

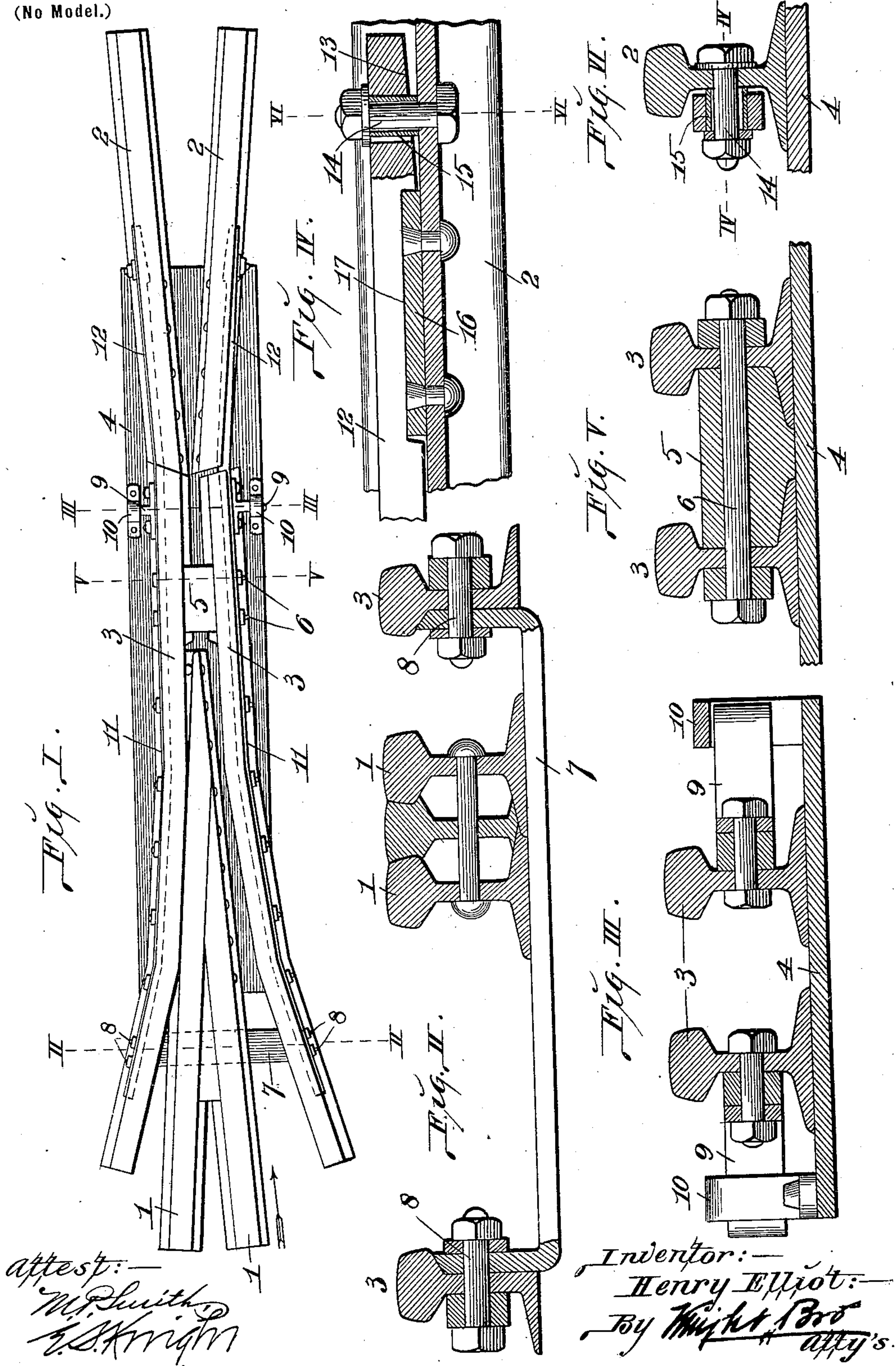
No. 677,647.

Patented July 2, 1901.

H. ELLIOT.  
RAILWAY FROG.

(Application filed Feb. 25, 1901.)

(No Model.)





# UNITED STATES PATENT OFFICE.

HENRY ELLIOT, OF ST. LOUIS, MISSOURI.

## RAILWAY-FROG.

SPECIFICATION forming part of Letters Patent No. 677,647, dated July 2, 1901.

Application filed February 25, 1901. Serial No. 48,775. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY ELLIOT, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Railway-Frogs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My present invention relates to a sliding railway-frog, the object being to produce a frog of this character which will not be liable to get out of order, as the parts are held in proper relation to each other.

The invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a top or plan view of my improved frog. Fig. II is an enlarged vertical transverse section taken on line II II, Fig. I. Fig. III is a like view taken on line III III, Fig. I. Fig. IV is a horizontal section taken on line IV IV, Fig. VI. Fig. V is a vertical section taken on line V V, Fig. I. Fig. VI is a like view taken on line VI VI, Fig. IV.

Referring to the drawings, 1 represents the point-rails, 2 the heel-rails, and 3 the shifting rails. The rails 1 and 2 are firmly bolted to a bed-plate 4, while the rails 3 rest upon the bed-plate and may be shifted thereon in a direction transversely of their lengths. Between the rails 3 is a distance-block 5, through which pass bolts 6, that also pass through the webs of the rails, the rails being thus firmly clamped together forward of the point-rails 1. Back of the point of the rails 1 is a bridge-bar 7, that passes beneath the rails 1 and the ends of which are connected to the webs of the rails 3 by bolts 8. The bar 7 fits up against the base of the rails 1, as seen in Fig. II, so that the bar and the rails 1 act to hold the rails 3 down upon the plate 4. The forward ends of the rails 3 are provided with fingers 9, adapted to slide through loops 10, secured to the plate 4, these fingers and loops also acting to hold the rails 3 down against the plate 4, while not interfering with the lateral movement of the rails. The ends of the rails 2 and 3 meet, as shown in Fig. I, and they are beveled off, so as to come up snugly together when the rails 3 are shifted to bring

either one of them into alinement with the corresponding rails 2. Bolted firmly to the webs of the rails 3 are bars 11, the ends 12 of which overlap onto the webs of the rails 2. The inner faces of the ends 12 of the bars are beveled off, as shown at 13, Fig. IV, and these ends of the bars are loosely connected to the webs of the rails 2 by means of bolts 14. Sleeves 15 fit between the bolts and the bars 11, so that the nuts on the bolts can be tightened up against a firm rest without the bars being clamped immovably to the webs of the rails.

16 represents blocks bolted or riveted to the webs of the rails 2 and which fit in notches 17 in the inner faces of the bars 12, these bars acting to prevent endwise movement of the bars 12 and rails 2 with relation to each other.

It will thus be seen that the rails 3 can be shifted laterally on the bed-plate 4 to bring either one of them in line with the corresponding rail 2, while the rails 1 and 2 are firmly held to the bed-plate and the rails 3 are securely held from vertical movement with relation to the bed-plate, the whole forming a substantial sliding frog that is not liable to get out of order.

The holes in the bars 12 in which the sleeves 15 fit should be made sufficiently long to allow for the fleeting or endwise movement of the bars as the shifting rails are moved.

I claim as my invention—

1. In a railway-frog, the combination of a bed-plate, point and heel rails rigidly secured to the bed-plate, and shifting rails rigidly connected together and movably held to the bed-plate and which have a loosely-hinged connection with the heel-rails whereby the shifting rails can fleet as they are moved, substantially as set forth.

2. In a railway-frog, the combination of a bed-plate, point and heel rails rigidly secured to the plate, shifting rails rigidly connected together and loosely resting on said plate, and bars secured to the shifting rails and loosely hinged to the heel-rails whereby the shifting rails can fleet as they are moved, substantially as set forth.

3. In a railway-frog, the combination of a bed-plate, point and heel rails firmly secured

to the bed-plate, shifting rails rigidly connected together and movably resting on the bed-plate, and a bar secured to each shifting rail, said bars being hinged to the heel-rails  
5 beyond the ends of the shifting rails, substantially as set forth.

4. In a railway-frog, the combination of a bed-plate, point and heel rails rigidly secured to the bed-plate, shifting rails movably secured to the bed-plate, a bridge-bar secured  
10 to the shifting rails and which passes beneath the point-rails, and bars rigidly secured to the shifting rails and which are connected to the heel-rails by bolts passing through sleeves

15; said bars being beveled at 13, substantially as set forth. 15

5. In a railway-frog, the combination of a bed-plate, point and heel rails rigidly secured to the bed-plate, shifting rails movably held to the bed-plate, bars rigidly secured to the  
20 shifting rails and which are loosely bolted to the heel-rails, and blocks secured to the heel-rails and fitting in notches in said bars, substantially as set forth.

HENRY ELLIOT.

In presence of—

E. S. KNIGHT,  
M. P. SMITH.