J. E. LEWIS.

RAILROAD FROG.

APPLICATION FILED OCT. 27, 1909.

955,887.

Patented Apr. 26, 1910.

2 SHEETS—SHEET 1.

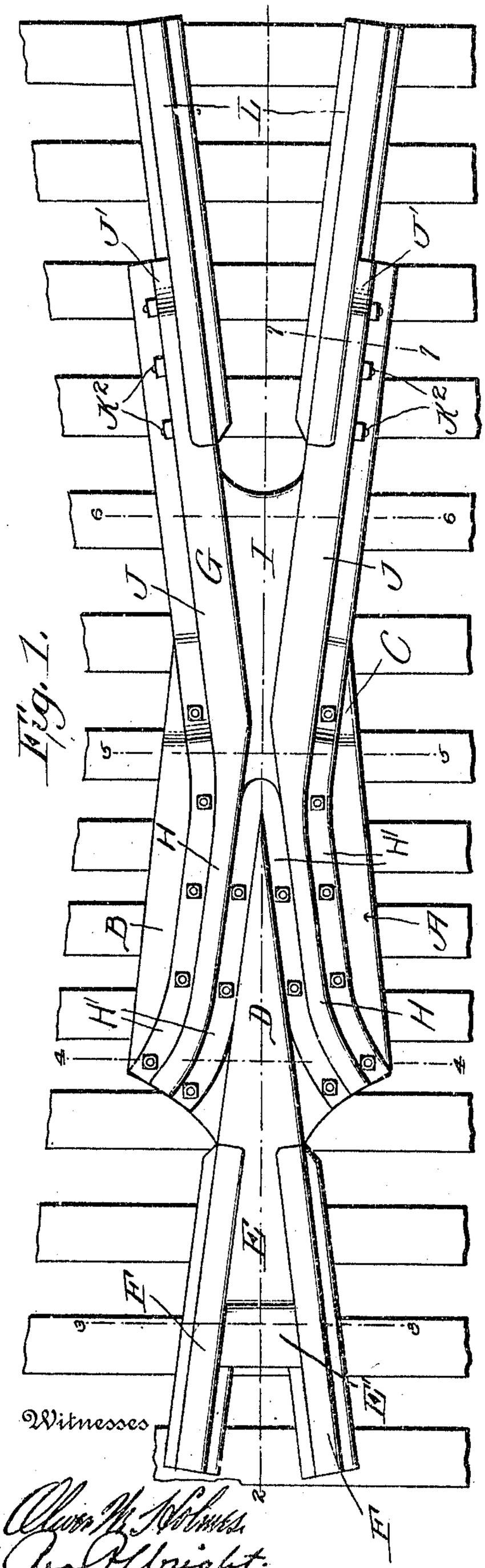


Fig. 1.

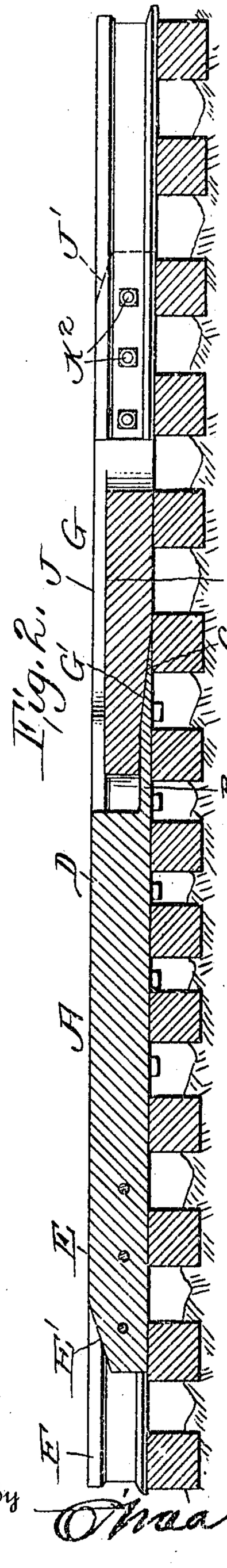


Fig. 2.

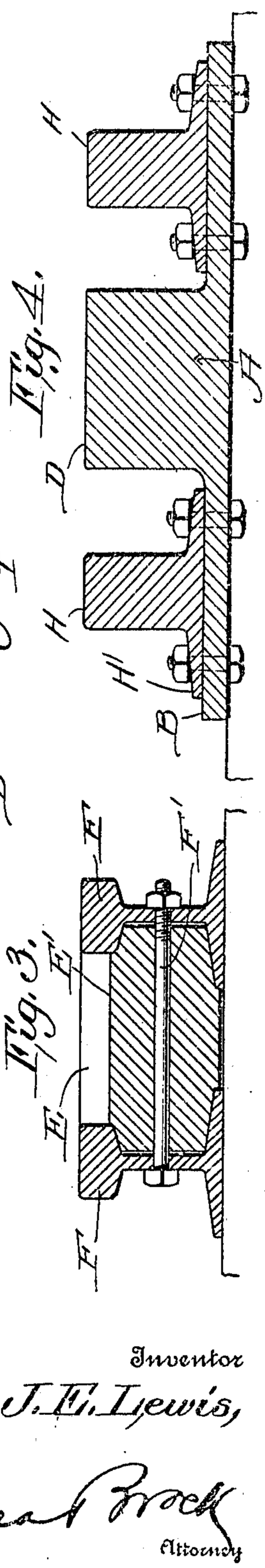


Fig. 4.

Fig. 3.

Witnesses

Alvin W. Nichols

Geo. B. Wright.

Inventor

J. E. Lewis,

By Marion Brock

Attorney

J. E. LEWIS.

RAILROAD FROG.

APPLICATION FILED OCT. 27, 1909.

955,887.

Patented Apr. 26, 1910.

2 SHEETS—SHEET 2.

Fig. 6.

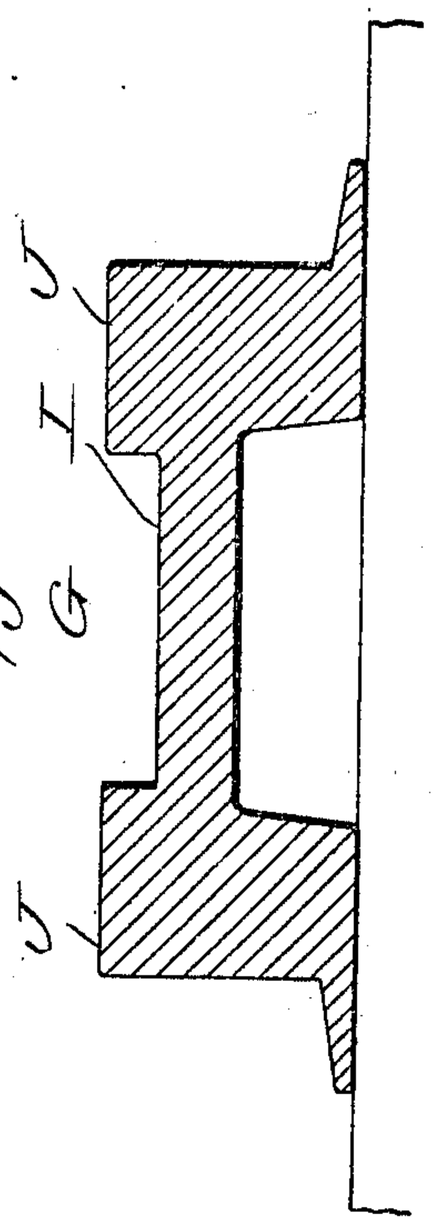


Fig. 7.

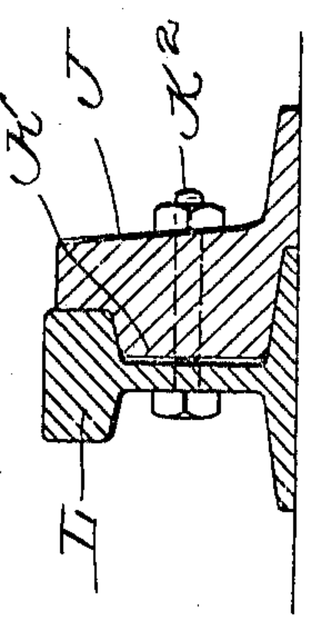


Fig. 9.

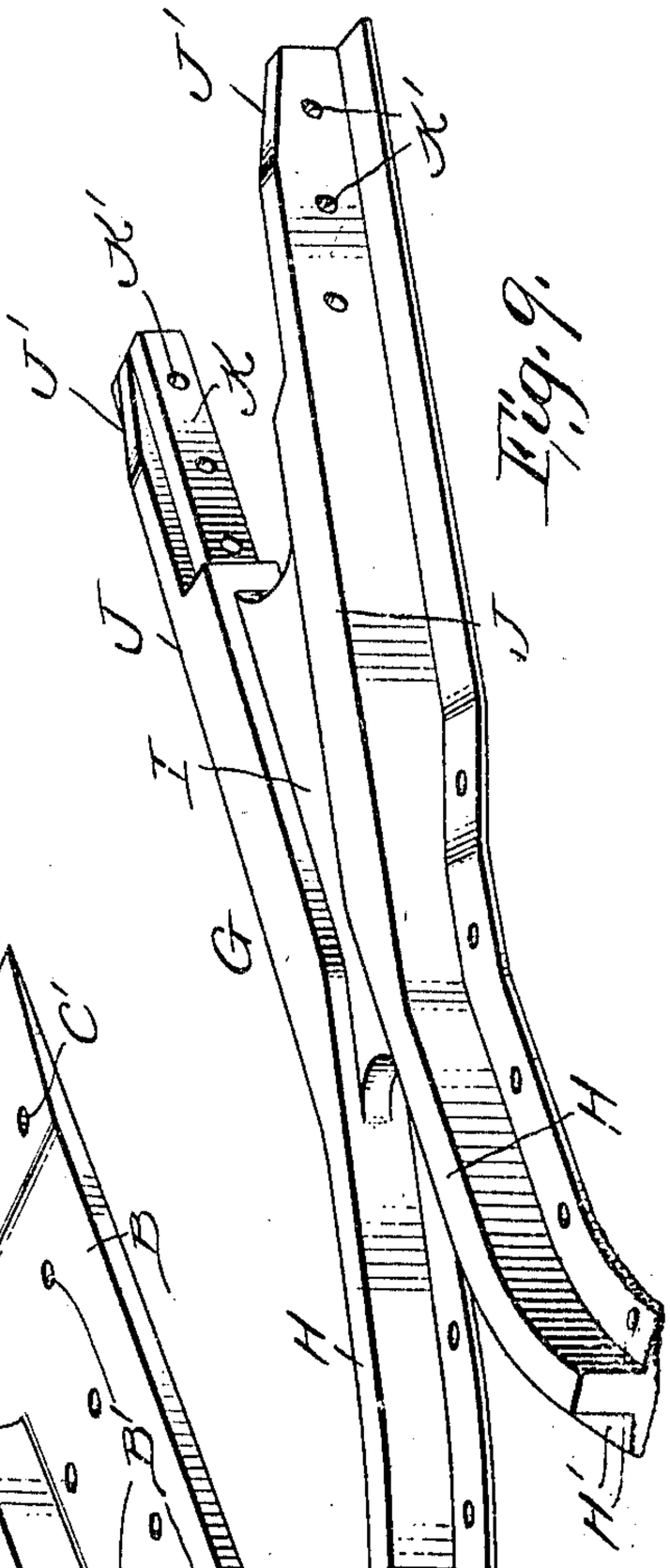


Fig. 5.

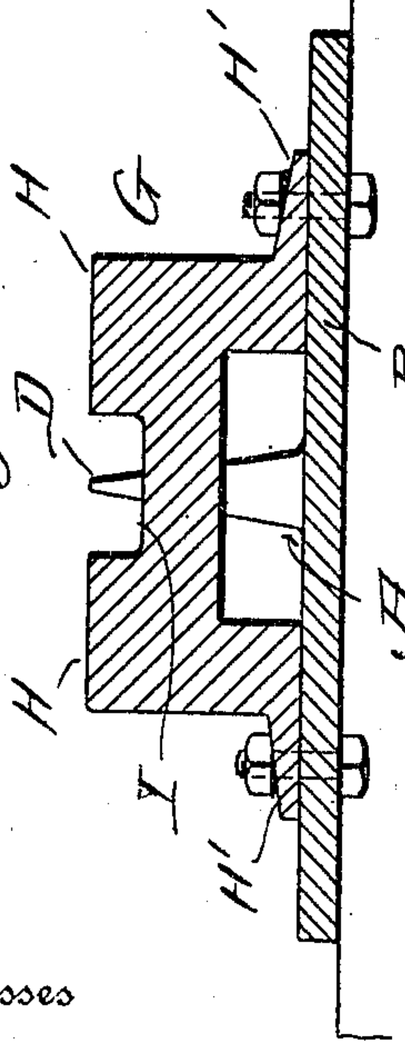
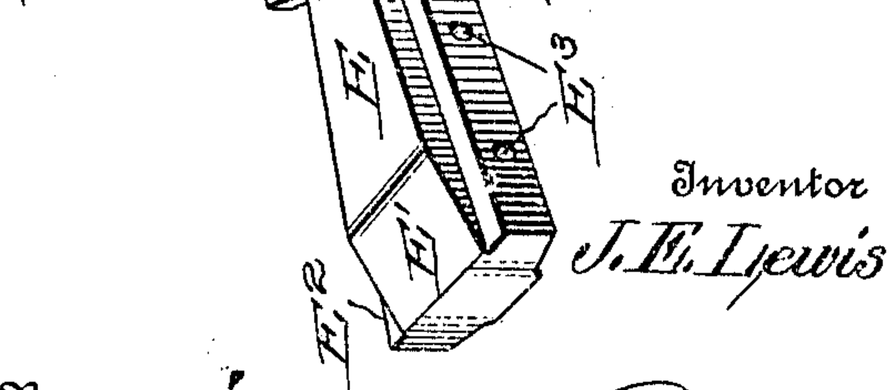


Fig. 8.



Witnesses

Oliver W. Holmes

Asa Albright

Inventor

J. E. Lewis

By Omund Brock

Attorney

UNITED STATES PATENT OFFICE.

JAMES E. LEWIS, OF STEELTON, PENNSYLVANIA.

RAILROAD-FROG.

955,887. Specification of Letters Patent. **Patented Apr. 26, 1910.**

Application filed October 27, 1909. Serial No. 524,885.

To all whom it may concern:

Be it known that I, JAMES E. LEWIS, a citizen of the United States, residing at Steelton, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Improvement in Railroad-Frogs, of which the following is a specification.

This invention relates to certain new and useful improvements in my former patent for railroad frog, Number 862,645, granted to me August 6, 1907, the object being to provide a frog which is formed of two sections so constructed that they can be easily and quickly connected or disconnected so as to form a very strong and durable frog.

Another object of the invention is to provide the wing member of the frog with joint portions which are so constructed that the ends of the respective rails can be readily secured thereto in such a manner that the rails will be so connected that all danger of the same working loose is prevented and at the same time a very even joint is formed.

Another object of the invention is to provide a frog which is formed of a point member having a base plate upon which the wing member is adapted to be secured by bolts in such a manner that all danger of the point working loose from the wing member is prevented.

A still further object of the invention is to provide a point member with a tail piece having outwardly projecting ribs adapted to fit under the head against the web of the rail in such a manner that the rails will be firmly held in position after being placed thereon.

With these objects in view, my invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described, pointed out in the claims and shown in the accompanying drawings, in which—

Figure 1 is a top plan view of my improved frog showing the same secured in position upon ties of a road bed. Fig. 2 is a longitudinal section taken on line 2—2 of Fig. 1. Fig. 3 is a section taken on line 3—3 of Fig. 1. Fig. 4 is a section taken on line 4—4 of Fig. 1. Fig. 5 is a section taken on line 5—5 of Fig. 1. Fig. 6 is a section taken on line 6—6 of Fig. 1. Fig. 7 is a section taken on line 7—7 of Fig. 1. Fig. 8 is a perspective view of the point member of my improved frog, and Fig. 9 is a perspective view of the wing member of the frog.

In carrying out my improved invention I employ a point member A comprising a base plate B having a beveled front end C provided with openings C′ and the plate B is also provided with spaced openings B′ through which bolts are adapted to pass for securing the wing member thereon as will be hereinafter fully described.

The base member B is provided with an integral point D having an outwardly projecting dove-tail-shaped portion E provided with a beveled end portion E′ and having longitudinal ribs E^2 formed upon its sides which are provided with transverse bores E^3 which extend through the tail portion E and form means for securing the ends of the respective rails F thereto which are secured in position by transverse bolts F′ as clearly shown in Fig. 3 and it will be seen that the ribs E^2 extend under the heads of the respective rails and over the bases of the rails against the webs of the same in such a manner that the rails are braced so that all danger of the same yielding in any way is prevented.

Arranged upon the base plate B of the point member A is a web member G formed of two wing rails H connected together by a central web or bridge I and said wing rails are provided with straight enlarged portions J having reduced ends forming joint members which are provided with longitudinal ribs K and the upper ends of the reduced portions are beveled as shown at J′ and these ribs are so shaped that when a rail is placed in position thereon the rib will fit under the head against the web and over the base of the respective rails L. The reduced end portions are provided with transverse openings K′ through which bolts K^2 are adapted to pass for securing the respective end of the rails L in their proper positions and it will be seen that by this manner the rails can be easily and quickly connected to the wing member in such a manner that all danger of the rails becoming loose or being spread in any way is prevented.

The wing rails proper of the wing member G are provided with apertured flanges H′ as clearly shown and the member is formed with an inclined portion G′ adapted to fit over the inclined portion C of the base B and when the wing rail member G is arranged upon the base plate, the openings of the flanges H′ will register with the open-

ings of the plate so that bolts M can be readily passed therethrough so as to securely hold the wing member G upon the base of the point member and it will be seen that by this construction it is only necessary to remove the bolts to detach the wing member from the point member. After the wing member has been secured in position upon the point member and the frog is placed upon the ties of the bed the plate is secured in position by spikes as clearly shown and it will be seen that by driving spikes into the ties alongside of the straight portions of the wing member the frog will be securely held in a set position so that all danger of the same moving in any way is prevented.

From the foregoing description it will be seen that I have provided a railroad frog formed of two sections which are so connected together by bolts that the wing member will be held in its proper position with respect to the point member so that all danger of the same moving or shifting in any way is prevented.

What I claim is:—

1. A railroad frog comprising a point member having a base plate, a wing member secured on said base plate, said wing member comprising a pair of wings connected together by a web.

2. A railroad frog comprising a point member having a base plate provided with a beveled front end, a wing member comprising a pair of wing rails having flanges and provided with an inclined portion adapted to fit upon the beveled portion of the base plate, said wing rails being connected together by a bridge piece and bolts for securing said wing member upon the base plate of the point member.

3. A railroad frog comprising a point member provided with a base having a beveled front end, a wing member arranged on said base having an inclined portion coacting with the beveled end of said base, said wing member comprising a pair of spaced wings connected together by a web.

4. In a railroad frog the combination with a pair of wing rails connected together by a web and provided with straight portions having means at their ends for connecting the respective ends of the rails thereto, of a point member provided with a base plate upon which said wing rails are adapted to be secured, said point member being provided with a tail piece for securing the respective ends of the rails thereto.

5. A railroad frog comprising a point member having a base plate, a wing member comprising a pair of wing rails connected together by a bridge piece secured upon said base plate, said members being provided with means at the respective ends for connecting the rails thereto.

6. A railroad frog comprising a point member having a base plate provided with a beveled front end, of an integral point portion having an outwardly projecting dovetail-shaped tail piece provided with longitudinal ribs for securing the respective rails thereto, a wing member comprising a pair of flanged wing rails connected together by a bridge piece, said wing member being provided with straight portions having reduced ends forming longitudinal ribs to which the respective ends of the rails are adapted to be secured, said wing member being provided with an inclined portion adapted to fit upon the beveled portion of the base plate, the respective members being provided with openings adapted to register when placed in position and through which bolts are adapted to be inserted for securing the members together.

7. A railroad frog comprising a point member and a wing member, the point member having a base plate to receive the wing member, said wing member being formed of a pair of wing rails connected together by a bridge piece, openings formed in the respective members adapted to register when placed in position one upon the other and bolts extending through said openings for locking said members together.

JAMES E. LEWIS.

Witnesses:
EDWARD LEWIS,
GEORGE EDWIN BILL.