I.G. Bering,

Railway Rail Chair.

10. 98546.

Fatented Jan. 4. 1870.

Fig. 3.

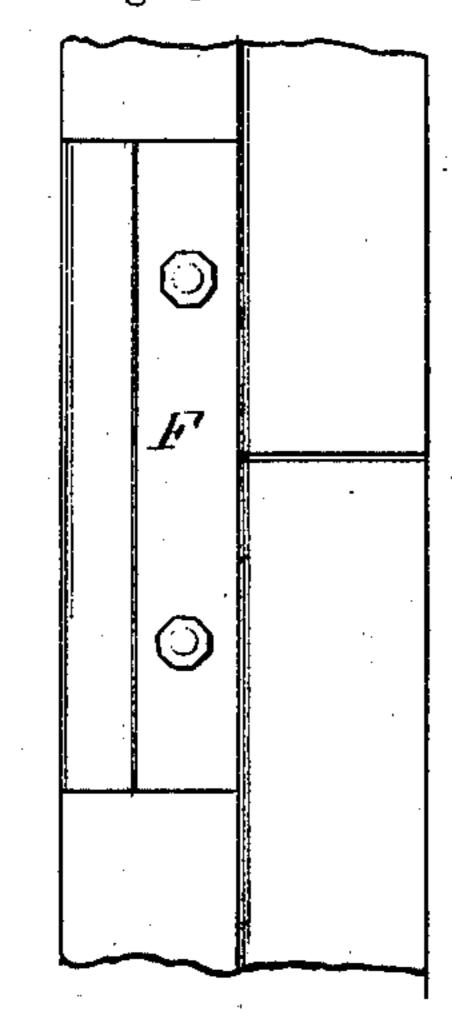
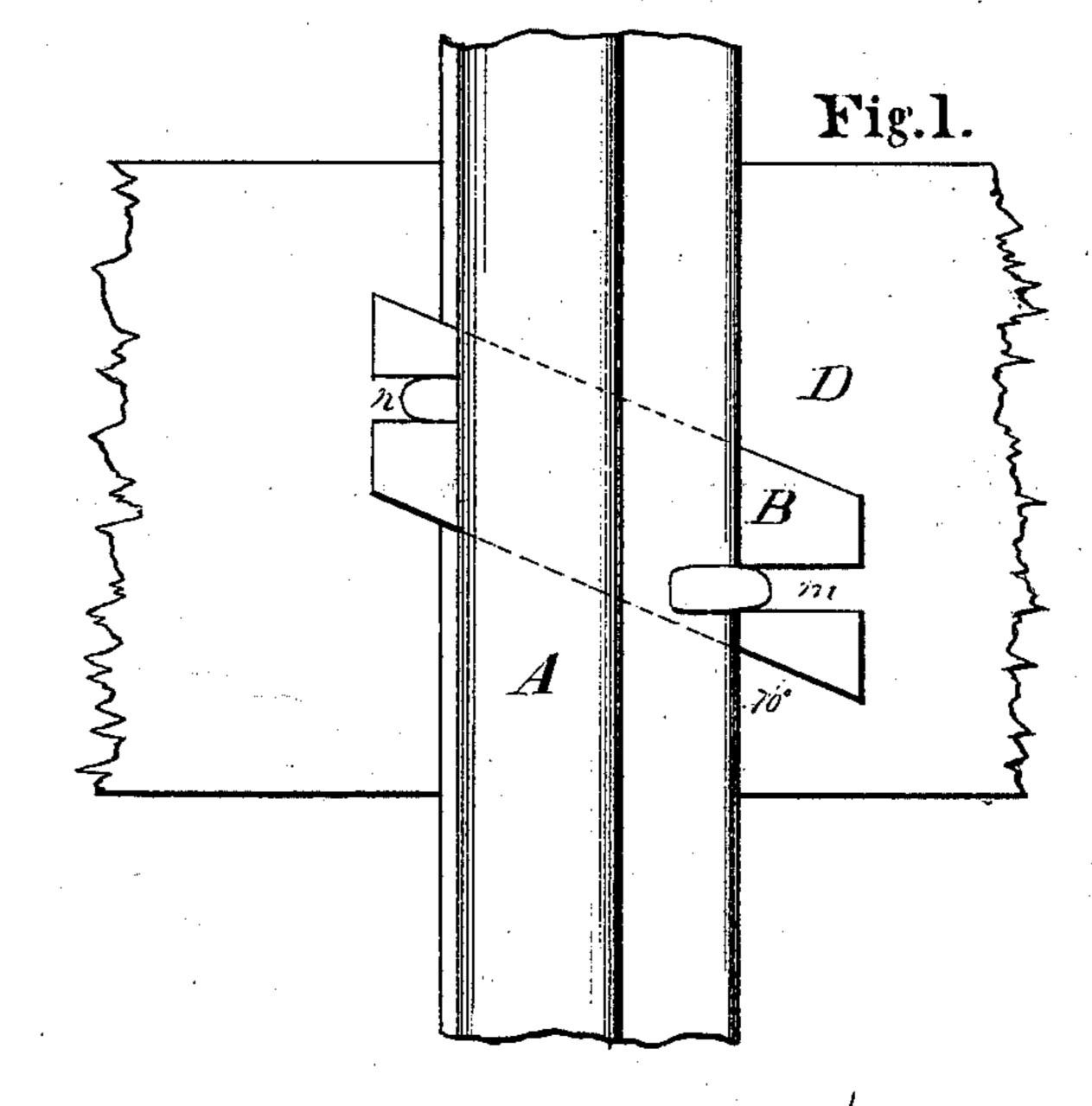
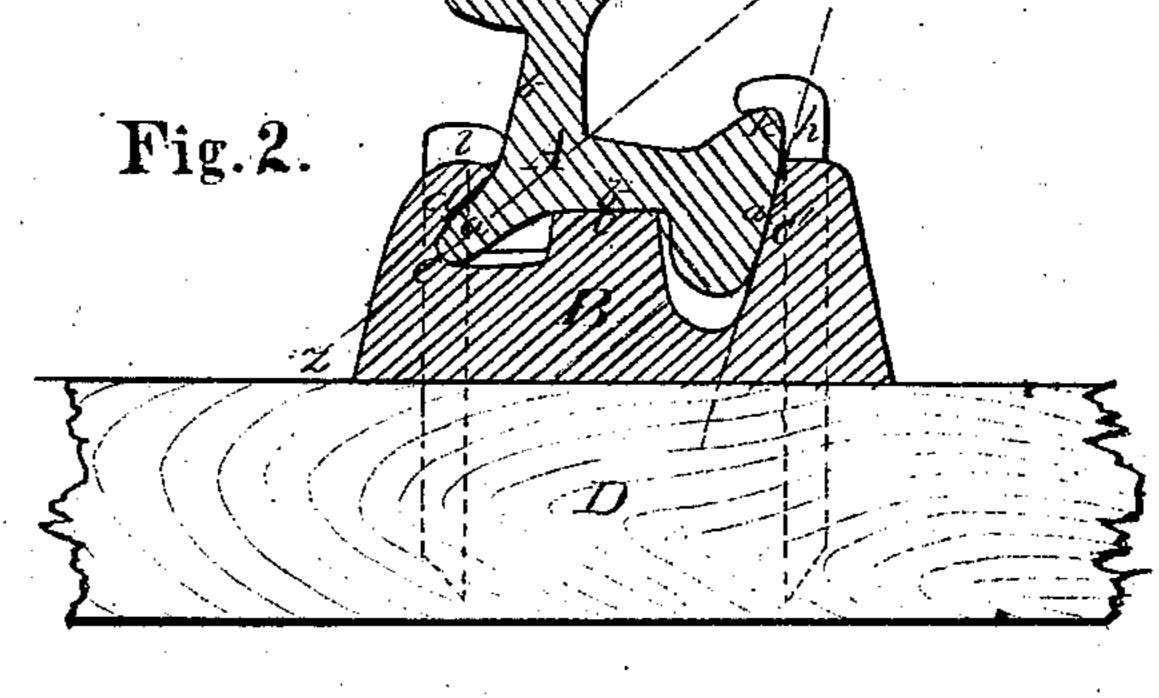


Fig.4





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M. Anderson. D.D. Kane

The Being Enpriman Hosmin Ho Attorneys,

Anited States Patent Office.

THOMAS G. BERING, OF HARRISBURG, PENNSYLVANIA.

Letters Patent No. 98,546, dated January 4, 1870.

IMPROVEMENT IN RAILWAY-RAIL CHAIRS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, Thomas G. Bering, of Harrisburg, in the county of Dauphin, and State of Pennsylvania, have invented a new and valuable Improvement in Double-Face Railroad-Rail and Clamp-Chair; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1, of the drawings, is a top view of my invention.

Figure 2 is a cross-section of the same.

Figures 3 and 4 are details.

My invention relates to railroads, and consists, mainly, in the construction and novel arrangement of devices, whereby a double rail is fixed in its chair, in such a manner that a firm foundation is secured.

The letter A, of the drawings, designates the rail, having two bearing-surfaces, a' a', inclined to each other in such a manner that tangential lines to each surface would intersect each other at an angle of seventy degrees, about, as shown in fig. 2.

In the same view, the union of the two bearing-rails is made apparent, and the elbow a thus formed is shown to be extended in the direction of a line, z, bisecting the angle of seventy degrees above mentioned, the rail being isometrical with respect to this line z z.

The part b which rests upon the sill c of the chair, is made parallel with the face of the bearing-rail.

B designates the chair, made so as to clamp as well as support the rail.

The flanch a of the rail is introduced under the clamping portion d of the chair, and takes at once its

proper position, so as to bear upon the chair at the three points e, c, and c'.

A clamping-spike, h, is driven, through a recess in the chair m, into the tie D, and biting on the edge k of the rail, secures it and one side of the chair firmly to the tie. The other side of the chair is in like manner secured by the spike l passing down through the recess n.

The chair B is placed under the rail diagonally, so that its longest sides incline to the line of direction of the rail, at an angle of about seventy degrees.

Further, in the use of these chairs, they are generally placed so that each chair inclines toward the one next to it.

It is apparent that this rail will have a firm and secure foundation in this chair, and that however much the edge k of the rail may be worn, it will afford a sufficient hold to the head of the spike h.

F is the fish-plate used to connect the ends of the rails. Its lower surface is made angular, to fit the neck of the rail.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with a double-bearing railroad-rail, having inclined treads a' a', and rib a, the diagonal clamp-chair B, having lip d, sill c, and inclined face c', arranged to press the rib a into the corner e, as shown and described.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses

THOMAS G. BERING.

Witnesses:

JOHN SAILER, FR. W. HAAS.