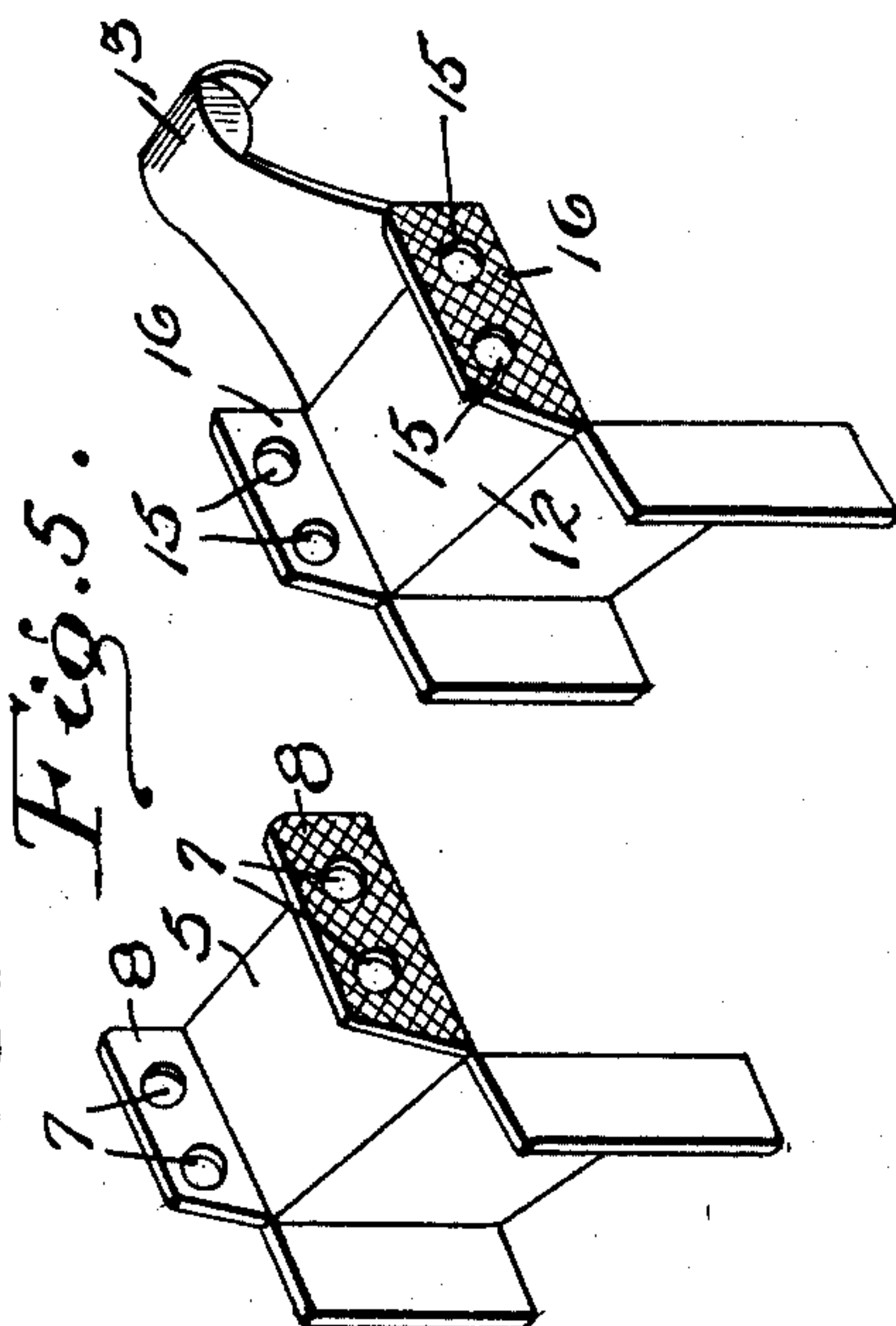
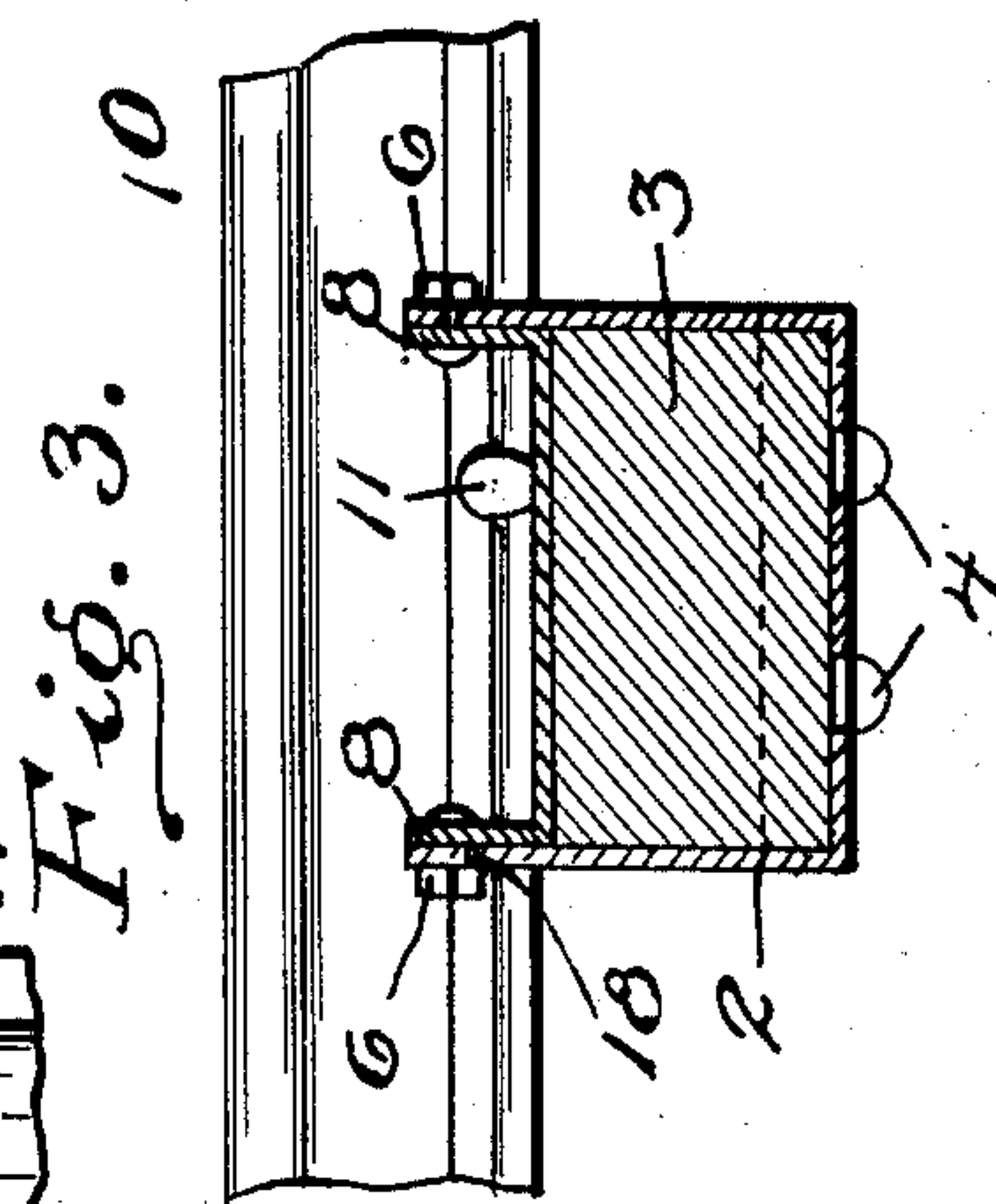
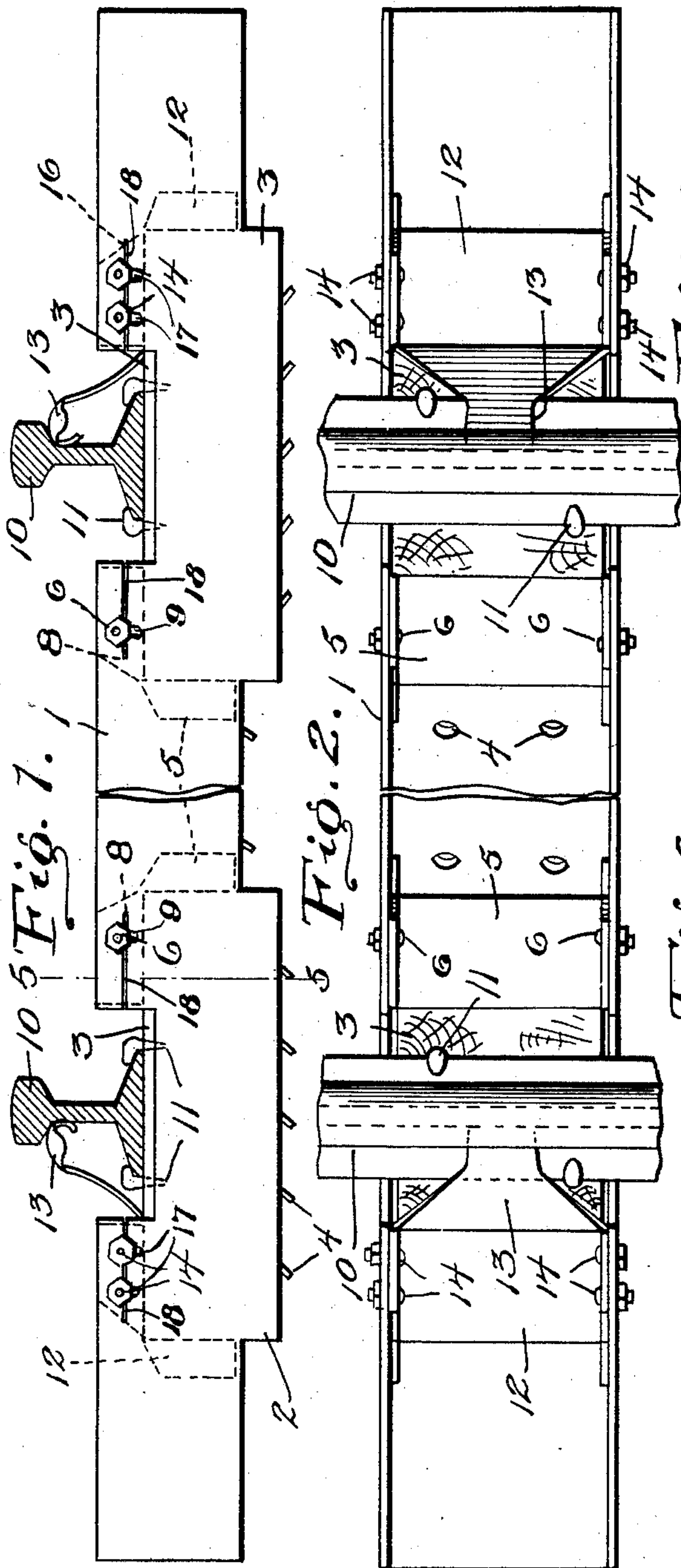


C. E. PATMOR.
RAILROAD CROSS TIE.
APPLICATION FILED DEC. 22, 1910.

998,387.

Patented July 18, 1911.



Witnesses

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RAILROAD CROSS-TIE.

998,387.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed December 22, 1910. Serial No. 598,779.

To all whom it may concern:

Be it known that I, CHARLES E. PATMOR, a citizen of the United States, residing at Fairbury, in the county of Livingston and State of Illinois, have invented certain new and useful Improvements in Railroad Cross-Ties; 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 relates to improvements in railroad cross ties, and particularly to those formed of metal in combination with some other material, as wood fiber or some other cushioning substance.

The device is easily pressed from one sheet of metal, and in combination with the cushioning blocks and retaining pieces forms a tie which is strong, resilient and durable.

With this construction the vibration and noise common to other types of metallic ties are eliminated.

With the above and other objects in view, this invention resides in the novel features of construction, formations, combinations and arrangements of parts to be hereinafter more fully described, claimed and illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation of my invention partly broken away; Fig. 2 is a top plan view thereof; Fig. 3 is a transverse sectional view taken on the line 5—5 of Fig. 1; and Figs. 4 and 5 are detail perspective views of the outer and inner hoods.

Referring to the drawing by characters of reference, the numeral 1 represents the body of the cross tie as formed from one sheet of metal, and pressed or formed into the peculiar channel shape shown, having a depression or seat 2 formed near each end for the reception of the blocks 3, made from wood fiber or some other suitable material. Holes 4 are formed in the bottom of the channel for the purpose of providing suitable drains in the central portion, and to form a more solid contact with the road under the depressed parts 2.

After placing the blocks 3 in the seats 2, the hoods 5 are placed over the inner edges of the blocks and secured to the side of the channel by means of the bolts 6, passing through the holes 7 in the upturned lips 8 of the hoods 5 and the slots 9 in the sides of the channel. The rails 10 are then put in

place and secured to the blocks 3 by the common form of railroad spikes 11. The outside hoods 12 are then placed on the outer edges of the blocks, the braces or supporting members 13 bearing against the side of the rail and are secured in place by the bolts 14 passing through the holes 15 in the upturned lips 16 of the hoods 12 and the slots 17 in the sides of the channel. The slots 9 and 17 are provided in the sides of the channel to allow adjustment of the hoods to slight irregularities in height of the cushioning blocks, as well as to compensate for their shrinkage or settling.

Horizontal cuts 18 are made to connect the slots 9 and 17 with the edges of the channel, which, together with the ribs formed on the outer surfaces of the upturned lips on the hoods, provides a means for easily, yet rigidly, adjusting said hoods.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A railroad cross tie such as described, consisting of a channel section formed with a depression near each end for the reception of a cushioning block to which the rails are fastened, and hoods to be placed over the blocks, and upturned lips formed at the edges of the said hoods to provide a surface to be bolted to the inside of the channels.

2. A railroad cross tie such as described, consisting of a channel section formed with depressions near the ends for the reception of cushioning blocks to which rails are fastened, hoods to be placed over the blocks and fastened to the sides of said channels, and a shoulder or brace formed on each outer hood to rest against the rails and provide a support for the same.

3. A railroad tie such as described, consisting of a channel section formed with depressions near the ends for the reception of cushioning blocks to which rails are fastened, hoods to be placed over the blocks and fastened to the sides of said channels, and vertical slots in the channel section through which the hood-retaining bolts are passed, which, together with horizontal slots cut to connect said vertical slots and an edge of the channel section, provide means for vertical adjustment of said hoods.

4. A railroad tie such as described, consisting of a channel section formed with a depression near each end for the reception of a cushioning block to which the rails are

fastened, hoods placed over the blocks, and upturned lips formed at the edges of said hoods to provide a surface to be bolted to the inside of the channels, horizontal slots cut in said channel section for the purpose set forth, and ribs formed on the outer surface of said upturned lips to engage the inner surface of the channel section and thus

provide friction to prevent any displacement of the hoods.

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

CHARLES E. PATMOR.

Witnesses:

JOHN H. McFADDEN,
CHARLES STEINBERG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
