No. 633,158. Patented Sept. 19, 1899.

J. E. ROBINSON.

RAILROAD FROG.

(Application filed May 15, 1899.)

(No Model.)

FIG. 1.

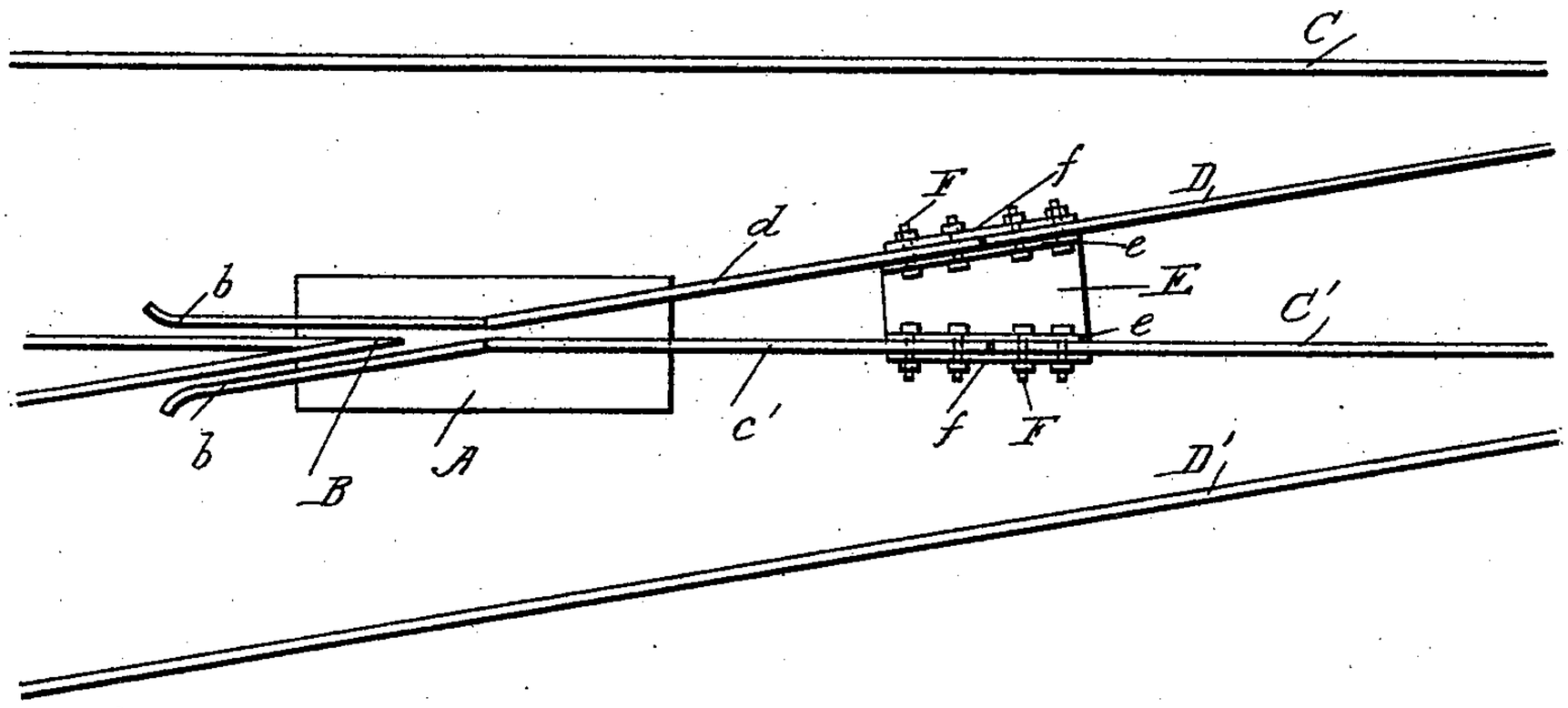
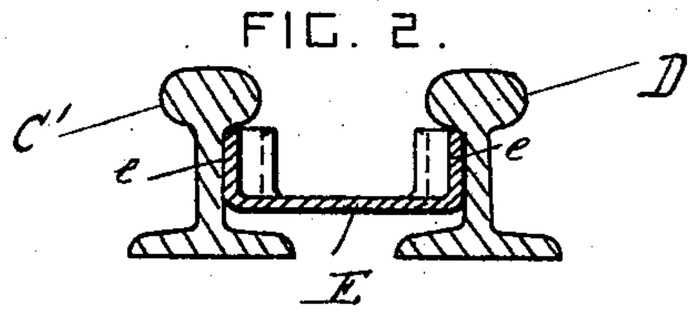


FIG. 2.



WITNESSES

INVENTOR

James E. Robinson.

by Herbert W. Jenner.

Attorney

UNITED STATES PATENT OFFICE.

JAMES E. ROBINSON, OF COVINGTON, GEORGIA.

RAILROAD-FROG.

SPECIFICATION forming part of Letters Patent No. 633,158, dated September 19, 1899.

Application filed May 15, 1899. Serial No. 716,843. (No model.)

To all whom it may concern:

Be it known that I, JAMES E. ROBINSON, a citizen of the United States, residing at Covington, in the county of Newton and State of Georgia, have invented certain new and useful Improvements in Railroad-Frogs; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railroad-frogs; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed.

In the drawings, Figure 1 is a plan view of a frog and the rails adjacent to it. Fig. 2 is a cross-section through the wedge-shaped plate or double angle-bar.

A is the base-plate of the frog, and B is its point.

C C′ are the rails of the main track, and D D′ are the rails of the side track. The rails D and C′ converge toward the frog, and *d c′* are rails which rest on the base-plate A at one end and which form extensions of the rails D and C′. The rails *d* and *c′* are arranged in front of the point B and form the approach or entrance to the frog. The point B is provided with guard-rails *b* in the usual manner.

E is a wedge-shaped plate or double angle-bar provided with flanges *e*, which overlap the rails D, *d*, C, and C′, and *f* are the usual joint-bars outside the rails.

F are the fastening-bolts.

When the frog is a spring-frog, the guard-rails *b* are formed integral with or are secured to the rails *d c′*, and the rails *d* and *c′* are free to slide laterally upon the plate A, upon which they rest, as is usual in a spring-frog. The plate E is supported by the rails clear of the ground, so that it does not interfere with their lateral motion.

The wedge-shaped plate or double angle-bar has the double function of keeping the rails to which it is secured at the proper distance apart and of preventing them from creeping longitudinally. The double angle-bar is supported by the rails, to which it is secured, and when used in connection with a spring-frog of any approved construction it does not interfere with the lateral motion of the said rails. The flanges *e* are secured to the webs of the rails above the base-flanges of the rails, as shown in Fig. 2.

What I claim is—

.The combination, with the converging rails which form the entrance to a frog, and the track-rails arranged in line with the said rails; of a joint-bar supported by all the said rails and consisting of a wedge-shaped plate provided with two flanges, said plate being arranged above the base-flanges of the said rails and the said flanges being secured to the webs of the rails, substantially as described and shown.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES E. ROBINSON.

Witnesses:

W. A. SPENCER,

JAMES G. LESTER.