

No. 847,073.

PATENTED MAR. 12, 1907.

J. S. A. HUNT.
RAIL JOINT.

APPLICATION FILED FEB. 28, 1906.

Fig. 1.

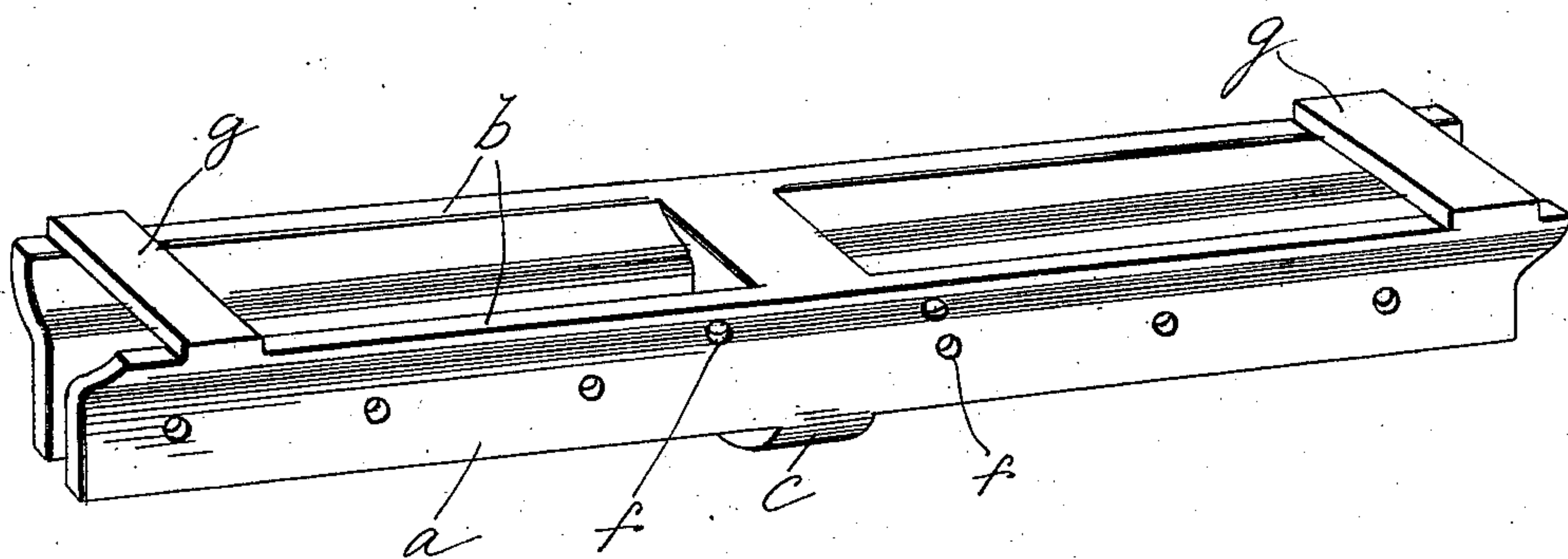
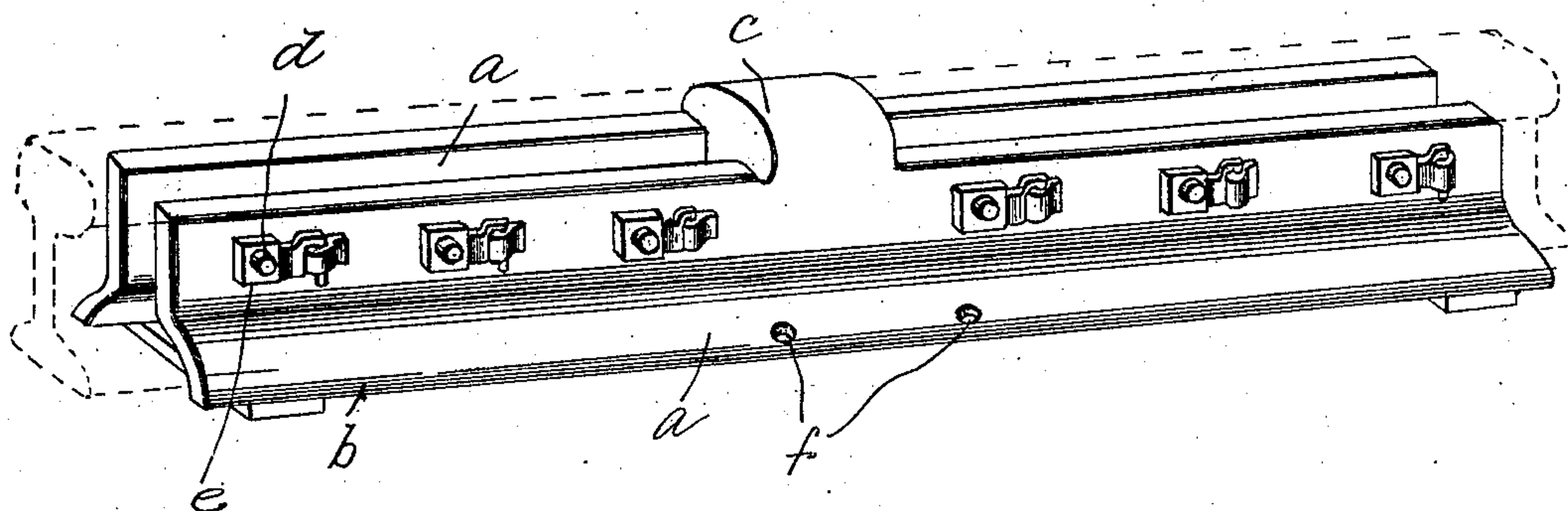


Fig. 2.

Witnesses

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JAMES S. A. HUNT, OF MATTIE, WEST VIRGINIA.

RAIL-JOINT.

No. 847,073.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES S. A. HUNT, a citizen of the United States, residing at Mattie, in the county of Roane, State of West Virginia, have invented certain new and useful Improvements in Rail-Joints; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention has relation to railway - rail joints or couplers.

It is the object of the invention to provide such improvements in railway-rail joints as will enhance their efficiency and durability and avoiding accidents in case the bolts or spikes should break or become loose.

The nature of my invention comprises a railway-rail joint or chair embodying strong and secure side or fish plates connected at the center with a bridge which has the form of the ends of the rails and is an integral part of the joint and connecting plates or straps at the ends and bottom of the joint, which plates are also integral with the latter, all as I will proceed to describe and claim.

Reference is to be had to the annexed drawings, forming a part of this specification, in which—

Figure 1 is a perspective view of the improved joint, showing a track-rail in position in dotted lines. Fig. 2 is an inverted perspective view of the rail-joint.

The same letters of reference designate the same parts or features, as the case may be, wherever they occur.

In carrying out my invention I provide a chair or joint in general of substantial construction and so that the fish-plates *a* and laterally-projecting flanges *b* will on their inner sides closely fit an ordinary track-rail, as represented by full and dotted lines in Fig. 1. At the center of the joint there is what I have chosen to call a "bridge" or "bridge-piece" *c*, which has the form exactly, or as near as may be, of a short section of the track-rail and which is made integral with the fish-plates *a*. This provision is made for con-

necting the fish-plates at the point where the ends of the rails join, as securely as the rails are themselves.

The ends of the track-rails abut against the sides of the bridge, and they are secured to the fish-plates by the usual bolts and nuts *d e* in the usual manner, and the lateral flanges *b* are spiked to the ties by spikes passing through the holes *f*, formed on opposite sides of the bridge-piece *c* an appreciable distance from its sides.

g g designate base plates or straps, which are formed integral with the fish-plates and connect the ends of the fish-plates. These plates *g* are shown as formed below the plane of the bottom surface of the joint and track rails. This is to avoid the necessity of making a cross-groove in the bottom of the track-rails at the point where the straps *g* fall. Besides it permits of the ends of the rails being laid upon and secured to the regular ties of the road-bed. The base-plates are provided in order that the fish-plates may be securely held against spreading at their ends.

With a rail-joint constructed as I have described it is obvious that it will hold the ends of the rails in place quite as securely and absolutely as though there were no joint in the track-rail. Should any of the bolts or spikes become loose or break, the joint would still hold the ends of the rails in place until the trouble was discovered without fear of accident on that account.

The location of the spike-holes *f*, hereinbefore described, is important, since they will register or come in line with the notches formed in the edges of the flanges of the rails, and spikes driven through said holes will also secure the rails to the tie.

The transverse plates at the bottom of the ends of the fish-plates are of peculiar importance in holding the fish-plates from spreading and keeping the parts securely in place and for other reasons stated.

What I claim is—

A railway-rail joint comprising in its construction fish-plates adapted to fit the sides and lateral flanges of the rails and having at their longitudinal center a bridge to form a

short section of the track-rail made integral
with the fish-plates, transverse plates at the
bottom ends of the fish-plates made integral
therewith and extending from edge to edge of
5 the flanges, the said transverse plates being
formed on a plane below the bottom of the
bottom of the rails, and spike-holes formed
through the flanges of the fish-plates near
their edge on opposite sides of the bridge-

piece at an appreciable distance from its re-
sides.

In testimony whereof I affix my signature
in presence of two witnesses.

JAMES S. A. HUNT.

Witnesses:

MARTHA H. RYAN,
LEWIS HILL.