

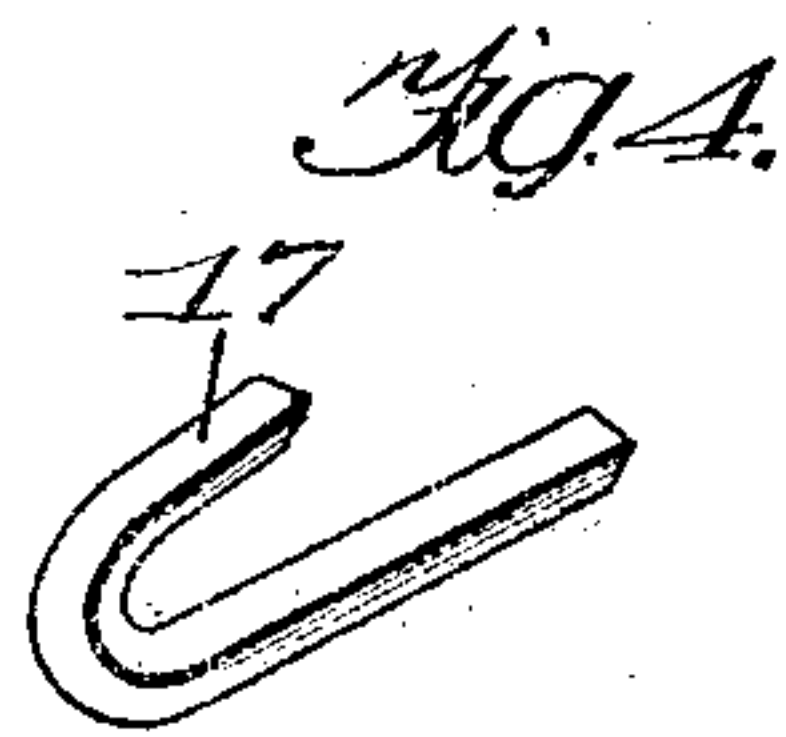
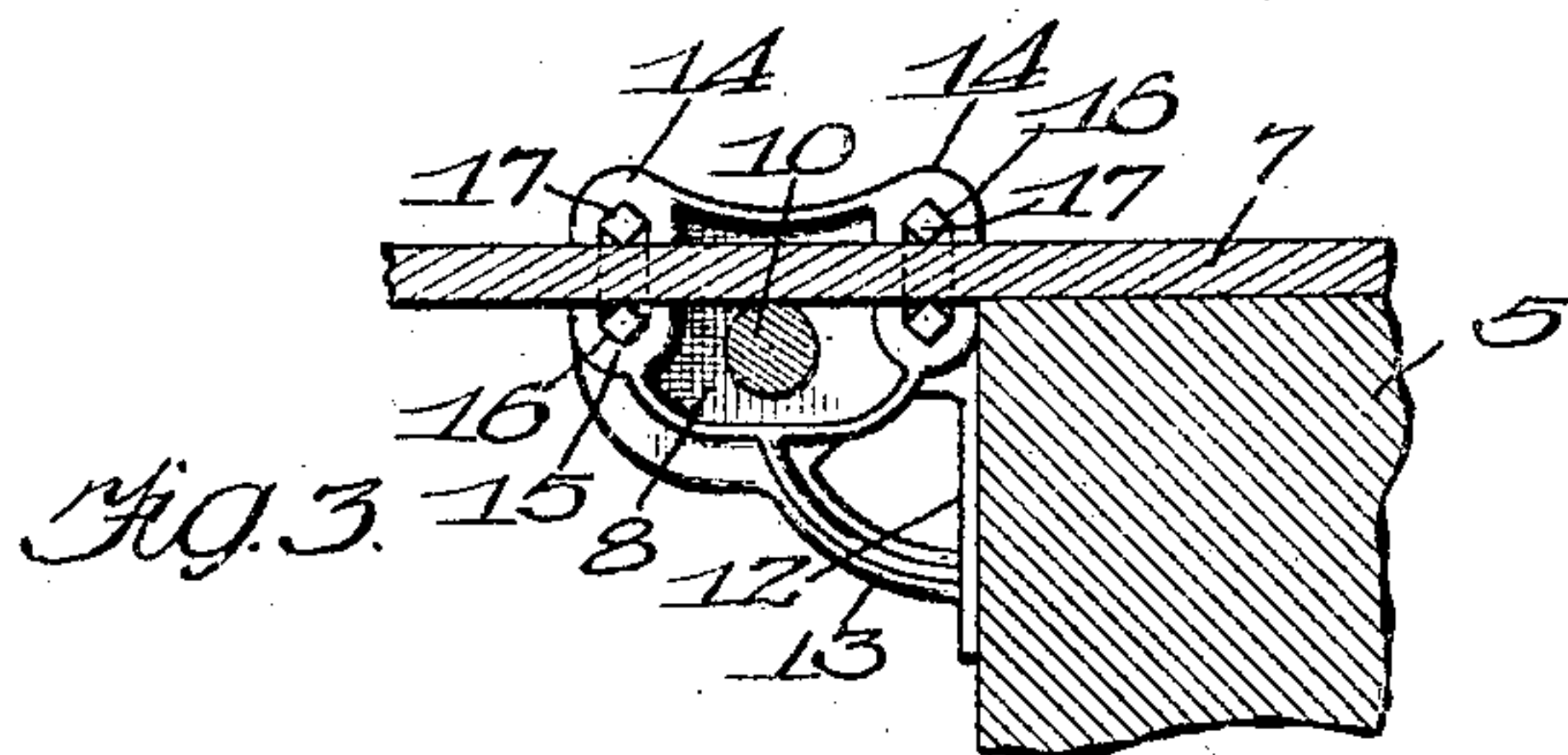
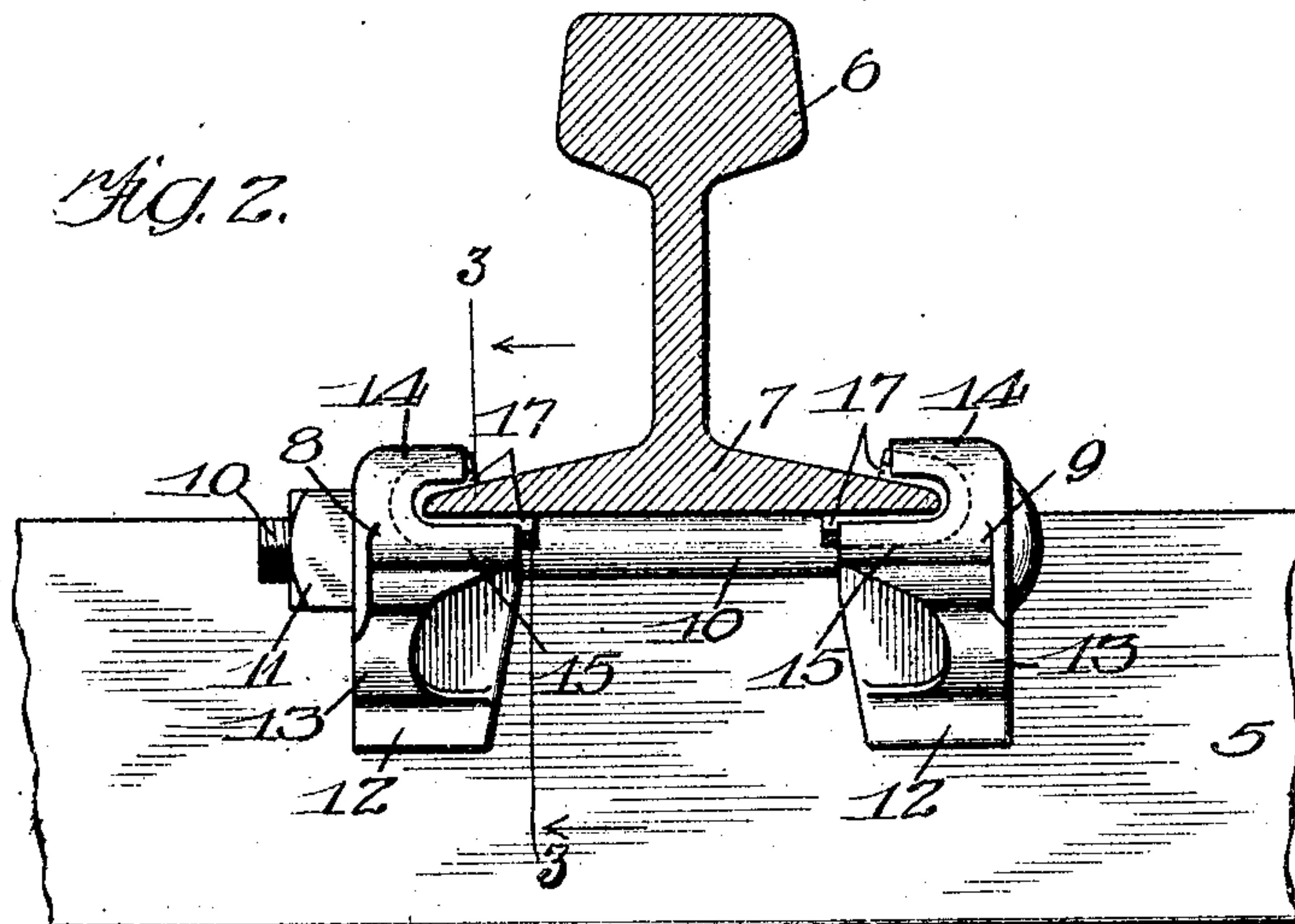
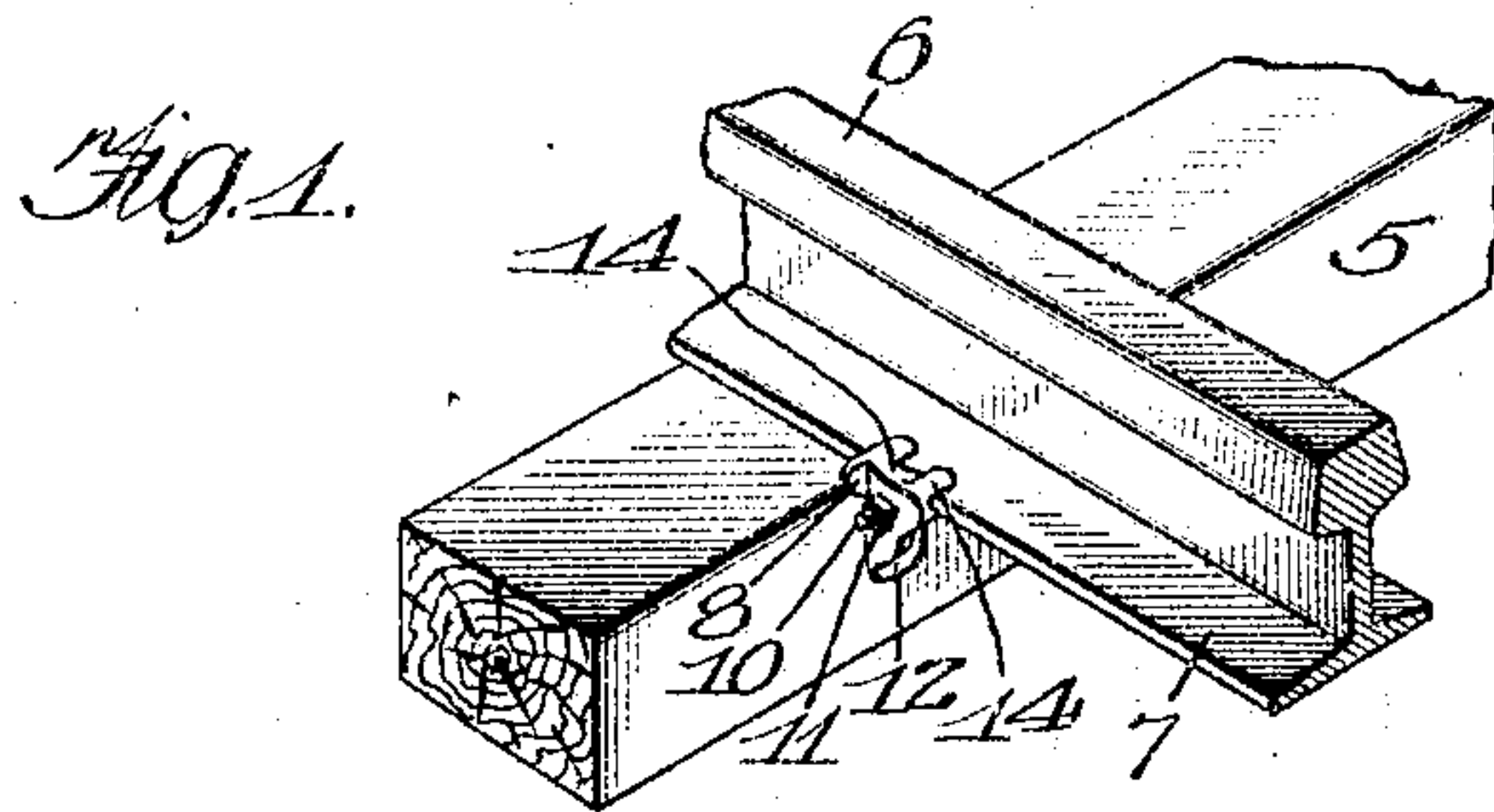
No. 897,307

PATENTED SEPT. 1, 1908.

J. M. SCOTT.

RAIL STAY.

APPLICATION FILED SEPT. 25, 1907.



Witnesses:

Ed. D. Perry

Robert H. Weir

Inventor:

John M. Scott.
By O. R. Barnett
Attorney

UNITED STATES PATENT OFFICE.

JOHN M. SCOTT, OF RACINE, WISCONSIN, ASSIGNOR TO OTTO R. BARNETT, OF CHICAGO ILLINOIS.

RAIL-STAY.

No. 897,307.

Specification of Letters Patent.

Patented Sept. 1, 1908.

Application filed September 25, 1907. Serial No. 394,525.

To all whom it may concern:

Be it known that I, JOHN M. SCOTT, a citizen of the United States, residing at Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Rail-Stays, of which the following is a specification.

My invention relates to devices for preventing the longitudinal movement of railroad rails, sometimes called rail stays, anti-creeping device or rail anchors, and has for its object to provide a new and improved construction in devices of that character.

Heretofore rail stays have been constructed consisting of opposed clamping members which grip the rail flange from either side and are clamped thereon by bolts of other equivalent means. It has been customary to make these devices in the main of relatively soft iron and to provide the requisite grip or bite upon the rail flange by means of hardened iron or steel insets of various sorts.

It is the object of my invention to provide a new and improved construction in rail stays of this character which shall be simple, economical and effective in the grip of the device upon the rail flange. These objects and such other objects as may be set forth in the accompanying specification and specified in the claims appended thereto are made clear by the accompanying drawings, in which

Figure 1 is a perspective view showing the attachment of the rail stay of my invention to a railroad rail. Fig. 2 is an elevational view of the rail stay with the rail shown in section. Fig. 3 is a vertical section taken on the line 3—3 of Fig. 2 looking in the direction of the arrows; and Fig. 4 is a detail of the hard-metal gripping device.

Like characters of reference indicate the same parts in the several figures of the drawing.

Referring to the drawings, 5 represents a cross tie and 6 a rail having the customary horizontal flange 7. The rail stay in the form illustrated in the drawings consists of the two opposed clamping members 8, 9 which extend around opposite edges of the rail flange and which are clamped upon the rail flange by a bolt 10, the end of which is threaded for the nut 11. In this particular form of device, each of the clamping members has the extension or plate 12 which is designed to abut against the tie, as shown in Fig. 3. In the construction shown, these plates are

reinforced by the curved struts 13. All these matters are details of construction not forming any essential part of my invention. It is not in all cases necessary, for example, that both of the clamping members should be provided with extensions for abutment against the tie. Likewise any other means than the one shown might be adopted for drawing the opposed clamping members together upon the rail flange.

The clamping members 8 and 9 are formed with jaws which surround the edges of the rail flange, these jaws being constituted by upper and lower members 14 and 15; respectively. I have shown two of these jaws upon each clamping member. The jaws are made with internal grooves 16 which form seats for the hard-metal gripping devices 17. These devices are preferably formed as shown in Fig. 4; that is, a bar of hardened iron or steel is bent upon itself into something like a U. The gripping members so formed are seated in the jaws. The bending and seating may, of course, be carried on simultaneously.

It will be seen that the jaws are provided with gripping devices for biting the rail flange which extend around the edge of the flange and may be made to bite the flange at both top and bottom. These devices may be forced or driven into the grooves in the jaws, so that they are held in position of themselves. It will be seen, in fact, that the insets or gripping devices are held in proper relation by the clamping action of the stay.

I wish it to be understood that I do not desire to limit myself to the particular devices and constructions herein set forth, as obvious modifications will occur to those skilled in the art, which modifications may nevertheless come within the scope of my invention as defined by the claims. I have shown the grooves forming the seat for the insets angular in cross section. If found more convenient in casting, the groove might be made somewhat rounded. It will be seen that the inset pieces may be formed or bent in such a way that the biting edges will be in contact with the rail flange on the top, bottom and at the edge thereof.

I claim:

1. In a rail stay, the combination of opposed clamping members, with means for clamping the same against the rail flange, and a U-shaped, hard-metal, gripping device associated with one of said members

and adapted to extend around the edge of and bite into the rail flange.

2. In a rail stay, the combination of opposed clamping members, with means for clamping the same upon the rail flange, a jaw on one of said clamping members, and a hard-metal, gripping device in said jaw, said device formed so as to bite into the rail flange from above and below.

3. In a rail stay, the combination of opposed clamping members, with means for clamping the same upon the rail flange, a jaw on one of said clamping members, said jaw having a groove, and a hard-metal gripping device in the groove, said device bent upon itself so as to extend around the edge of the rail flange.

4. In a rail stay, the combination of opposed clamping members, with means for clamping the same upon the rail flange, a jaw on one of said clamping members, and a hard-metal gripping device in said jaw, said device

formed with an edge and so as to bite into the rail flange from above and below.

5. In a rail stay, the combination of opposed clamping members, with means for clamping the same upon the rail flange, a jaw on one of said members, and a hard-metal gripping device in said jaw, said device consisting of a rod bent upon itself and angular in cross section so as to form an edge extending around and biting into the rail flange.

6. In a rail stay, the combination of opposed clamping members, with means for clamping the same upon the rail flange, a pair of jaws on each of said members, said jaws being formed with grooves, and hard-metal gripping members in said grooves consisting of bent rods angular in cross section so as to form edges to bite the rail flange.

JOHN M. SCOTT.

Witnesses:

CHRISTOPHER C. GITTINGS,
MATTIE E. PALMER.