

(No Model.)

2 Sheets—Sheet 1.

W. A. BICKFORD.  
SWING.

No. 561,368.

Patented June 2, 1896.

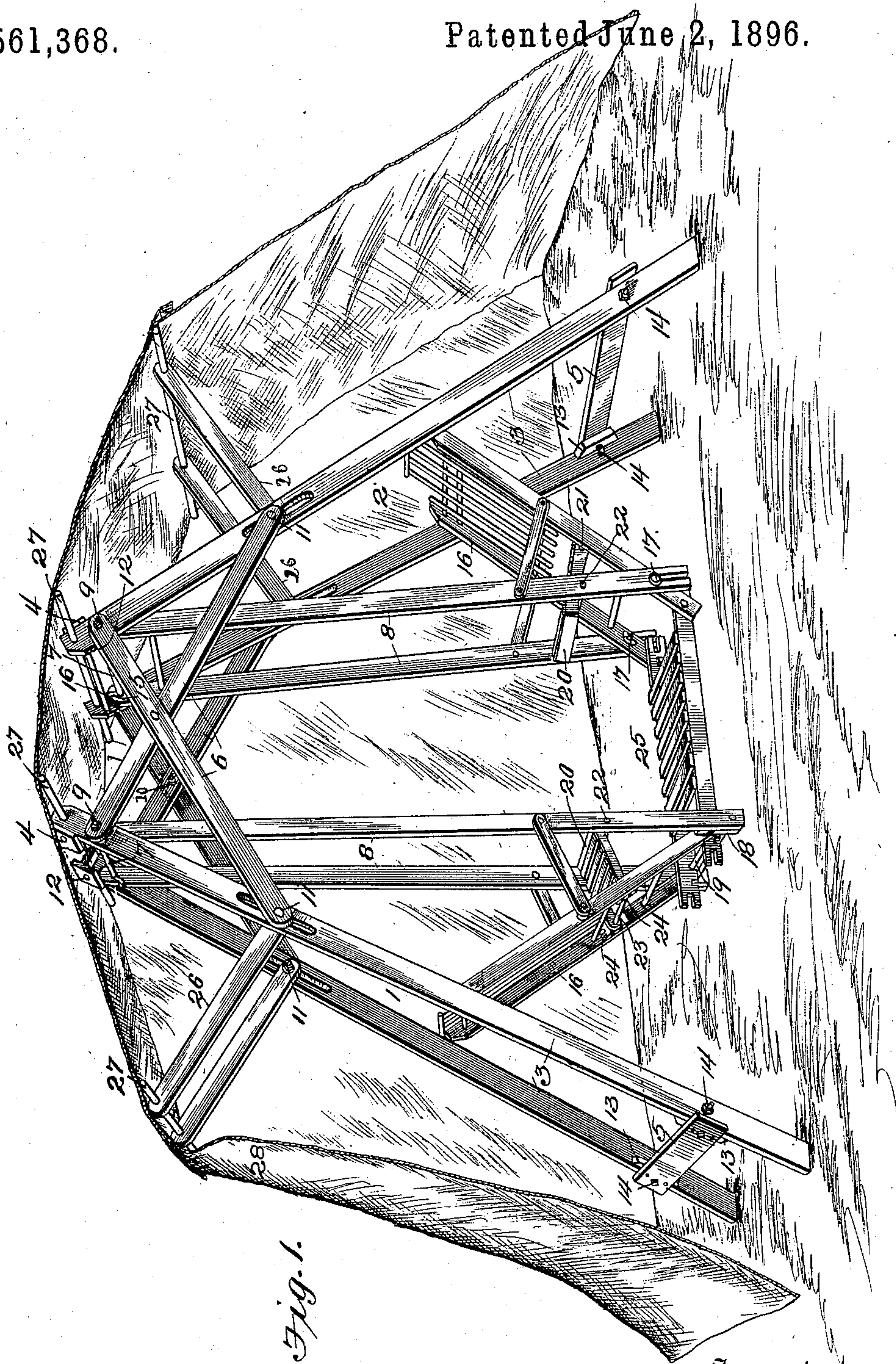


Fig. 1.

Witnesses

*John D. Smith*  
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Inventor  
*William A. Bickford*  
By *T. J. W. Robertson*

Attorney



(No Model.)

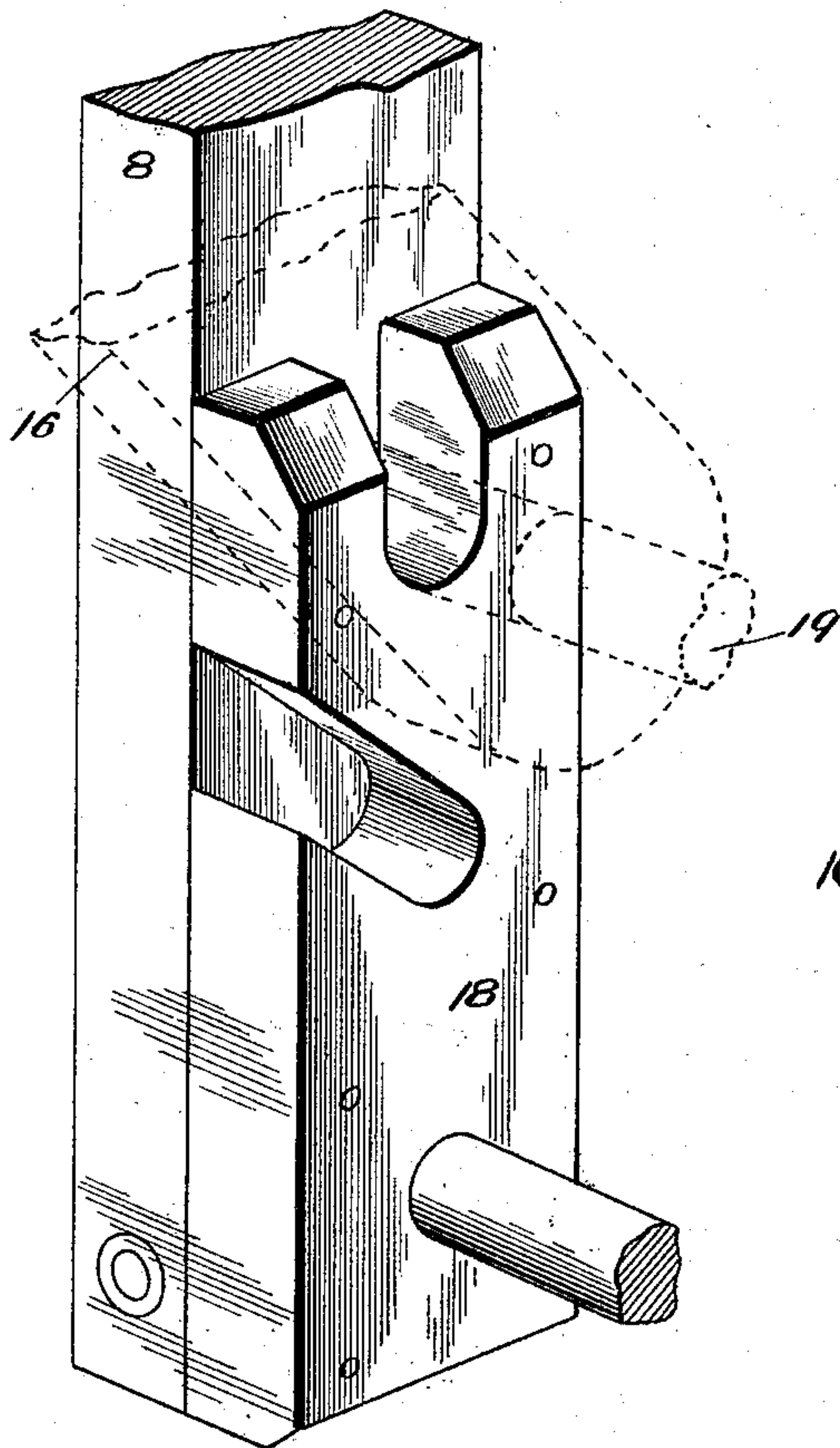
2 Sheets—Sheet 2.

W. A. BICKFORD.  
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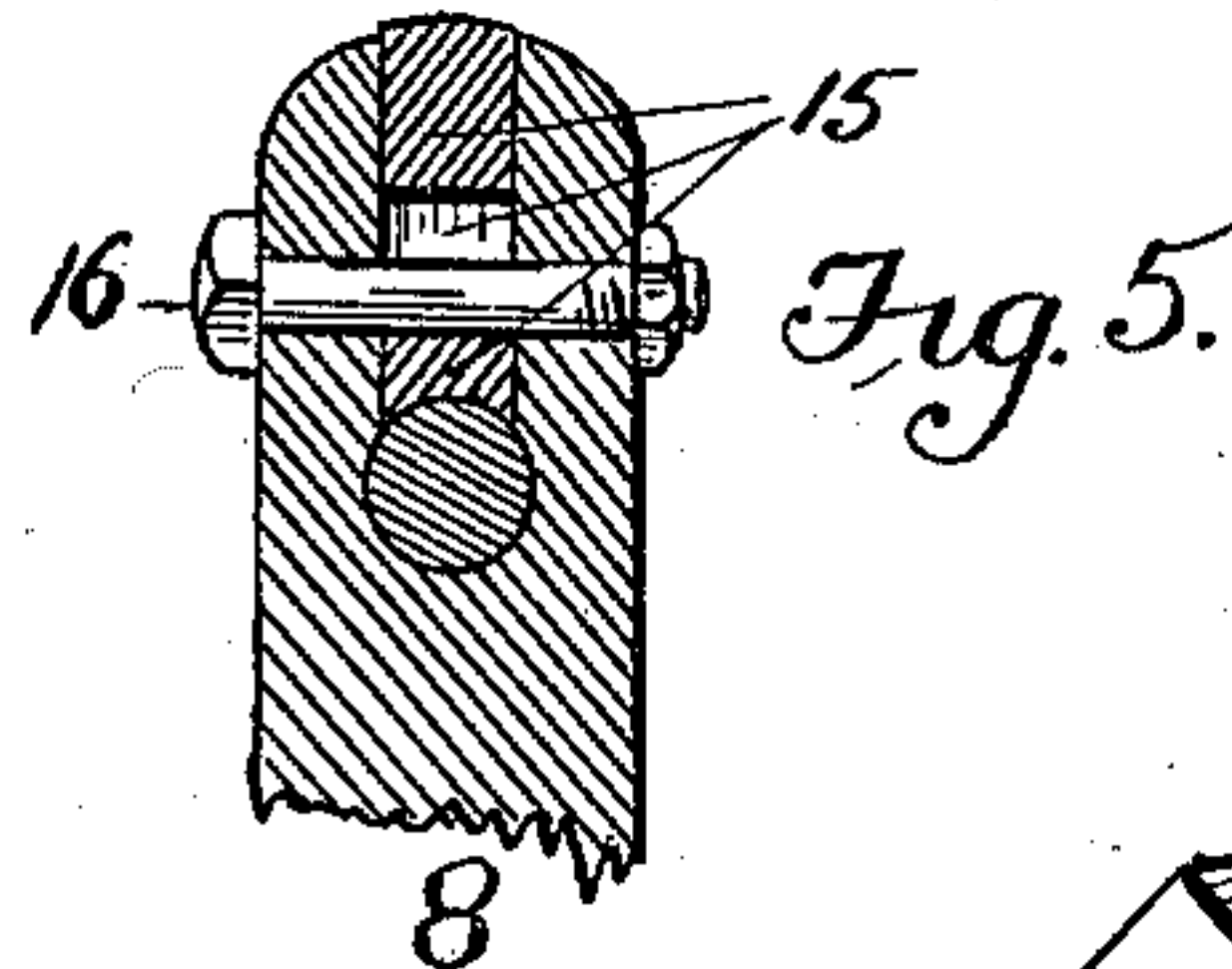
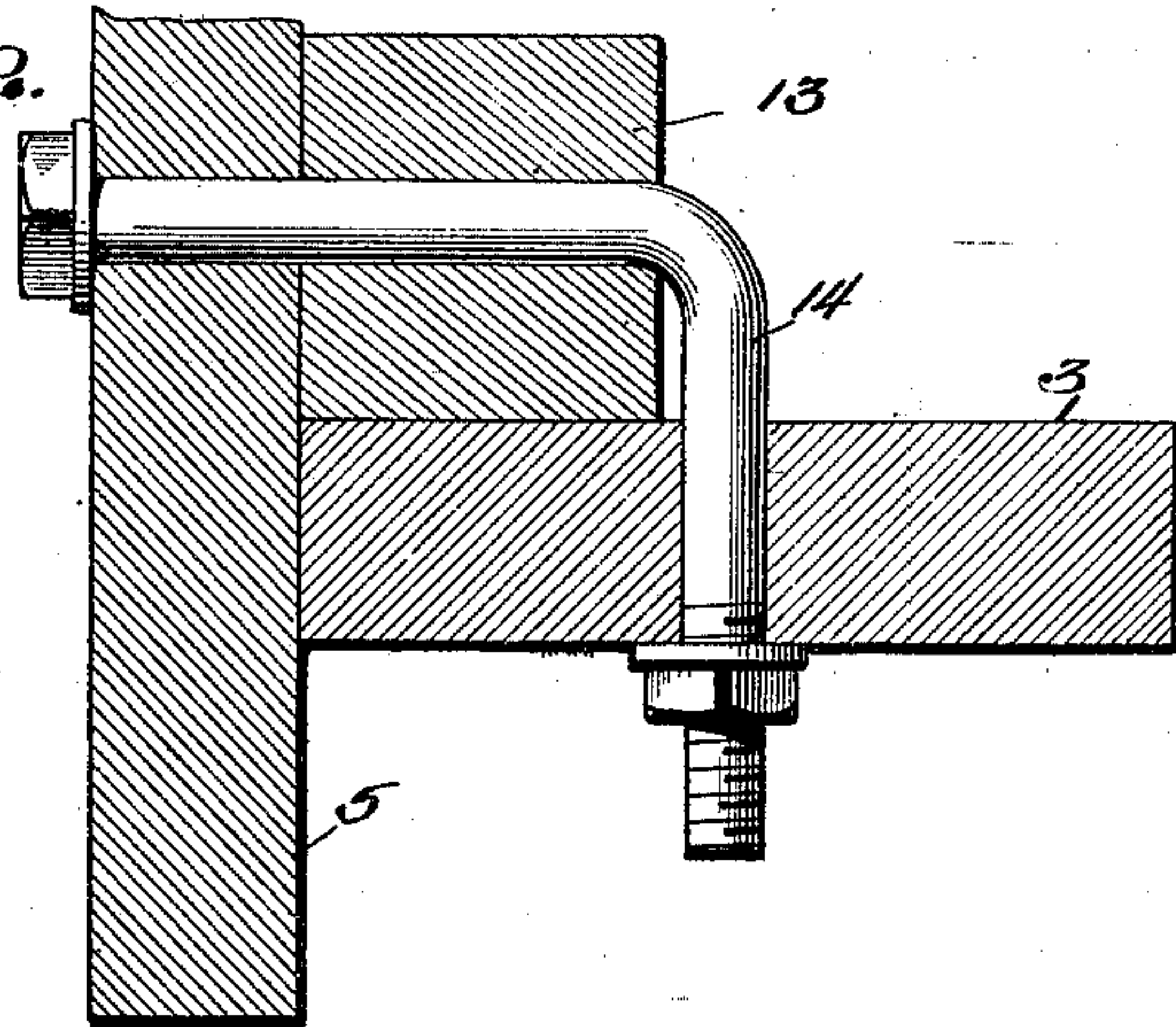
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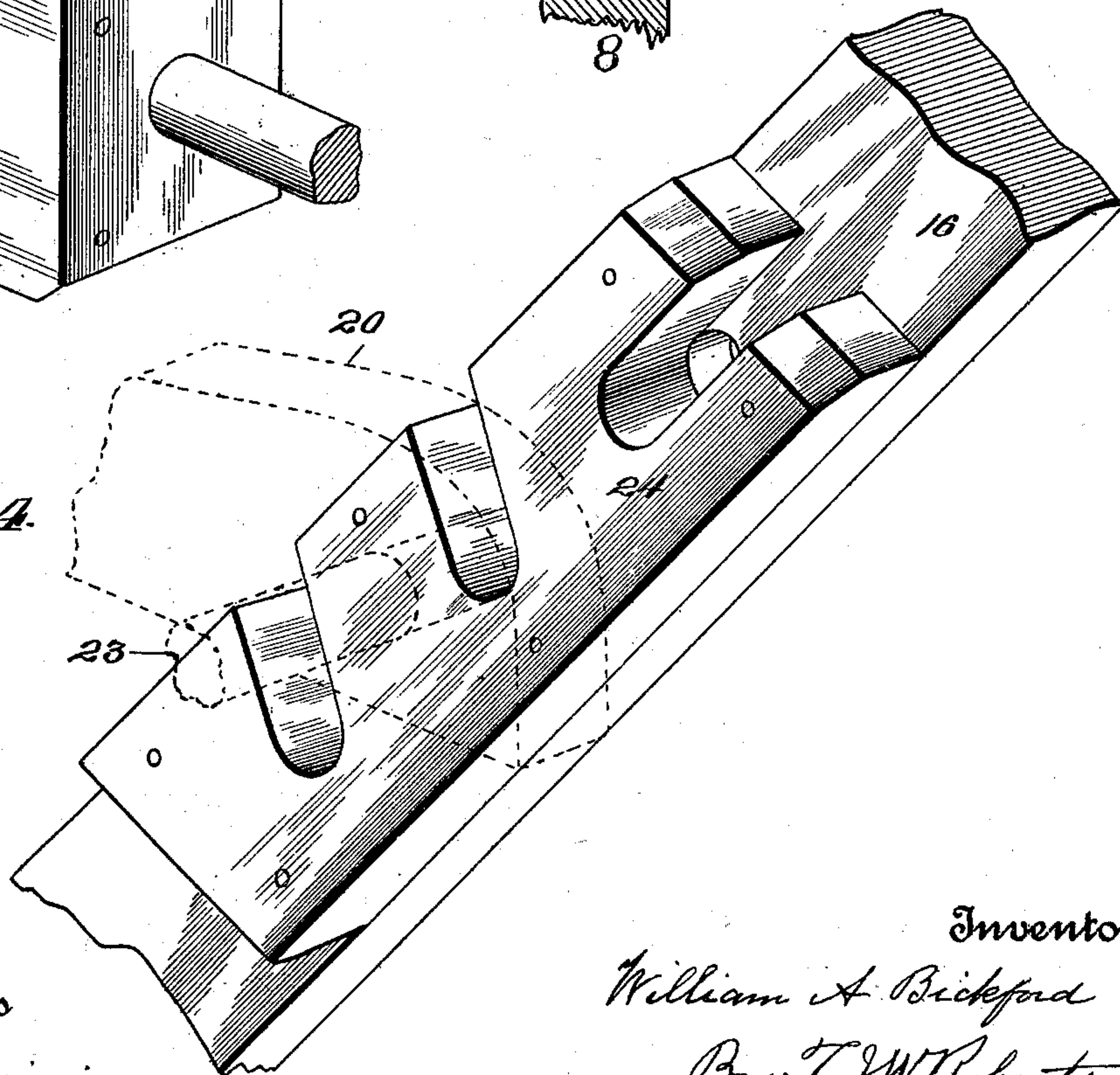
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM A. BICKFORD, OF BORDER CITY, NEW YORK.

## SWING.

SPECIFICATION forming part of Letters Patent No. 561,368, dated June 2, 1896.

Application filed June 12, 1894. Serial No. 514,309. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM A. BICKFORD, a citizen of the United States, residing at Border City, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Swings, of which the following is a specification, reference being had therein to the accompanying drawings.

This improvement relates more particularly to that class of swings which are provided with folding frames, from which hang two swinging chairs; and the invention consists in the construction hereinafter more particularly described and then definitely claimed. In the accompanying drawings, Figure 1 represents a perspective view of a combined tent and swing constructed according to my improvement, with parts broken away the better to show other parts. Figs. 2, 3, 4, and 5 are details, on a larger scale, which will be more fully referred to hereinafter.

Referring now to the details of the drawings by figures, 1 2 represent the two sides of the frame, each consisting of two inclined bars or standards 3, connected at top and bottom by cross-bars 4 5, and the two sides are connected by the cross-braces 6, which are hung at top upon rods 7, passing through the frame, forming supports for the swing-hangers 8, and having nuts 9 to secure the braces. These cross-braces are pivotally secured where they cross by a bolt and nut 10, and their lower ends are secured to the standards 3 by bolts and nuts 11, which bolts pass through slots in the standards. When the nuts on the bolts are loosened, the standards may be closed up together, as the cross-braces will then double up, turning on the bolt 10 as a pivot in like manner to the closing of scissors on their pivots.

The top cross-bars or caps 4 are made of two pieces nailed together, so as to form a T in cross-section, and they are secured to the inclined standards 3 by bolts 12, passing through one of the pieces of the cap and the inclined standard, the second part of the cap fitting between the inner sides of the inclined standards.

The lower cross-bar 5 has corner-pieces 13 nailed to it, and an angle-bolt 14 passes through the parts, as shown in the sectional detail, Fig. 2. This construction of the sides

of the frame admits of the frame being shipped and stored in "knockdown" order, while it can be easily put together and yet makes a stronger frame than one having its joints put together with nails.

I have shown two ways of arranging the chairs, &c., for the swing. In the right-hand side of Fig. 1 the hanger 8 is slotted at top to receive a slotted block of hard wood 15, which is held there by a bolt 16, which block can be adjusted as desired to take up wear. The bolt 16 also serves as a means of preventing the top of the hangers from splitting. On the left-hand side the hanger is formed into a hook to hang over the rod 7.

On the right-hand side the bottom of the hanger is slotted, and the bottom of the chair-back 16 is adjustable therein by bolts 17. On the other or left side the hangers are provided with notched blocks 18 (see Fig. 3) to receive rungs 19 on the bottom of the chair-back. By either of these arrangements the position of the seat 20 and back 16 can be changed as desired.

The back of the seat on the right-hand side is connected to the back by a rung 21, which runs through said seat and the back of the chair, while its front rests on another rung 22, which passes through the hangers. The back of the seat on the left-hand side is provided with a rung 23, the ends of which fit into notches cut in notched blocks 24, secured to the inside of the chair-back, as shown in Fig. 4.

Between the chairs and resting on rungs in the chairs or hangers, as desired, is a foot-rest 25, which is notched and slotted at the ends, by which means the angles of the chairs may be adjusted without changing the seats with respect to the hangers, for by spreading the chairs farther apart they are set more upright, and by bringing them closer together they are more inclined. The foot-rest may also be raised and set on the rungs 22, so as to make a reclining chair or lounge, or by laying a light mattress on the same when in this position a very comfortable bed may be made.

Projecting from the side frames are canopy-arms 26, which are secured by the bolts and nuts 11, which also fasten the cross-braces 6. These arms are provided with holes at their outer ends through which and through corresponding holes in the top of the inclined



standards the canopy-rods 27 pass, which form supports for the canopy 28. Depending from the lower rods 27 are the sides of the tent 28, which may be secured by hook, buttons, or by any desired means at the will of the maker or user.

By the construction above described a very comfortable swing or lounging-place is provided, which will be found adapted for use on the lawn, the veranda, or in the house at will. It is light and strong, can be folded up in very small space, and can be moved with ease in or out of the house or shipped to any distant point at a small expense.

It will be seen that the tops of the sides of the frame are separated from each other by a considerable space and are not directly connected, as is the case with some swings that have been made. This is a decided advantage, as the frame takes up less room when it is closed up, it being so much the shorter than it would be were the tops of its sides joined together.

What I claim as new is—

1. A swing-hanger provided with a slotted adjustable block set in a slot in said hanger, and an adjusting-bolt to secure it in the desired position and prevent the splitting of the hanger, substantially as described.

2. The combination with the chair-hangers 8 and a chair-back 16, having solid side pieces and provided with blocks 24 fixedly secured to said side pieces and having notches at different heights therein, of a seat 20 having its front supported by the hangers and its rear provided with a rung 23 resting in one of the sets of notches in the blocks 24, whereby the inclination of the seat can be changed without varying the inclination of the back, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 9th day of June, 1894.

WILLIAM A. BICKFORD.

Witnesses:

JOSHUA E. BORTON,  
CHAS. S. COLEMAN.