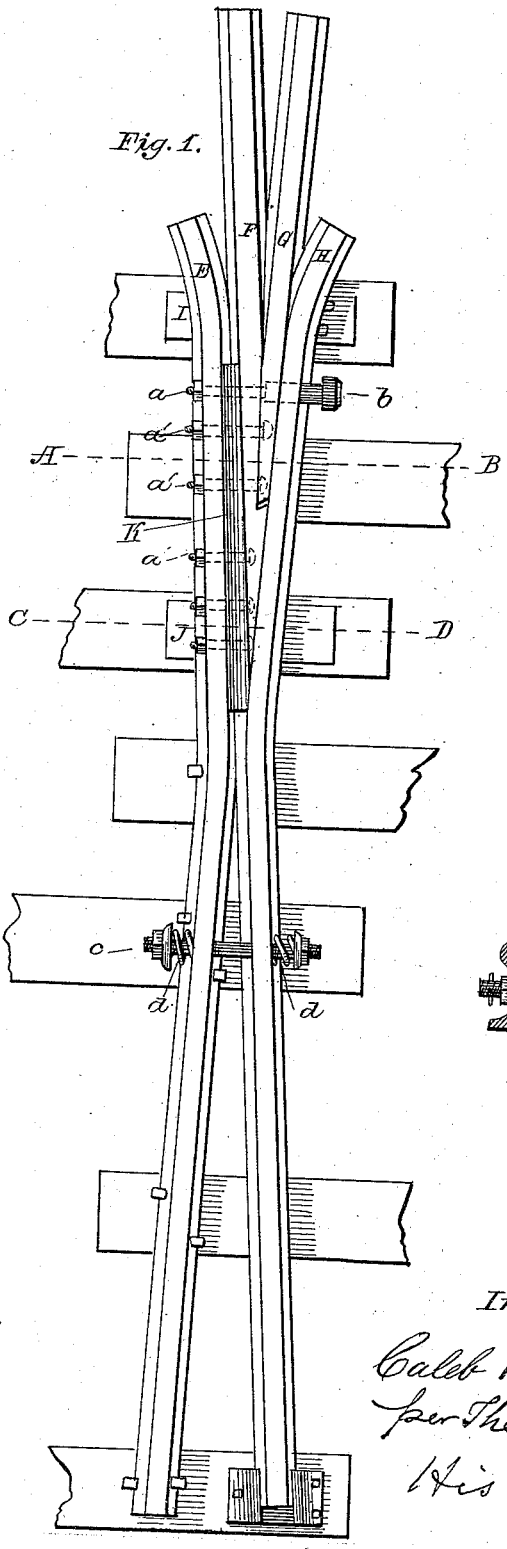


Fig. 2.

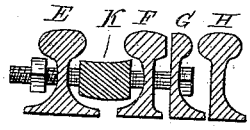
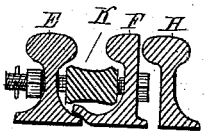


Fig. 3.



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 vertically 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.