

No. 742,597.

PATENTED OCT. 27, 1903.

G. B. F. COOPER.
BRAKE BEAM FULCRUM.
APPLICATION FILED APR. 1, 1903.

NO MODEL.

Fig. 1.

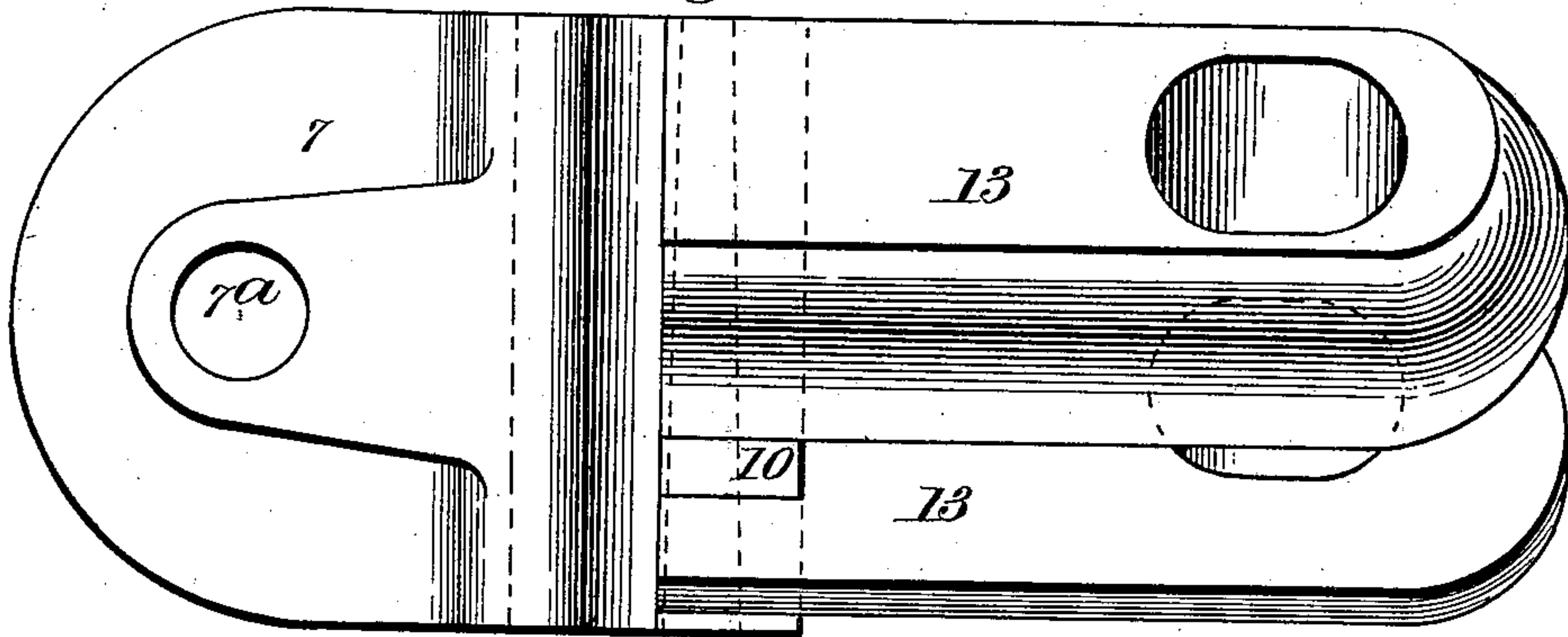


Fig. 2.

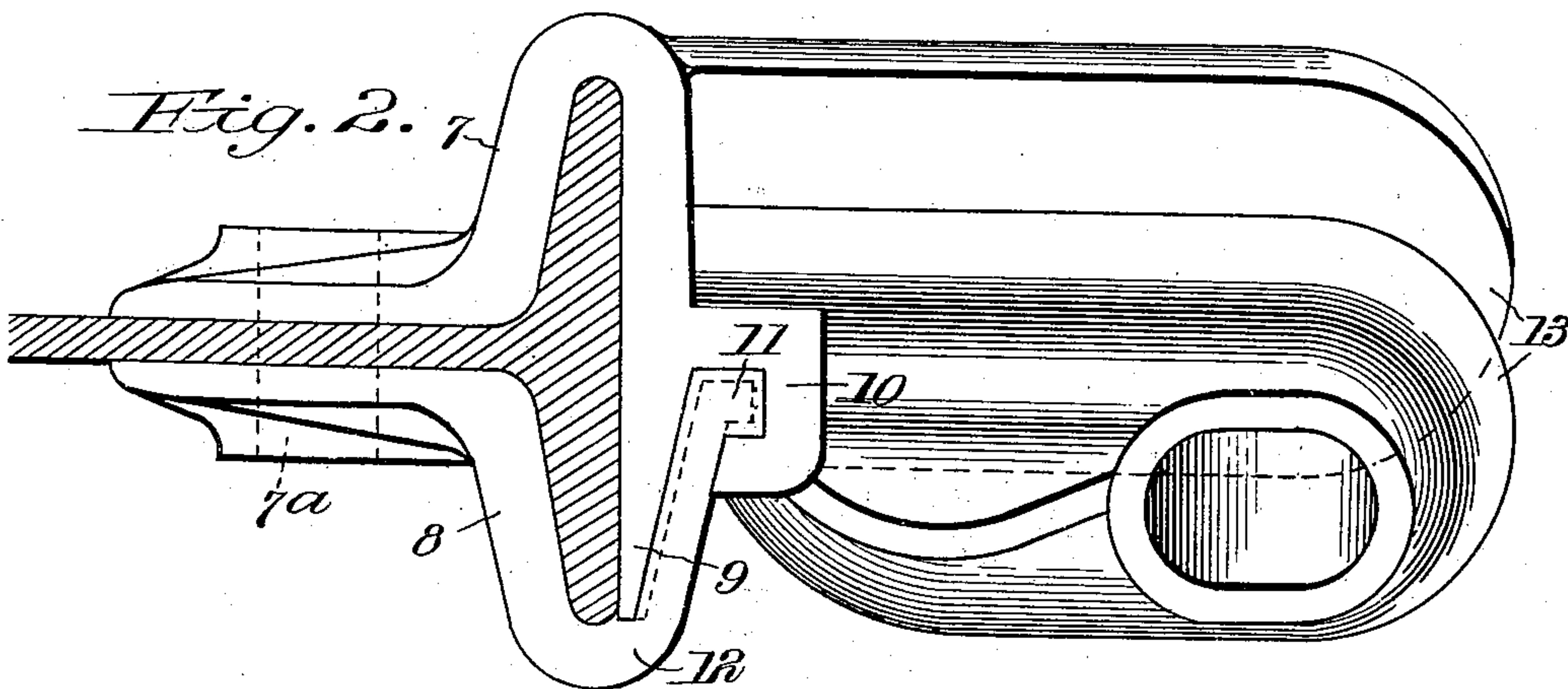
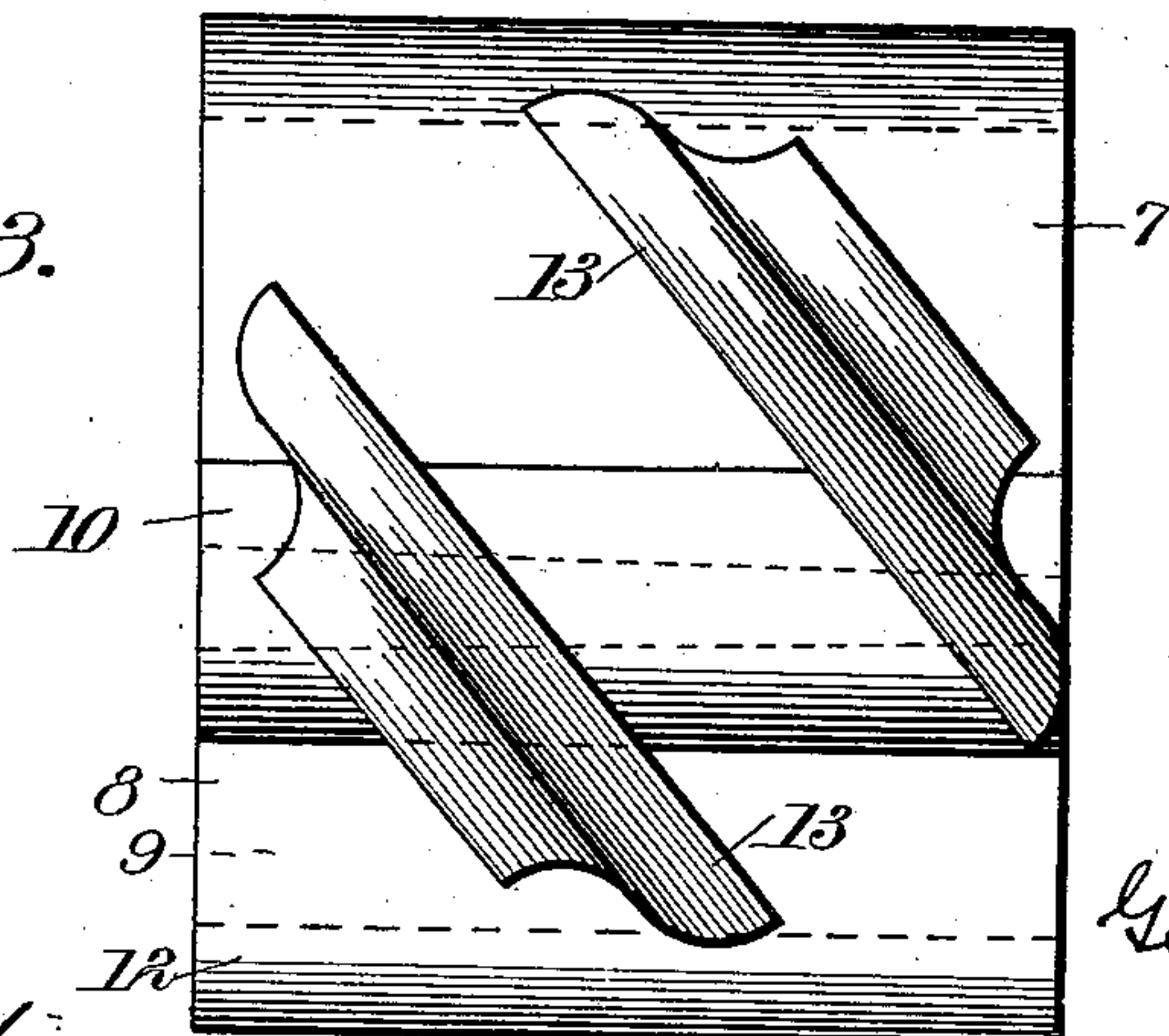


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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BRAKE-BEAM FULCRUM.

SPECIFICATION forming part of Letters Patent No. 742,597, dated October 27, 1903.

Application filed April 1, 1903. Serial No. 150,537. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. F. COOPER, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Brake-Beam Fulcrums; 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to that class of brake-beams formed of a metal beam, such as an I or a T beam, with the brake-heads and fulcrum attached thereto; and the object of this invention is to produce a fulcrum which may be readily and firmly clamped to the beam.

A further object is to produce a construction permitting easy removal of the fulcrum for renewal or repairs without removing the brake-heads.

With these and other objects in view the fulcrum comprises two parts, one of which carries both the ears for the attachment of the brake-lever and the other of which is a clamp member which secures the other part to the beam. The fulcrum is composed of two parts or sections, which are joined by a wedge-shaped tongue-and-groove connection, forming a joint which avoids loosening or rattling of the fulcrum.

In the accompanying drawings, Figure 1 is a top plan view of the fulcrum. Fig. 2 is a side view thereof, showing the beam in section; and Fig. 3 is a front view thereof.

The two parts of the fulcrum are indicated at 7 and 8. They embrace the flanges of the beam and are secured to opposite sides of the web by a rivet through registering holes 7^a in the sections and the web. The section 7 carries both of the ears 13 for the attachment of the brake-lever and lies against the face of the beam-flanges, across the entire width thereof. This affords a broad and solid support for the ears. A portion of this section

lying against the face of the flange is inclined 50 or beveled, as at 9, to engage a corresponding jaw 12 of the clamping-section 8. An undercut groove is also formed in a rib 10, extending transversely across the section 7 at the base of the ears. This groove receives the lip 11, projecting from the jaw 12 of the clamping-section 8. The part 9 is embraced and clamped between the face of the beam-flange and the jaw 12, and said part and jaw and also the groove and lip are tapered on all contacting sides, as indicated in dotted lines in the drawings. When the parts are assembled, the section 8 is driven in from the side and the taper of the engaging parts produces a wedge draw and bind which when the rivet is placed firmly lock the sections together, clamping the part 9 within the jaw 12 and the lip 11 within the groove of the rib 10. A firm and solid fulcrum is thus formed which may be placed on the beam or removed therefrom without removing the brake-heads.

The rib 10, with the undercut groove, may be formed at any place between the edges of the beam.

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

1. A brake-beam fulcrum comprising two parts embracing the beam, one of which has ears for the lever, and a transverse tapering undercut groove, and the other of which has a tapering lip engaging in the groove.

2. A brake-beam fulcrum formed of two parts joined by transverse tapering tongue and groove, forming a wedge-joint.

3. The combination with a flanged beam, of a fulcrum comprising two parts one of which has ears for the lever, a portion 9 lying against the face of the flange, and a transverse groove, and the other of which has a jaw clamping said portion against the flange, and a lip on the jaw engaging in the groove.

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

GEORGE B. F. COOPER.

Witnesses:

JESSIE A. GORDON,
ELIZABETH J. PRICE.