

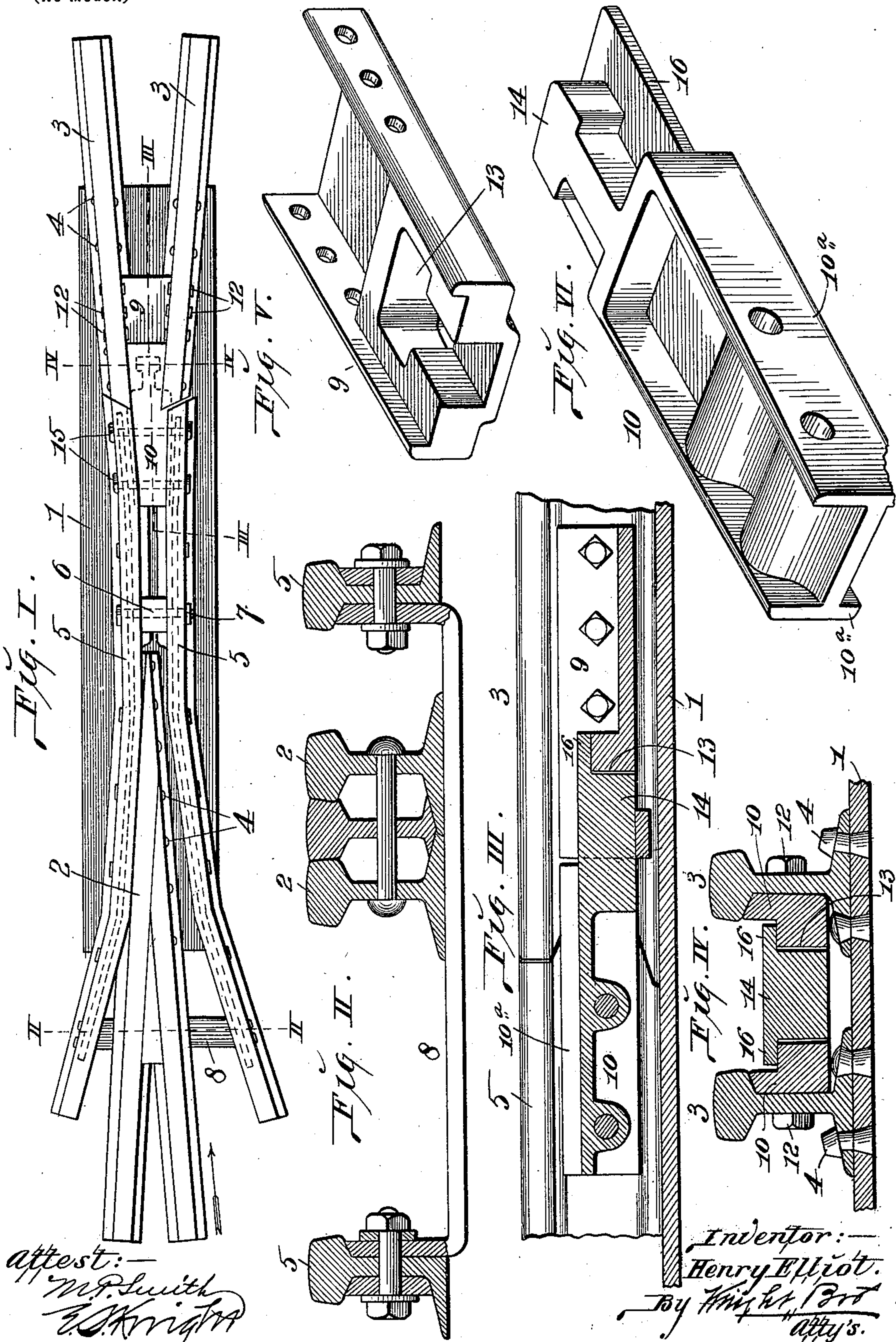
No. 677,646.

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. 677,646, dated July 2, 1901.

Application filed February 25, 1901. Serial No. 48,774. (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
5 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.

10 This invention relates to a frog wherein the point-rails and the heel-rails are rigidly secured to the bed-plate, which also supports and to which are movably held the shifting rails.

15 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
20 transverse section taken on line II II, Fig. I. Fig. III is an enlarged detail vertical longitudinal section taken on line III III, Fig. I. Fig. IV is an enlarged vertical section taken on line IV IV, Fig. I. Fig. V is a perspective
25 view of one member of the hinge that connects the shifting rails to the heel-rails. Fig. VI is a perspective view of the other member of the hinge.

Referring to the drawings, 1 represents a
30 bed-plate, to which the point-rails 2 and heel-rails 3 are rigidly secured by rivets 4 or otherwise. 5 represents the shifting rails, movably held to the bed-plate 1. Forward of the point-rails 2 the rails 5 are connected together by a distance-block 6 and a bolt 7.
35 Back of the point of the rails 2 is a bridge-bar 8, that passes beneath the rails 2 and the ends of which are bolted to the rails 5, this bar acting by contact with the rails 2 to
40 hold the rails 5 down upon the bed-plate while permitting the rails to be moved laterally on the bed-plate.

The rails 5 are connected to the rails 3 by a hinge consisting of two members 9 and 10,
45 (see Figs. V and VI,) the member 10 being shown in an inverted position. The member 9 fits between the ends of the rails 3, to which it is secured by bolts or rivets 12. This member of the hinge has a T-socket 13,
50 in which fits a T-head 14 on the member 10 of the hinge. The member 10 of the hinge fits between the ends of the rails 5 and is se-

cured thereto by bolts or rivets 15. The head of the member 10 is surmounted by a flange 16, that acts to keep foreign matter
55 from entering the socket 13. The hinge acts to tie the rails 3 and 5 together and holds them from longitudinal movement with relation to each other, while the rails 5 are free to be moved to bring either one of them into
60 alinement with the corresponding rail 3. The body of the member 10 of the hinge is provided with flanges 10^a on its upper surface, these flanges fitting up against the head of the rails 3 and acting to hold the rails 5 down
65 upon the bed-plate.

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
70 connected together and movably held to the bed-plate and which have a hinged connection with the heel-rails back of the ends of the latter and between the same, substantially as set forth.

2. In a railway-frog, the combination of a
75 bed-plate, point and heel rails rigidly secured to the bed-plate, shifting rails movably held to the bed-plate, and a hinge connecting the shifting rails to the heel-rails and consisting
80 of two members, one of which is secured to the heel-rails and provided with a socket, and the other of which is secured to the shifting rails and which is provided with a head to fit in the socket of its mate, substantially as set
85 forth.

3. 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, and a hinge connecting the
90 shifting rails to the heel-rails and which is composed of two members, one member being secured to the heel-rails and provided with a T-socket, and the other member being secured to the shifting rails and which
95 is provided with a T-head to fit in said socket, 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 held
100 to the bed-plate, and a hinge connecting the shifting rails to the heel-rails and which is composed of two members, one member being secured to the heel-rails and having a

socket and the other member being secured to the shifting rails and which is provided with a head fitting in said socket, and a flange overhanging the head, substantially
5 as set forth.

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, and a hinge connecting the
10 shifting rails to the heel-rails and which is composed of two members, one member be-

ing secured to the heel-rails and having a socket, and the other member being secured to the shifting rails and having a head fitting in said socket and having also vertical flanges
15 bearing against the heads of the heel-rails substantially as described.

HENRY ELLIOT.

In presence of—

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