

No. 786,174.

PATENTED MAR. 28, 1905.

F. O. WOOD.

CLAMP.

APPLICATION FILED JAN. 23, 1905.

Fig. 1

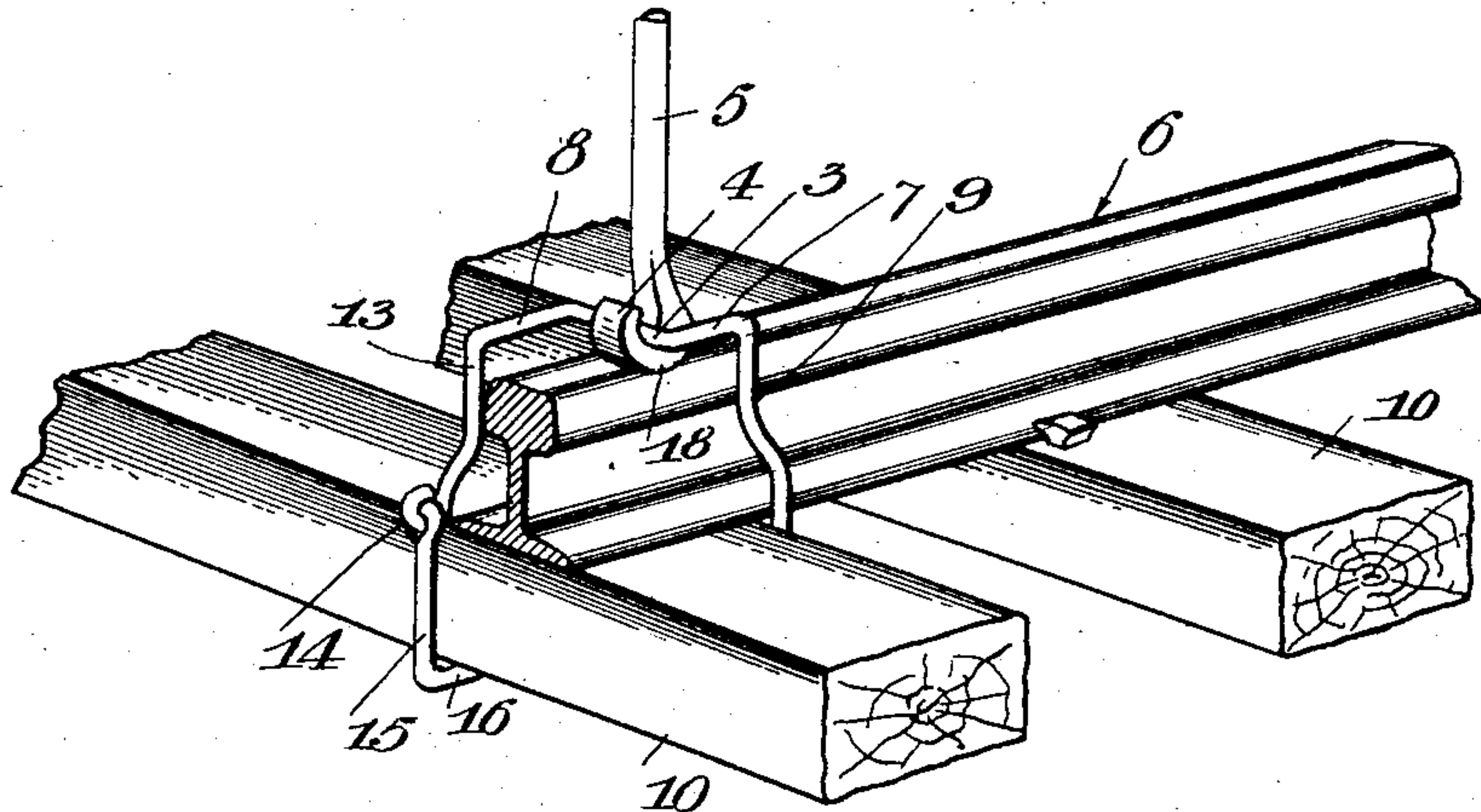


Fig. 2

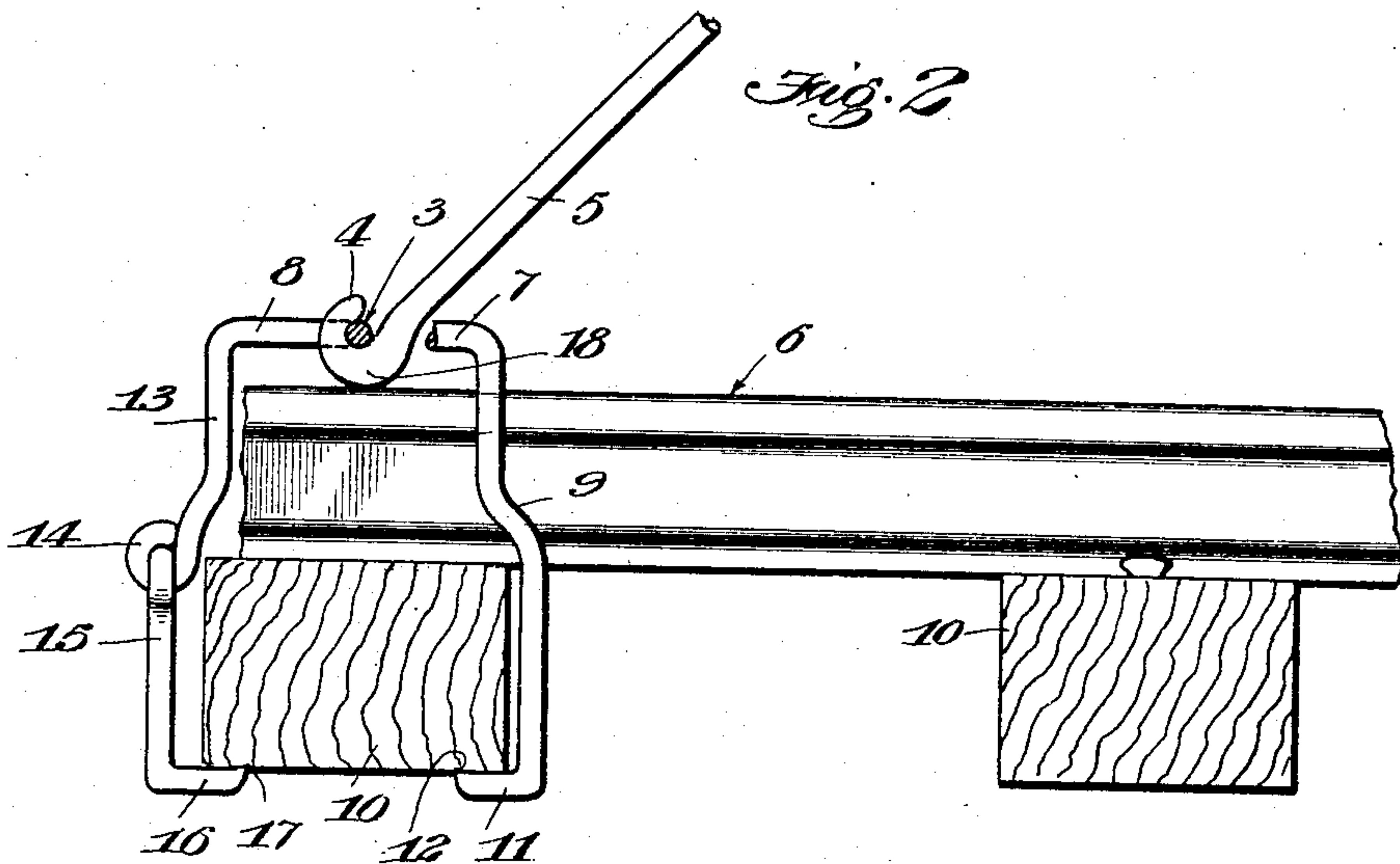
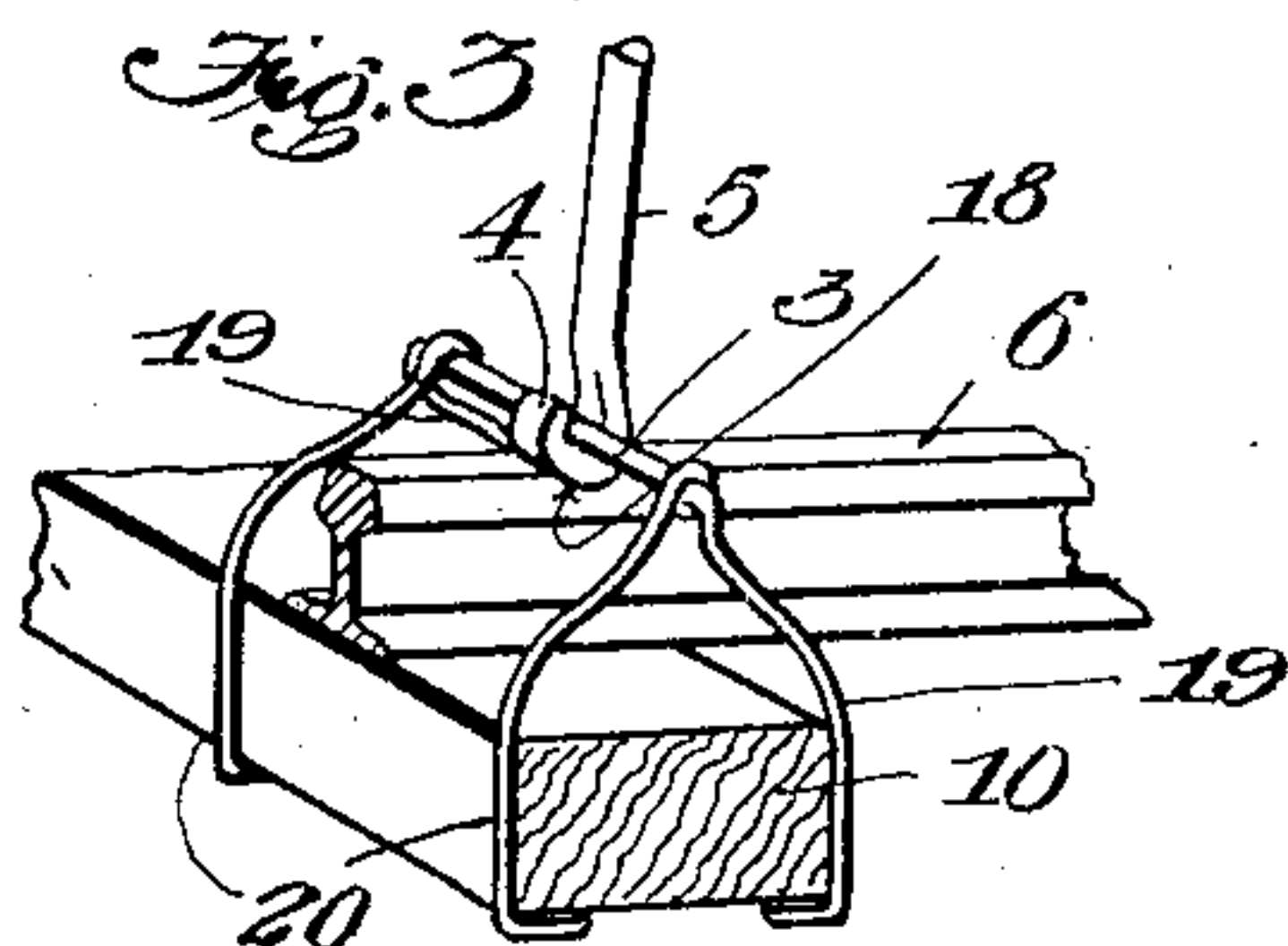


Fig. 3



Witnesses

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FRANC O. WOOD, OF SOUTH PASADENA, CALIFORNIA.

CLAMP.

SPECIFICATION forming part of Letters Patent No. 786,174, dated March 28, 1905.

Application filed January 23, 1905. Serial No. 242,427.

To all whom it may concern:

Be it known that I, FRANC O. WOOD, a citizen of the United States, residing at South Pasadena, in the county of Los Angeles and State of California, have invented new and useful Improvements in Clamps, of which the following is a specification.

My invention relates to a clamp for holding a railway tie and rail together while the rail is being spiked to the tie; and the object thereof is to provide a clamp that can be readily secured upon the tie and rail and which will clamp the same firmly together until the spike is driven into the tie and which can then be readily removed from the rail and tie. I accomplish this object by the clamp described herein and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a fragment of a rail and of two ties, one of which has been spiked to the rail and the other of which is held beneath the rail, with my clamp in place thereon in position to be set so as to hold the rail and tie firmly together while the spikes are driven into the tie. Fig. 2 is a side elevation of the parts shown in Fig. 1 with the clamp-lever thrown so as to secure the rail and tie from separating. Fig. 3 shows a modified form.

In the construction of railways, after the ties are laid upon the road-bed the rails are then placed upon the ties and spiked thereto before the road-bed is ballasted. Owing to the inequalities of the road-bed, when the ties are placed thereon it is necessary that the tie be supported in firm contact with the rail while the spikes are being driven into the tie, which holds the rail secured thereto. Various devices have been used for the purpose of holding the ties up to the rail while it is being spiked to the tie, a common way being of having a man on each side of the tie, each with a crowbar under the end of the tie to hold it in contact with the rail while the spike is driven into the tie. This requires the services of four men—two to hold the tie against the rail and two to drive the spikes. With my clamp one man can perform this work.

The body of the clamp is formed of a transverse section 3, which is adapted to receive

the hook 4 of the lever 5. From the transverse section the body turns at one side forwardly and at the other side rearwardly at substantially right angles to the transverse section and parallel with the top of the rail when a clamp is in place thereon and forms what I term "side members" 7 and 8, each of which is approximately one-half the width of the tie upon which it is used. From the outer end of the side members they are bent downwardly to form leg members, one of which, 9, extends as far below the bottom of the rail as the thickness of the tie 10, when it is bent forwardly at substantially right angles to pass under the tie, as shown in Fig. 2, to form a holding member 11, at the outer end of which is preferably placed a point 12, which sinks into the wood and prevents the holding member from slipping thereon. The other leg member, 13, of the clamp is turned to form an eye 14 at or near the bottom of the rail. This eye receives and holds the upper end of a hook 15, which hook is provided with a holding member 16, provided with a point 17, which holding member is passed under the tie, as best shown in Fig. 2.

In the use of my device the body of the clamp is placed over the rail and the leg member 9 is placed with the holding member under the tie, as best shown in Fig. 2. The hook 15 is then turned so as to bring its holding member likewise under the tie, when the hook of the clamping-lever is inserted under the transverse section and the lever is turned so as bring the cam-face 18 of the hook to draw the tie firmly against the rail, where it is securely held while the operator drives the spike into the tie in the usual manner. As one of the leg members is on one side of the tie and the other leg member is on the other side of the tie, spikes can be readily driven on both sides of the tie, and when the rail and tie are secured together by the spikes the clamp can be quickly removed and replaced over the rail at another tie.

If desired, an eye could be formed on the end of the operating-lever, having one side thereof formed into a cam-face, and the transverse body portion of the clamp could be passed therethrough, and pivoted legs having holding members to pass under the tie could

be used, there being two legs on each side of the rail. Another construction would permit of a leg member 19 on each side being formed integral with the transverse body portion 3
5 and a leg member 20 on each side pivoted to the transverse body portion. I prefer, however, the form shown in the accompanying drawings, as it is simpler of construction and equally effective in operation.

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

1. A clamp having a body adapted to pass across the tread of a rail; legs secured to said
15 body at each side thereof having holding members at the lower ends of said legs, said holding members being adapted to pass under a tie and a lever having a cam-faced hook on the end thereof adapted to engage the body
20 over the rail and to be turned so as to clamp the rail and tie together.

2. A clamp comprising a transverse body portion; side members secured thereto; leg members having holding members adapted to
25 be passed under the tie at each side thereof

and on each side of the rail; and a clamping-lever having a cam-faced hook on the end thereof, said hook being adapted to pass upon the transverse portion and to be turned to securely hold the tie in engagement with the rail. 30

3. A clamp comprising a body adapted to pass across the tread of a rail; side members secured to said transverse body, one extending forwardly and one extending rearwardly; leg members secured to said side members, one
35 of said leg members being jointed; holding members secured to said leg members adapted to pass under and hold a tie; and a lever having a cam-faced hook on the end thereof, said hook being adapted to engage the transverse
40 body and when turned to clamp the rail and tie together.

In witness that I claim the foregoing I have hereunto subscribed my name this 16th day of January, 1905.

FRANC O. WOOD.

Witnesses:

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