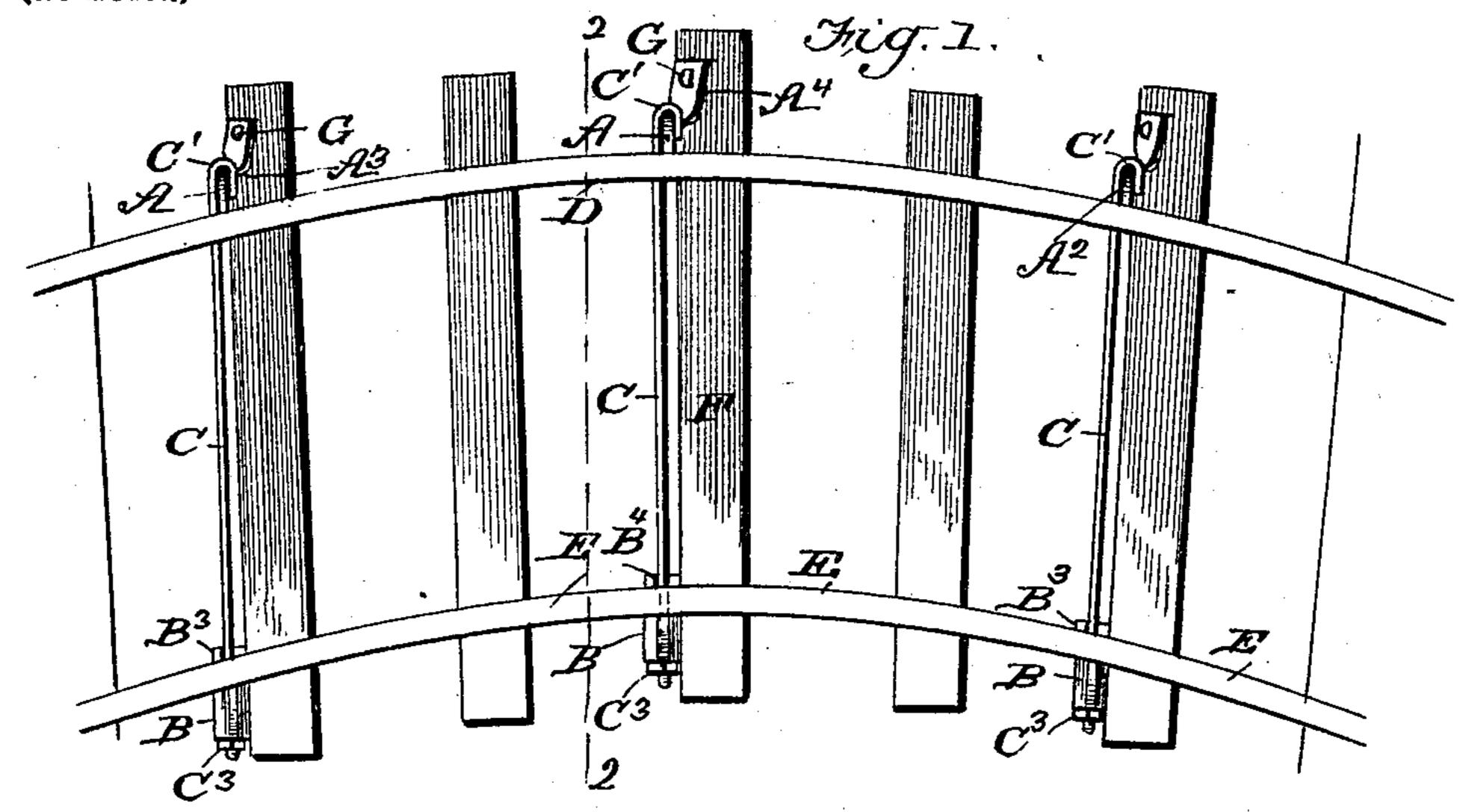
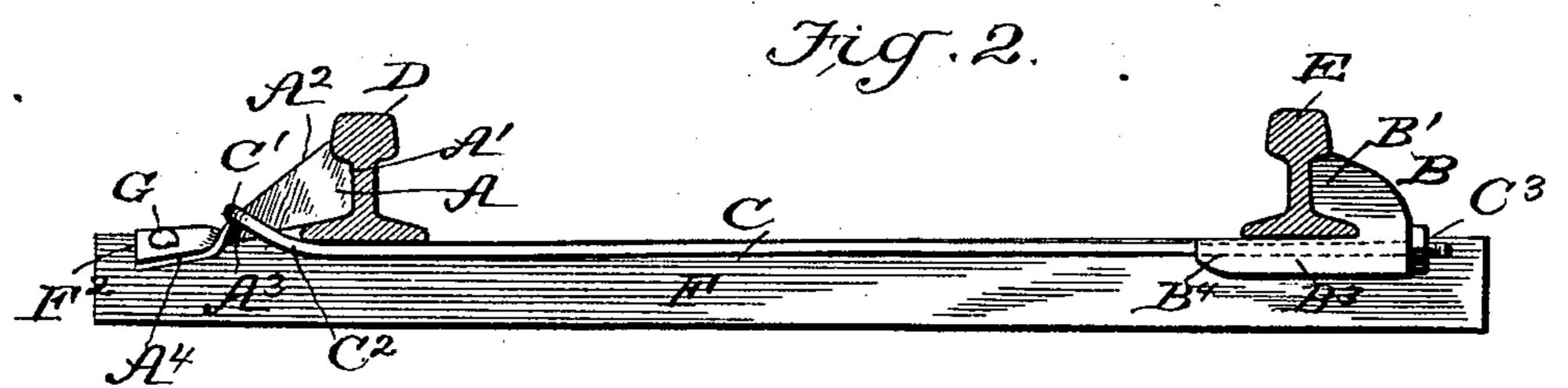
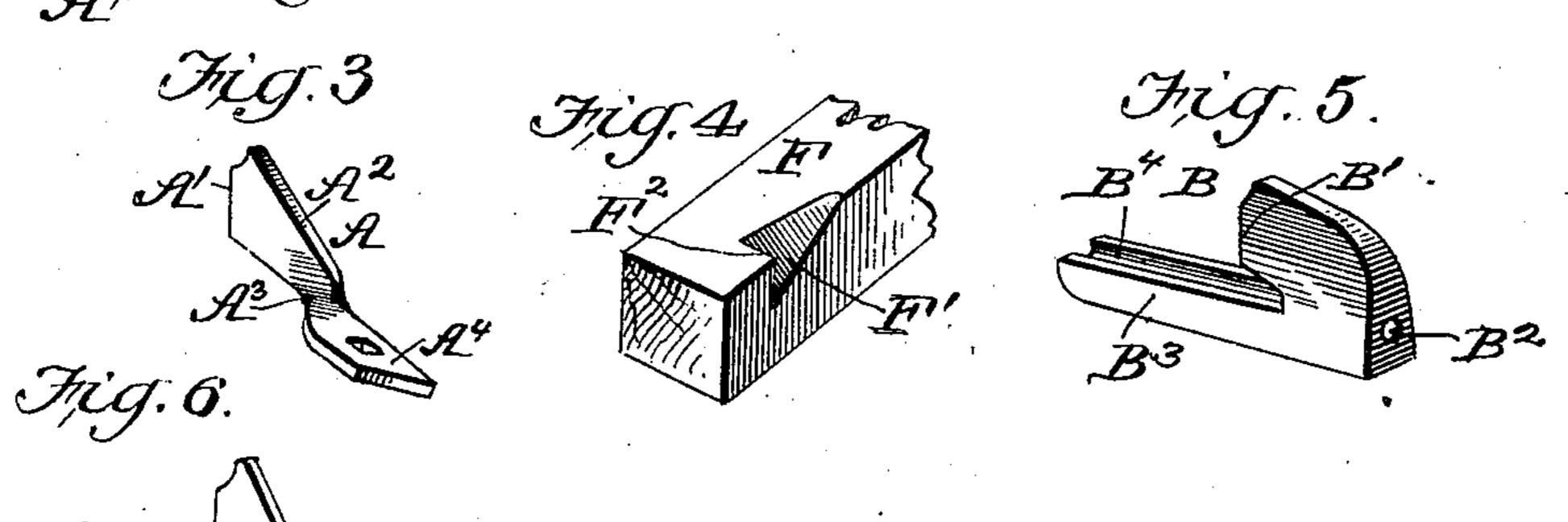
## H. E. JACKSON. RAILROAD TRACK.

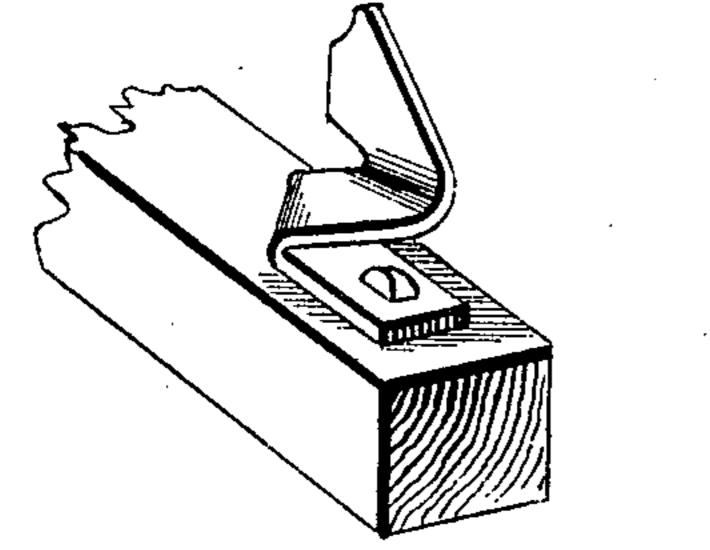
(Application filed Apr. 1, 1901.)

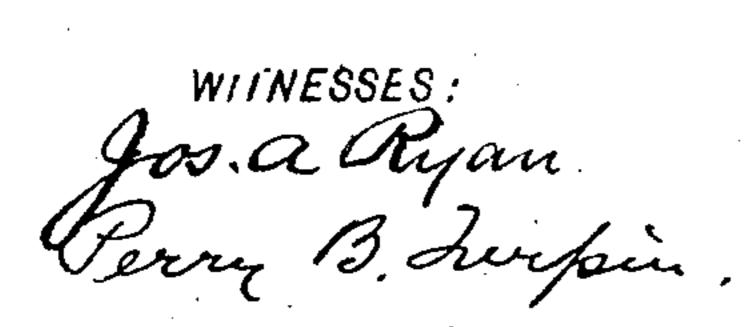
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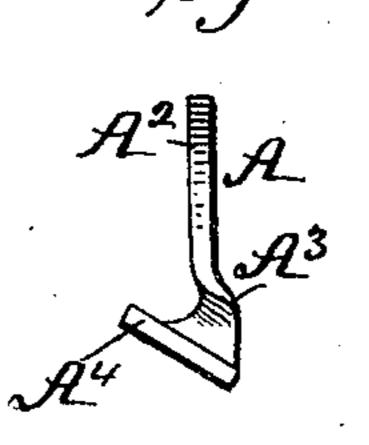












Hampton E. Jackson.

BY Munn

## United States Patent Office.

HAMPTON E. JACKSON, OF ANDERSON, INDIANA, ASSIGNOR OF ONE-HALF TO CLARENCE LEIB, HARRY SKEHAN, AND PERCY DOYLE, OF SAME PLACE.

## RAILROAD-TRACK.

SPECIFICATION forming part of Letters Patent No. 680,153, dated August 6, 1901.

Application filed April 1, 1901. Serial No. 53,834. (No model.)

To all whom it may concern:

Be it known that I, HAMPTON E. JACKSON, residing at Anderson, in the county of Madison and State of Indiana, have made certain 5 new and useful Improvements in Railroad-Tracks, of which the following is a full, clear,

and exact specification.

My invention is an improvement in railway-tracks, and while it will be found useful on all portions of the track it is especially designed and intended for use on curves to prevent the spreading of the outside rail by the force exerted thereon by the passing trains; and the invention consists in certain novel 15 constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of a portion of a curved track provided with my improvements, and Fig. 2 is a cross-sec-20 tional view on about line 22 of Fig. 1. Fig. 3 is a detail perspective view of the rail brace or bracket. Fig. 4 is a detail perspective view of a portion of a tie. Fig. 5 is a detail perspective view of the shoe. Fig. 6 is a de-25 tail perspective view of a somewhat-different form of bracket from that shown in Figs. 1, 2, and 3; and Fig. 7 is a detail end view of the bracket.

The tendency of tracks to spread on curves 30 on account of the extraordinary strain exerted against the inner side of the outer rail by the passing trains is well known. By my invention I seek to provide a simple construction by which to securely anchor the outer 35 rail from spreading by a simple, economical, and easily-applied construction, the application of which will tend to diminish the rotting of the rail by the accumulation and retention of moisture thereon.

In carrying out my invention I provide a bracket A to fit against the outer side of the outer rail, a shoe B to fit against the outer side of the inner rail, and a tie-rod C, held to the shoe B, and provided with a hook C', 45 which engages with the bracket A when the

parts are applied for use.

The bracket A is formed at its end A' to fit within the hollow of the outer rail D, while the shoe B is formed at its end B' to fit within 50 the hollow of the inner rail E. I form the bracket A with the upper edge A2 of its body l

portion inclined upwardly toward the rail D, and such bracket A is twisted at A3 at the juncture of its body portion with its shank A4, and such shank is formed in a plane diagonal 55 to that of the body of the bracket, so the said shank A4 will stand at an incline or obliquely when adjusted, as shown in Fig. 2, to the tie F. This is important, as it causes the shank to shed rain or other moisture, as desired, and 60 also facilitates the fitting of said shank into a notch F' cut at one edge of the tie F at the upper surface thereof, as will be understood from Figs. 1, 2, and 4. This notch F' when formed as shown in Fig. 4 provides a square 65 inwardly-facing shoulder F2, against which abuts the outer end of the shank  $A^4$  of the bracket A, as shown in Figs. 1 and 2. As best shown in Fig. 2, the bracket A fits at one end against the outer side of the rail D and at its 70 other end against the shoulder F2 on the tie, so the outward pressure of the rail D is exerted upon the bracket A in the direction of length of the latter, such bracket being anchored at its outer end firmly against the shoulder  $F^2$  75 of the tie. I secure the bracket by means of the single spike G, arranged as shown in Figs. 1 and 2, and operating to secure the bracket in position with its outer end bearing firmly against the shoulder F<sup>2</sup>. By means of the 80 special construction of the bracket I am able to secure it in place by the single spike, thus avoiding the necessity of driving numerous spikes into the tie, which cause the latter to rot, as is well understood. This simple se- 85 curing of the bracket is also rendered practicable by the special connection of the tierod therewith, as will now be explained. The tie-rod C is held at one end to the shoe

B and is provided at its other end with the 90

hook C', which engages directly with the

bracket A and preferably with the inclined

upper edge A<sup>2</sup> thereof, as shown in Fig. 2.

To this end the tie-rod is bent slightly up-

over the inclined edge A<sup>2</sup> of the bracket. By

this construction it will be noticed that if

strain be exerted upon the rod C by tightening

the nut C<sup>3</sup> against the outer side of the shoe

bracket A will tend to anchor said bracket

against any outward movement and also draw

B the engagement of the hook C' with the 100

ward at C<sup>2</sup> from beneath the rail D and hooks 95

the bracket down tightly against the outer side of the rail and upon the base thereof in such manner as to secure the rail firmly in position. Thus it will be noticed the spreading of the rail D is not only resisted by the special construction and combination of bracket A and tie F, but also by the action of the tie-rod directly upon the bracket A, as shown in Figs. 1 and 2.

The shoe B is formed, as before described, with a portion B' to fit the hollow of the rail and has at B<sup>2</sup> below the rail an opening for the rod C and also a base portion B<sup>3</sup>, which extends beneath the rail and is provided in its upper side at B<sup>4</sup> with a groove in line with the opening B<sup>2</sup> and adapted to receive the rod C, as shown in Fig. 2. Manifestly by means of the nut C<sup>3</sup> the tie-rod can be tight-

ened up to any desired extent.

While I prefer the construction of bracket shown in Fig. 3, it is manifest the said bracket might be formed as shown in Fig. 6 without departing from some of the principles of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is—

1. The improvement in railroad - tracks herein described consisting of the rail, the tie 30 provided with the inclined notch having a shoulder at its outer end, the bracket having a body portion, and a shank arranged obliquely to the body portion and fitting and held within the notch of the tie, the body por-35 tion of the bracket being fitted against the outer side of the rail, the shoe fitting against the outer side of the opposite rail and having an opening for the tie-rod and a base grooved in alinement with said opening and the tie-40 rod extending at one end through the shoe and provided with a securing-nut and having its other end slightly upbent and provided with a hook engaging with the body of the bracket all substantially as and for the 45 purposes set forth.

2. The combination of the tie, the rail, the bracket held to the tie and provided with a body portion fitting against the rail, and the tie-rod anchored at one end and provided at 50 its other end with a hook engaged with the

bracket substantially as set forth.

3. The combination of the rail, the bracket having its body portion engaged with the rail and provided with an inclined upper edge, and the tie-rod having a hook engaged with

said edge from one side thereof, whereby it may operate therein substantially as set forth.

4. The combination of the notched tie, the rail and the bracket fitting against said rail and having an oblique shank fitting in the 60 notch of the tie substantially as set forth.

5. The combination of the tie having an oblique notch in its upper surface, the rail, and the bracket having its body portion bearing against the rail and provided with an oblique 65 shank fitting in the notch of the tie, and the tie-rod having a hook engaging said bracket

substantially as set forth.

6. The combination of the tie, the rails, the bracket fitting against the outer side of one 70 rail, the shoe fitting against the outer side of the other rail, and the tie-rod anchored adjustably to the shoe and extended at its other end alongside the bracket and provided at such end with a hook engaged with the 75 bracket substantially as set forth.

7. In a railroad-track the combination of the bracket, the tie, the rail, the tie-rod engaged with the bracket, and the shoe having an opening for the tie-bar, and a base portion 80 extending beneath the rail and provided in its upper side next the rail with a groove in alinement with said opening and adapted to receive the tie-rod whereby the latter may lie close to the rail substantially as set forth.

8. A bracing-bracket for railroads having a body portion to bear against the rail, and a shank for connection with the tie, said shank being arranged obliquely to the body portion, combined with the tie, notched, and forming a 90 seat for said oblique shank substantially as set forth.

9. A rail-bracing bracket having a body portion, and an obliquely-arranged shank, and twisted between said parts substantially 95 as set forth.

10. A rail-bracing bracket having a body portion, a shank in a different plane from said body portion and a twisted portion between said body and shank substantially as 100 set forth.

11. The combination of the tie having an oblique notch and the rail-bracing bracket having a shank fitting in said notch substantially as set forth.

HAMPTON E. JACKSON.

Witnesses:

Solon C. Kemon, Perry B. Turpin.