No. 862,645. PATENTED AUG. 6, 1907.

J. E. LEWIS.

RAILROAD FROG.

APPLICATION FILED JULY 27, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

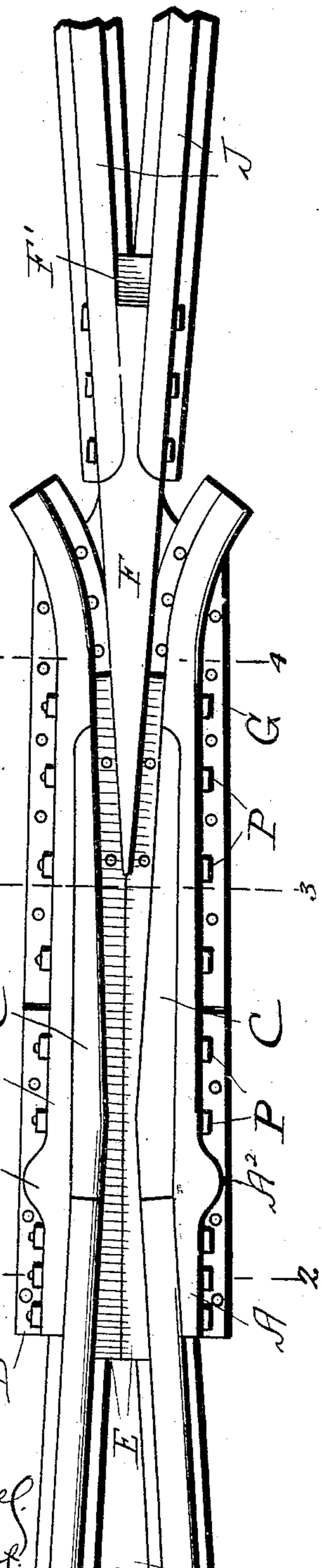


Fig. 3.

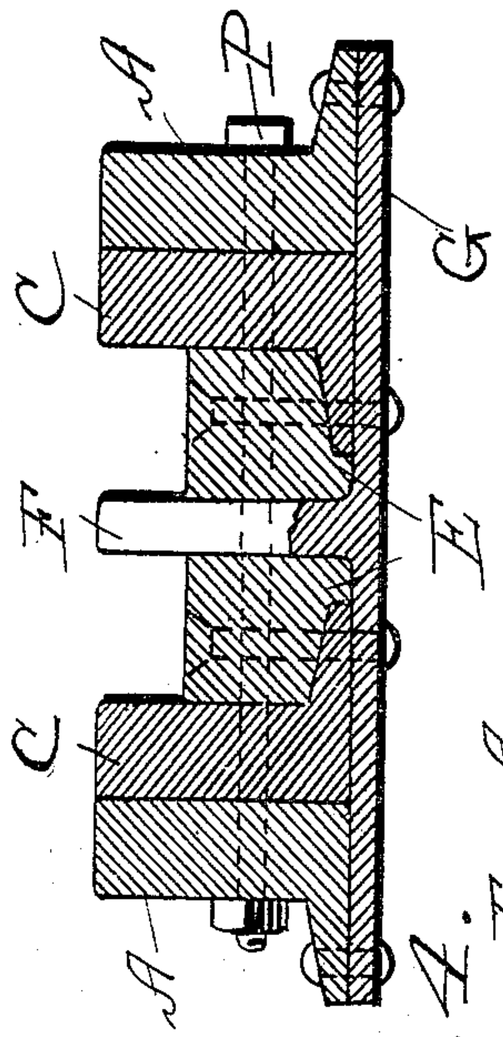


Fig. 4.

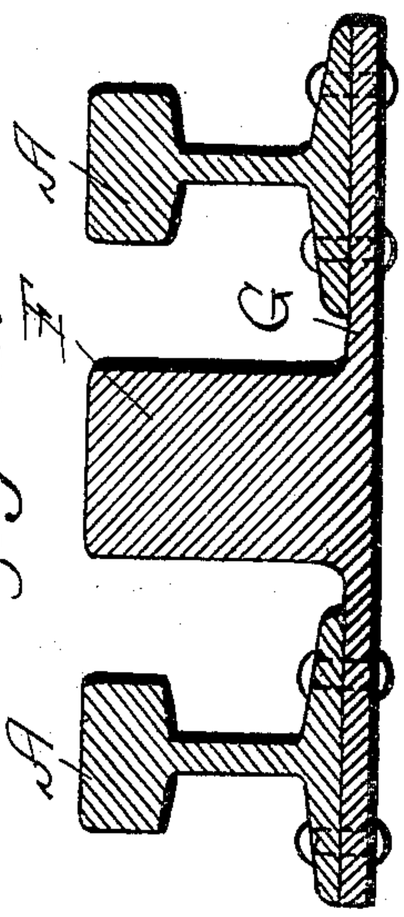
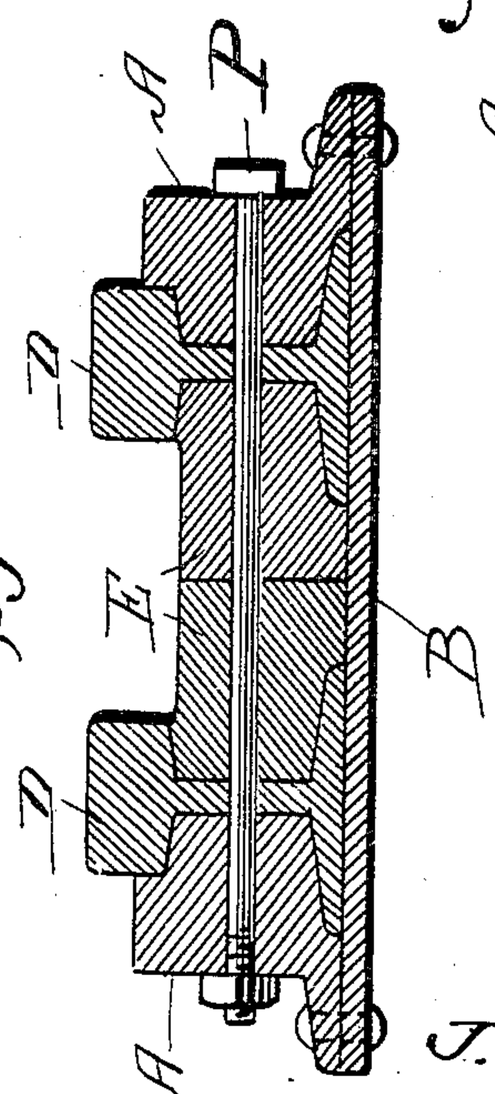


Fig. 2.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 5.

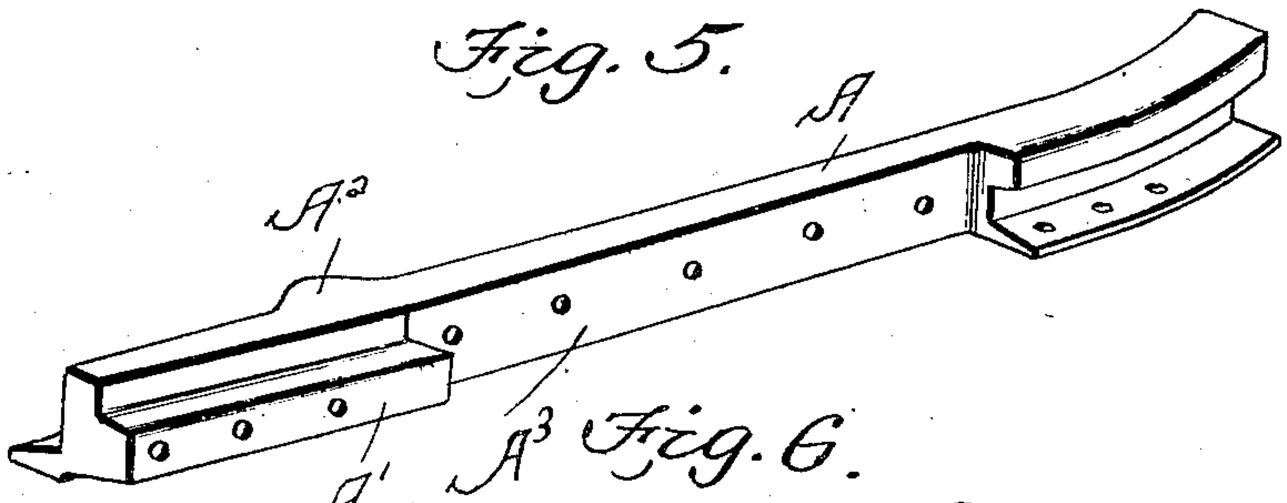


Fig. 6.

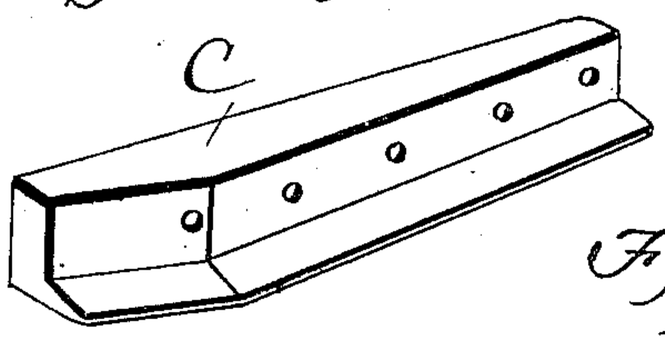


Fig. 7.

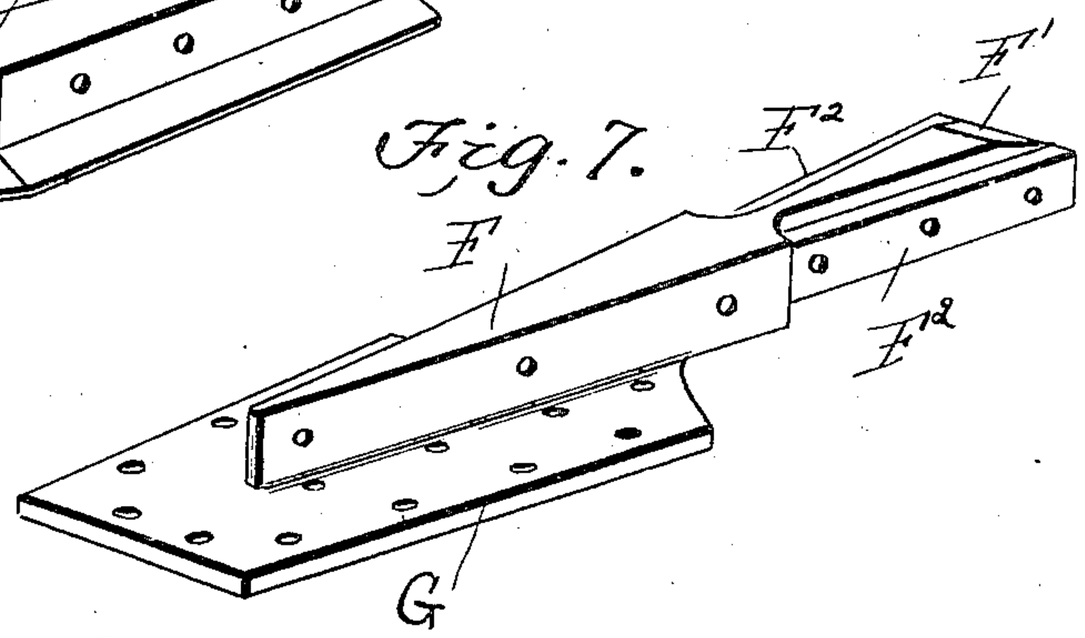


Fig. 8.

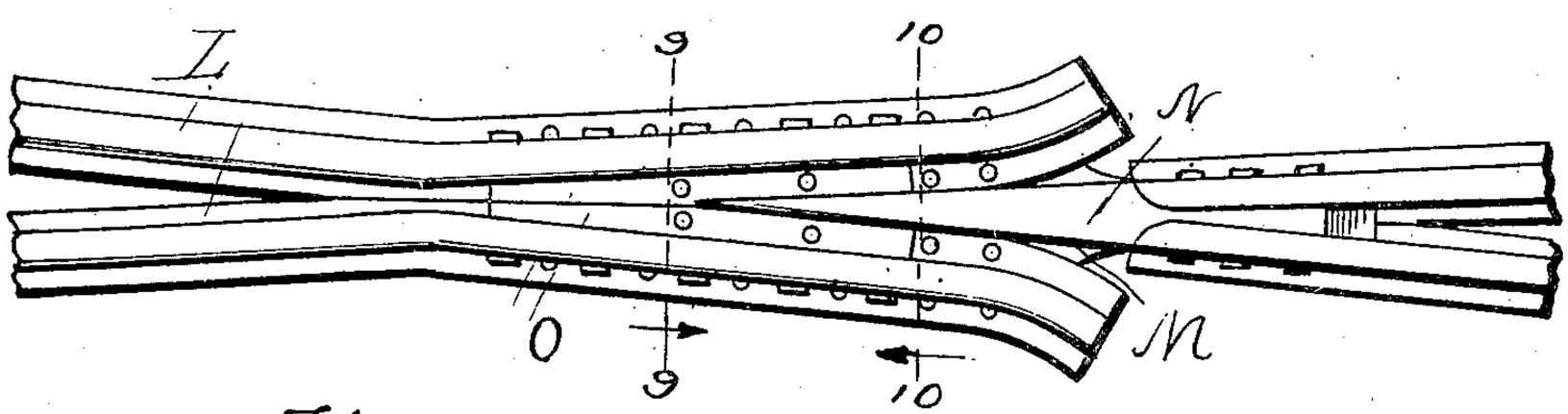


Fig. 9.

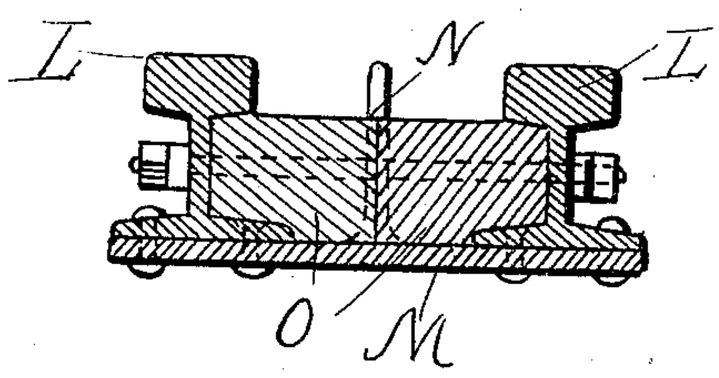
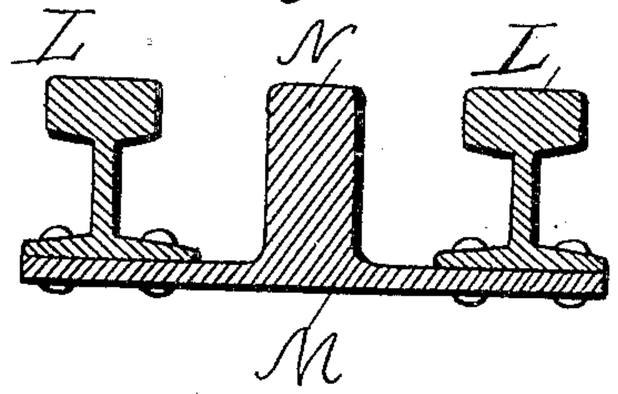


Fig. 70.



WITNESSES

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JAMES E. LEWIS, OF STEELTON, PENNSYLVANIA.

RAILROAD-FROG.

No. 862,645. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed July 27, 1906. Serial No. 328,060.

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 railroad frogs and more particularly to sectional frogs bolted together, the object being to provide a frog having a point formed with an integral base plate.

Another object of my invention is to provide a frog so constructed that the point and wings will be securely locked together without any danger of them coming apart.

With these objects in view, the invention consists in the novel features of construction, combination and arrangement of parts hereinafter fully described and pointed out in the claims.

In the drawings forming a part of this specification:—Figure 1 is a top plan view of my improved frog. Fig. 2 is a section taken on lines 2—2 of Fig. 1. Fig. 3 is a section taken on lines 3—3 of Fig. 1. Fig. 4 is a section taken on lines 4—4 of Fig. 1. Fig. 5 is a perspective view of one of the wings. Fig. 6 is a perspective view of one of the blocks. Fig. 7 is a perspective view of my improved point. Fig. 8 is a top plan view of a modification. Fig. 9 is a section taken on line 9—9 of Fig. 8. Fig. 10 is a section taken on lines 10—10 of Fig. 8.

In these drawings A indicates a pair of wings secured at their straight end portions on a perforated metal plate B, by rivets passing through the base of the wings and the perforations in the plate. The wing rails are cut out as shown at A^3 on the inside in which cut out portions are arranged bearing members C, of hard steel so that the rails will be provided with bearing members at the point which they are subject to the greatest strain and wear, and so that they can be readily replaced by new bearing members when they become worn. A perforated lug A′ projects from the end of each of the wings which are adapted to engage the webs of the rails D, forming a brace for the same. Arranged between the rails D on the plate B, is a pair of perforated brace blocks E provided with reduced sides adapted to fit over the base of the rails and wings and securely lock the rails in place. The blocks extend forward and are made to conform to the shape of the wings. A hard metal point F extends in between the blocks E, provided with a perforated integral locking plate G which extends under the blocks and wings and engages one end of the plate B.

The base of the curved portion of the wings, A are secured to the plate G, securely connecting the two wings together. The blocks E are secured in place by rivets which pass through the blocks, rail bases and plates. Bolts P, pass transversely through the wings, blocks and bearing members and securely lock the members together.

The end of the point F is provided with a dove-tailed shaped portion having a beveled end F′ and outwardly projecting lugs F^2, to which the web of rails J are adapted to be secured by bolts. The wings are provided with reinforced portions A^2, opposite the point where the rails are connected thereto so as to strengthen the same at the points nearest the greatest strain.

In the modification shown in Fig. 8, I have shown a pair of rails L bent outwardly to form wings secured on a plate M, in a similar manner having a point N of the same construction secured thereto, provided with rails. Blocks O are arranged between the rails securely holding the members in place.

The wings A may be cast, forged or formed by hydraulic pressure.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. In a rail road frog, the combination with a pair of wings provided with cut away portions, of bearing members arranged in said cut away portions, blocks arranged between said wings adapted to engage said bearing members and a point having an integral plate arranged between the blocks, the said plate extending beneath the blocks and wings.

2. In a railroad frog, a base plate, wings secured at one end to said plate and having cut-out portions, bearing blocks in the cut-out portions, track rails secured to the wings and forming a continuation of the bearing blocks, a point and a plate carried by the point, said plate extending under the wings and bearing blocks to the first mentioned plate.

3. In a rail road frog, the combination with a pair of wings provided with outwardly projecting lugs, of rails secured to said lugs, bearing members secured to said wings and blocks arranged between said rails adapted to bear against said bearing members and rails, for the purpose described.

4. In a rail road frog, the combination with a perforated plate, of wings secured to said plate and provided with cut away portions, bearing members arranged in said cut

away portions, lugs formed on said wings, track rails secured to said lugs, and blocks arranged between said rails, for the purpose described.

5. In a rail road frog, the combination with a plate, of a pair of wings arranged on said plate provided with cut away portions, bearing members arranged in said cut away portions, a point, a plate connected to said wings, said plate forming a part of the point, blocks arranged between said point and wings, and rails connected to said point and wings, for the purpose described.

6. In a rail road frog, wings, a point and a plate carried by the point, said plate extending under and being secured to the wings.

7. In a rail road frog, wings having cut out portions, bearing blocks fitting therein, rails secured to said wings, a point and a plate carried by the point and extending under and secured to the wings.

JAMES E. LEWIS.

Witnesses:
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HENRY G. POSEY.