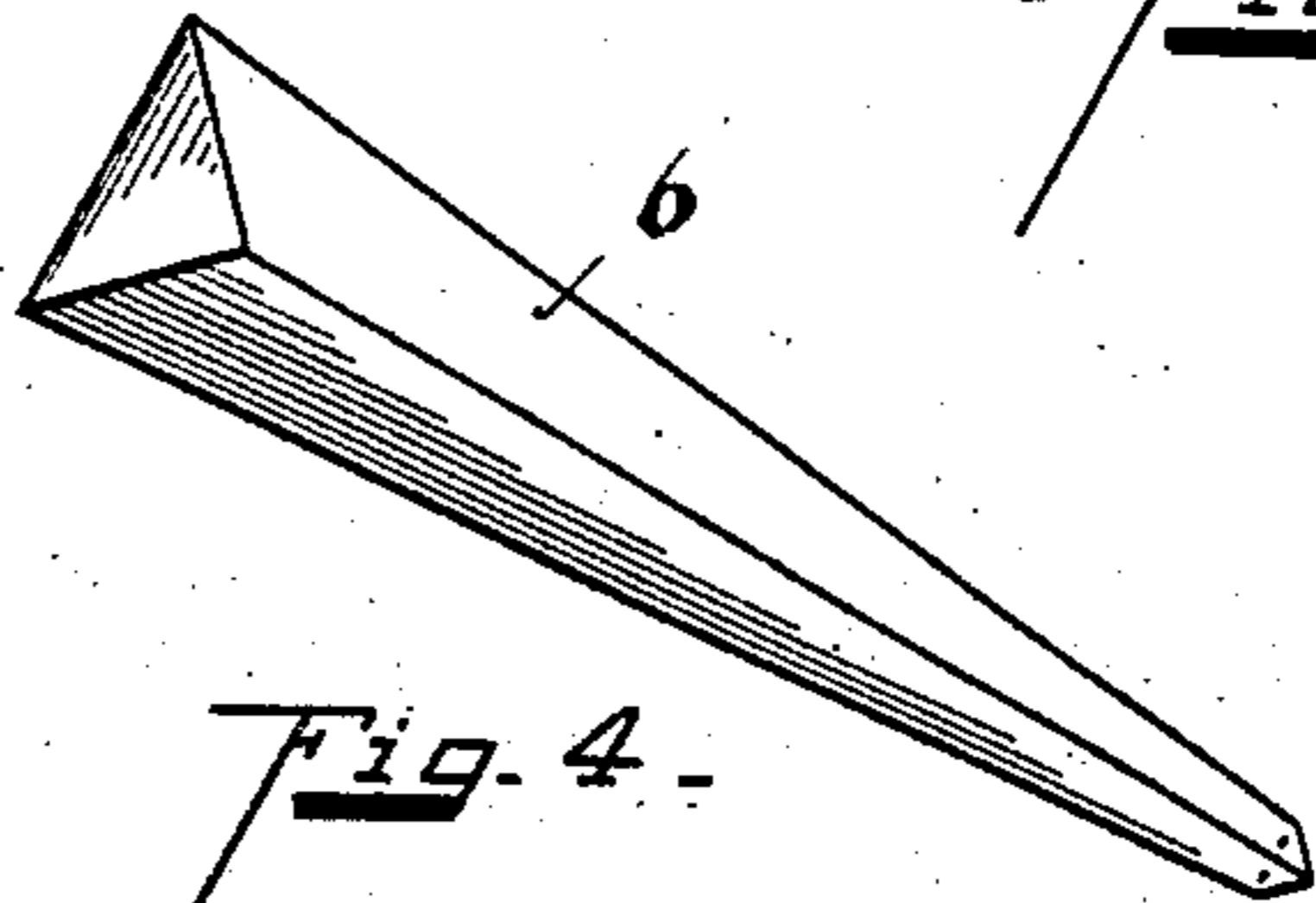
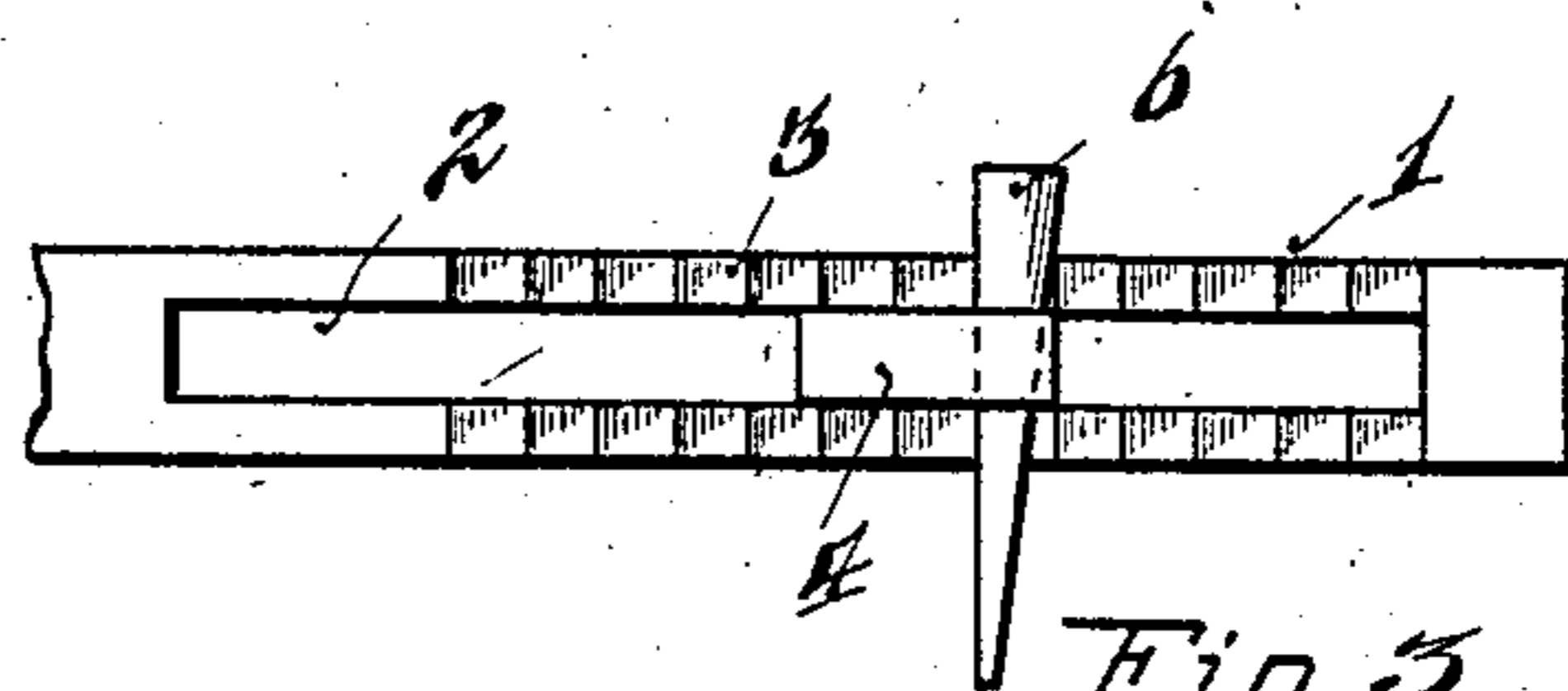
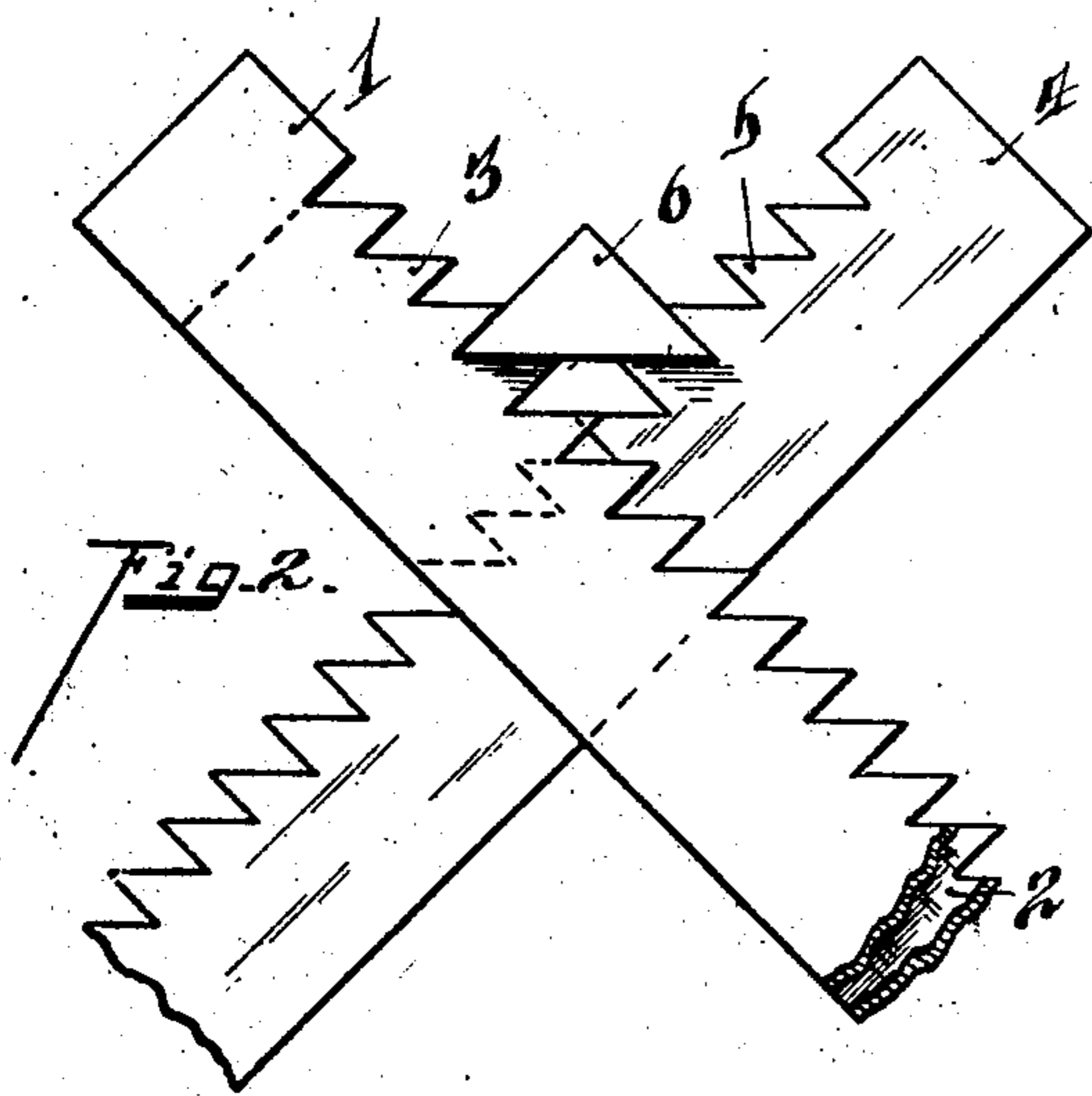
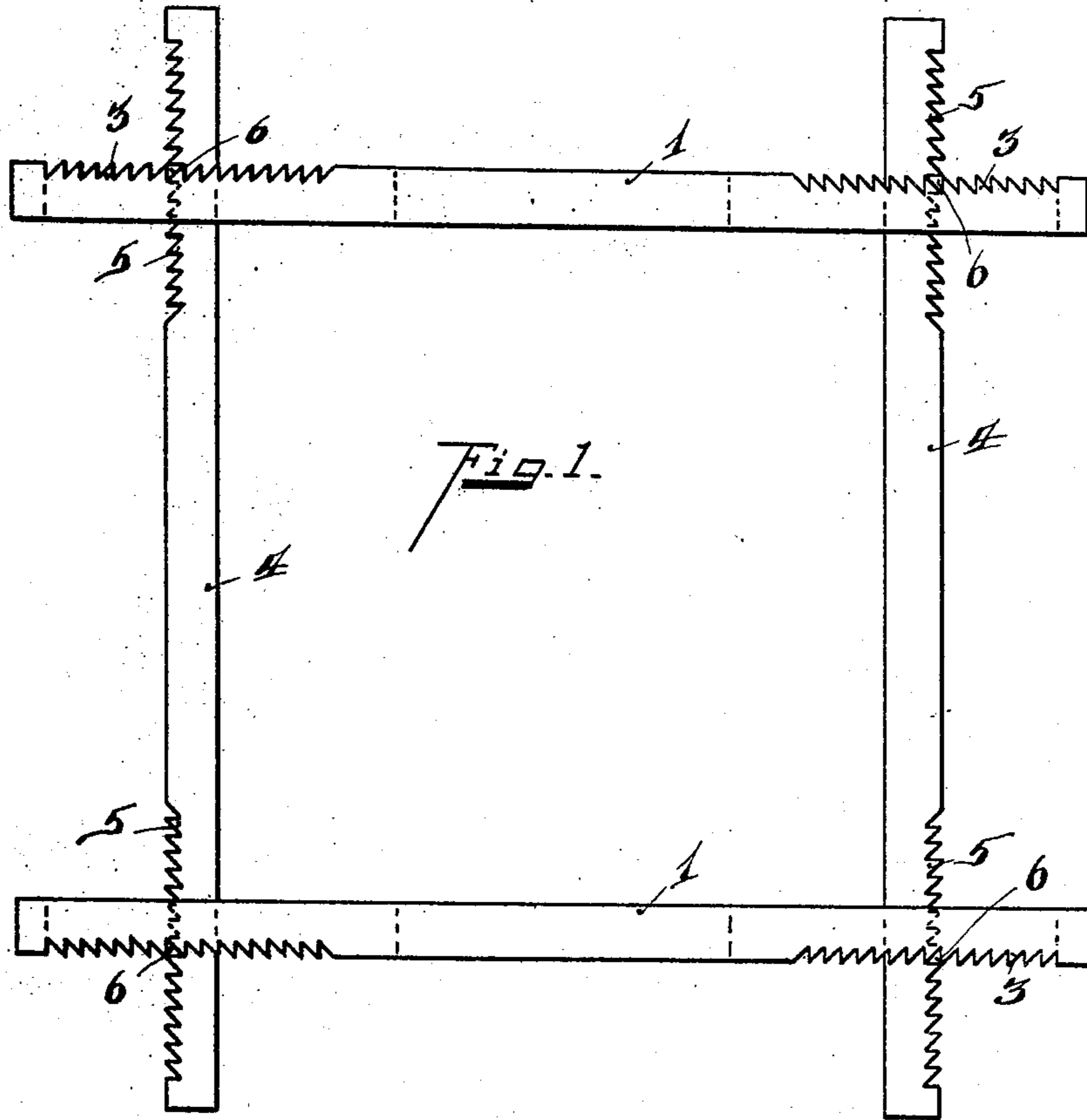


No. 898,396.

PATENTED SEPT. 8, 1908.

O. WALLACE.
CLAMP.

APPLICATION FILED JAN. 9, 1908.



Witnesses
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CLAMP.

No. 898,396.

Specification of Letters Patent.

Patented Sept. 8, 1908.

Application filed January 9, 1908. Serial No. 410,024.

To all whom it may concern:

Be it known that I, OSCAR WALLACE, a citizen of the United States, residing at Elmwood Place, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Clamps, of which the following is a specification.

My invention consists in a clamp, primarily adapted to clamp and draw together the sides of angular structures and it is particularly adapted to clamp the false work of pillars in the construction of concrete structures.

In the accompanying drawing I have shown the same adapted to be used with a four-sided pillar and the clamping devices applied to each of the four corners thereof, as the preferred form of construction.

The features of my invention are more fully set forth in the description of the accompanying drawing, forming a part of this specification, in which:—

Figure 1 is a plan view of a four-sided clamp. Fig. 2 is a plan view of one of the corners of said clamp in its clamped position. Fig. 3 is an end elevation of Fig. 2. Fig. 4 is a perspective view of the clamping wedge.

I will first describe the preferred form of construction.

1 represents the clamping bars provided near each end thereof with small slots 2.

3 represents ratchet teeth on the outer faces of the bars 1 and adjacent to the slots of said bars.

4 represents transverse slidable bars supported in the slots 2 and provided with the ratchet teeth 5 on the outer faces thereof adjacent to the teeth 3.

6 represents a wedge having in the present case triangular corners which fit and engage the ratchet teeth of the transversely disposed bars. As the wedge is driven the bars are slidable one with the other and clamp the abutting faces of the structure on which they are disposed. I have shown a series of ratchet teeth on each bar member, so that the same set of bars may be used upon different sized columns.

It is obvious that six-sided structures or other sided structures may be clamped together by providing a bar member for each of the sides to be clamped intersecting the adjacent bar-member and provided with ratchet teeth in the proper angle to the correspond-

ingly angled wedge. It will be readily seen that, say in the case of a four-sided structure, the bars or pins may be fixed together at diagonal corners and the sliding wedge connection be applied to the adjacent corners. In some cases an effective clamp will be obtained by applying the clamping mechanism at only one point of the structure.

While I have shown as the preferred form of construction one of the bars slotted to receive the transverse member, I do not wish to be limited to this construction, as any slidable engagement of the two transverse bars, provided with the ratchet teeth, which will permit one to slide from the other, may be employed in lieu of the slotted engagement, which is a convenient method of yoking the two transverse bars in slidable engagement with each other.

I have shown the triangular wedge as having three full sides, but it will be readily seen that only two of the wedge corners have a functional engagement with the ratchet teeth. The angle of the ratchet teeth and the angle of the wedge will of course correspond in pitch with the angle of the structure to be clamped.

Having described my invention, I claim:—

1. A clamp for a plain sided angular structure, consisting of two or more bars having ratchet teeth at one end thereof, an intersecting transverse slidable bar having ratchet teeth at one end thereof opposite the teeth of the bar with which it is in transverse engagement, a triangular wedge pin adapted to engage the oppositely disposed ratchet teeth of the respective bars, substantially as described.

2. A clamp for a plain sided angular structure, having two or more bars provided with ratchet teeth on their outer faces, an intersecting bar having ratchet teeth opposite the teeth of the bars with which it is in engagement, and a triangular wedge pin adapted to engage the oppositely disposed ratchet teeth of the respective bar members, substantially as described.

3. A clamp of the class described, consisting of two or more bars having ratchet teeth on the outer faces thereof, an intersecting bar slidably supported transversely upon the opposite bar members, provided with ratchet teeth adjacent to the teeth of said members, and a triangular wedge pin adapted to en-

gage the oppositely disposed ratchet teeth of the respective bar members, substantially as described.

4. A clamp for a plain sided angular structure, consisting of two or more slotted bars having ratchet teeth adjacent to the slots, a transverse intersecting bar having ratchet teeth near the ends thereof and slidable in the slots of the opposing bars, and a triangular wedge adapted to engage the oppositely disposed ratchet teeth of the respective bar members, substantially as described.

5. A clamp for angular structures consisting of two bar members, one slidable with the other, each bar being provided on its outer face with a series of oppositely disposed

ratchet teeth, and a triangular wedge adapted to engage the opposite faces of the opposite ratchet members, substantially as described.

6. A clamp comprising intersecting bars, a wedge disposed between the extensions of the bars beyond the intersection, and teeth on the bars engageable with opposite sides of the wedge, substantially as described.

In testimony whereof, I have hereunto set my hand.

OSCAR WALLACE.

Witnesses:

OLIVER B. KAISER.

LEO O'DONNELI.