

No. 708,100.

Patented Sept. 2, 1902.

H. E. VICK.

SAW SET.

(Application filed May 15, 1902.)

(No Model.)

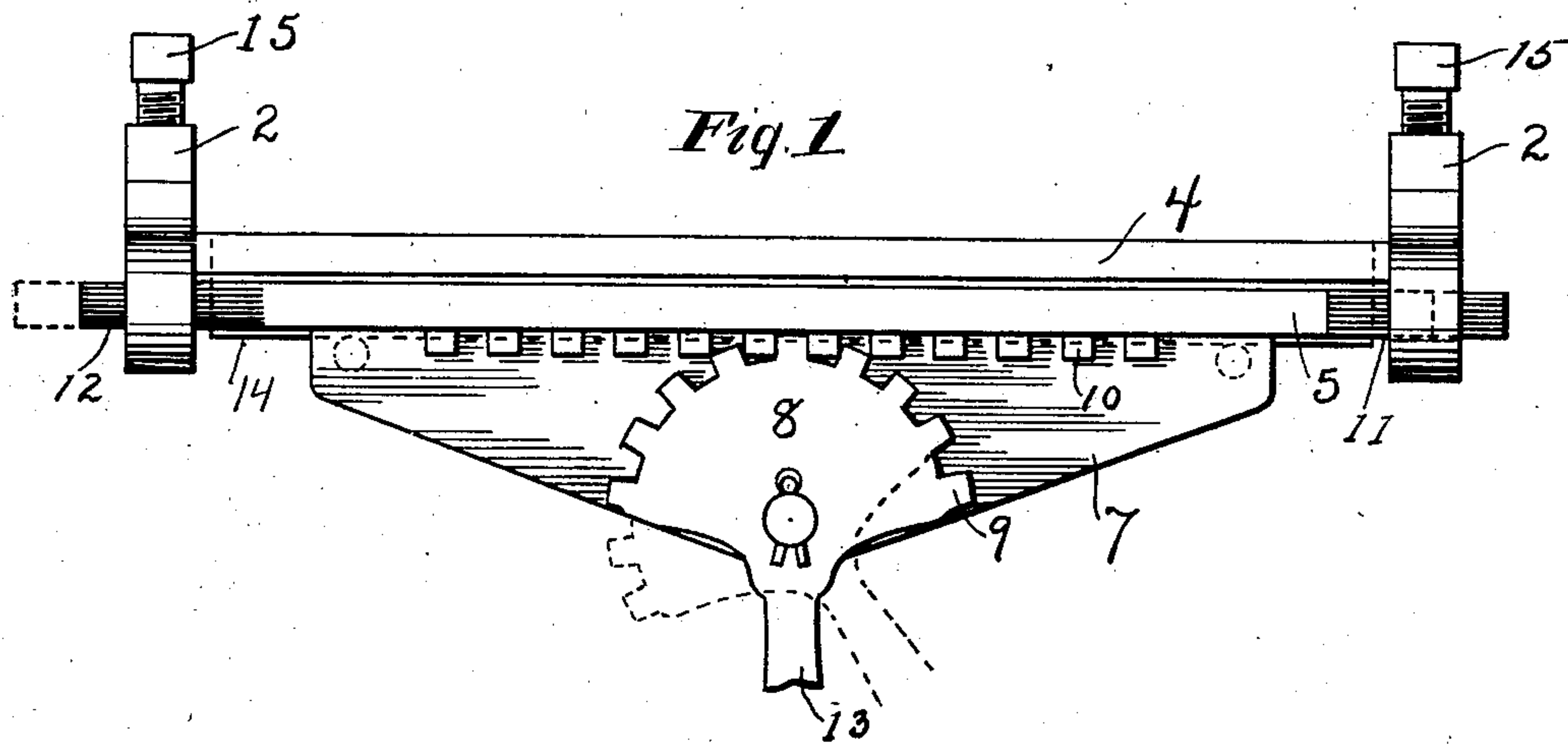


Fig. 2

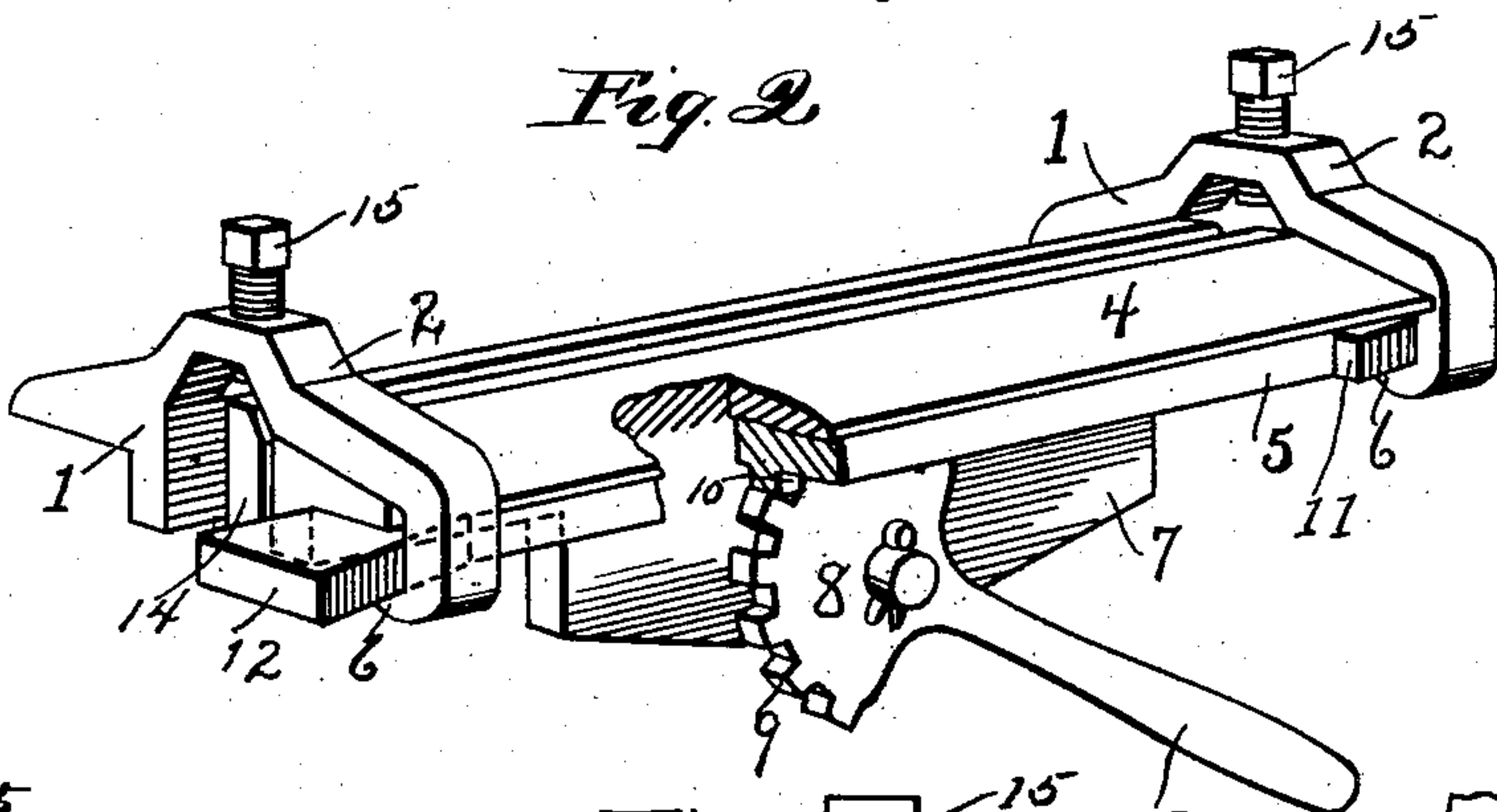


Fig. 5

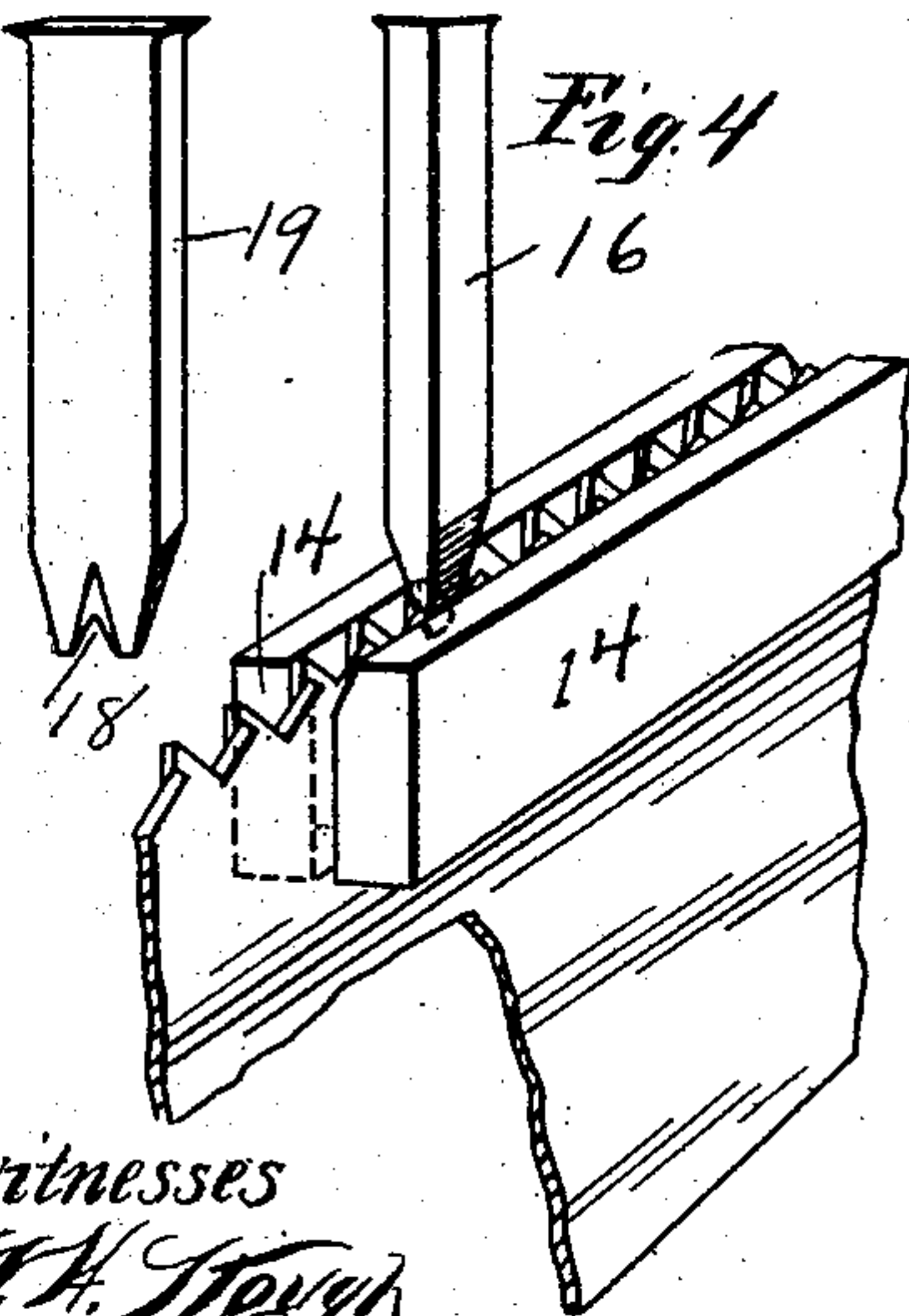


Fig. 4

Fig. 3

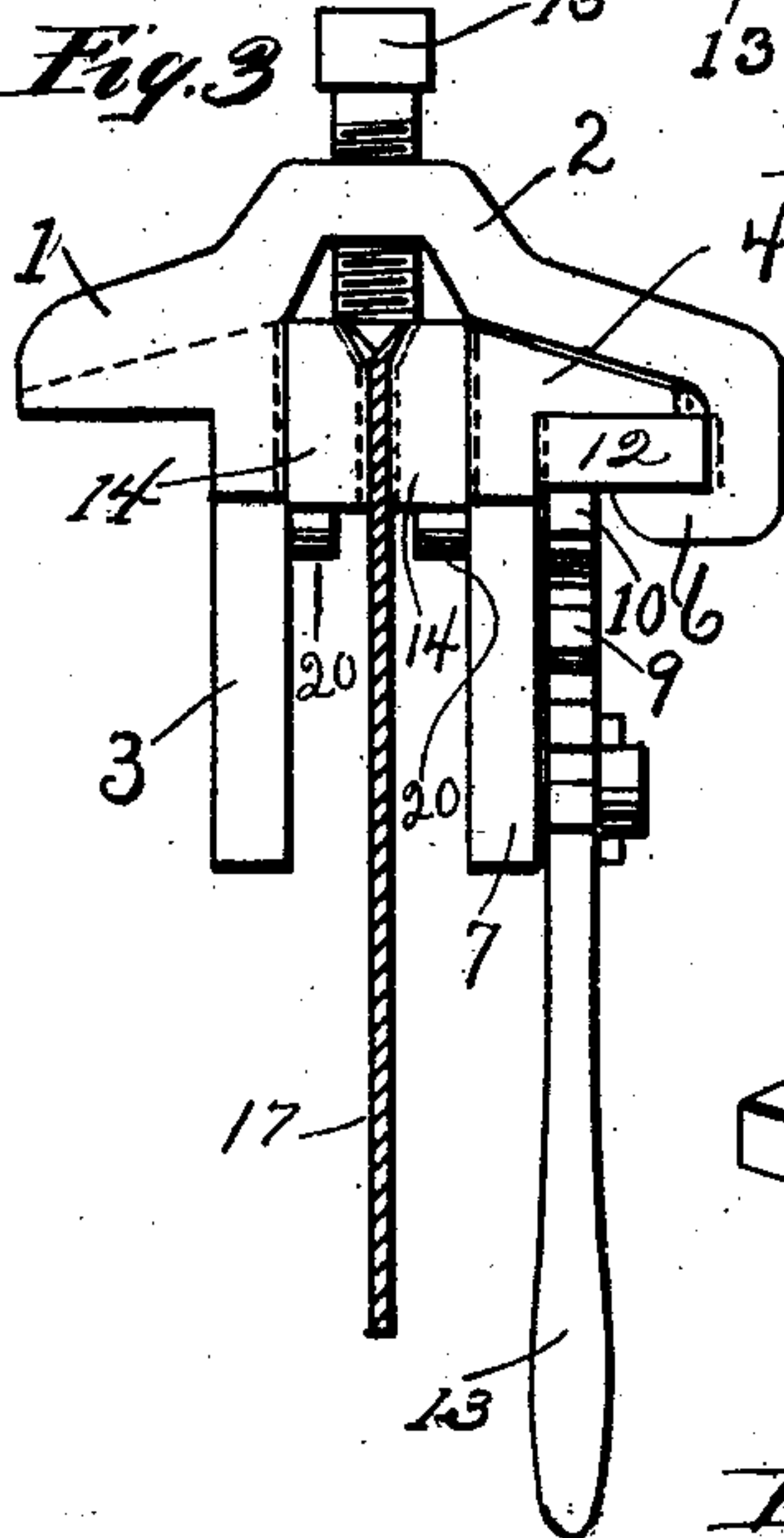


Fig. 6

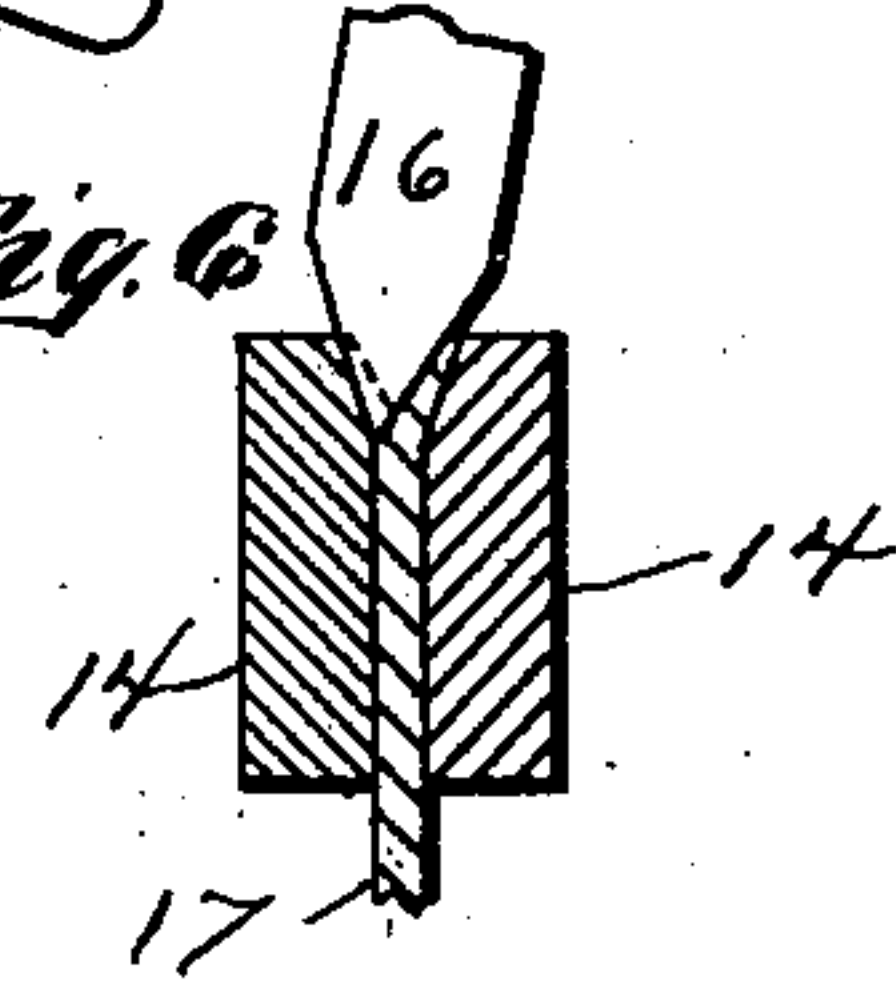
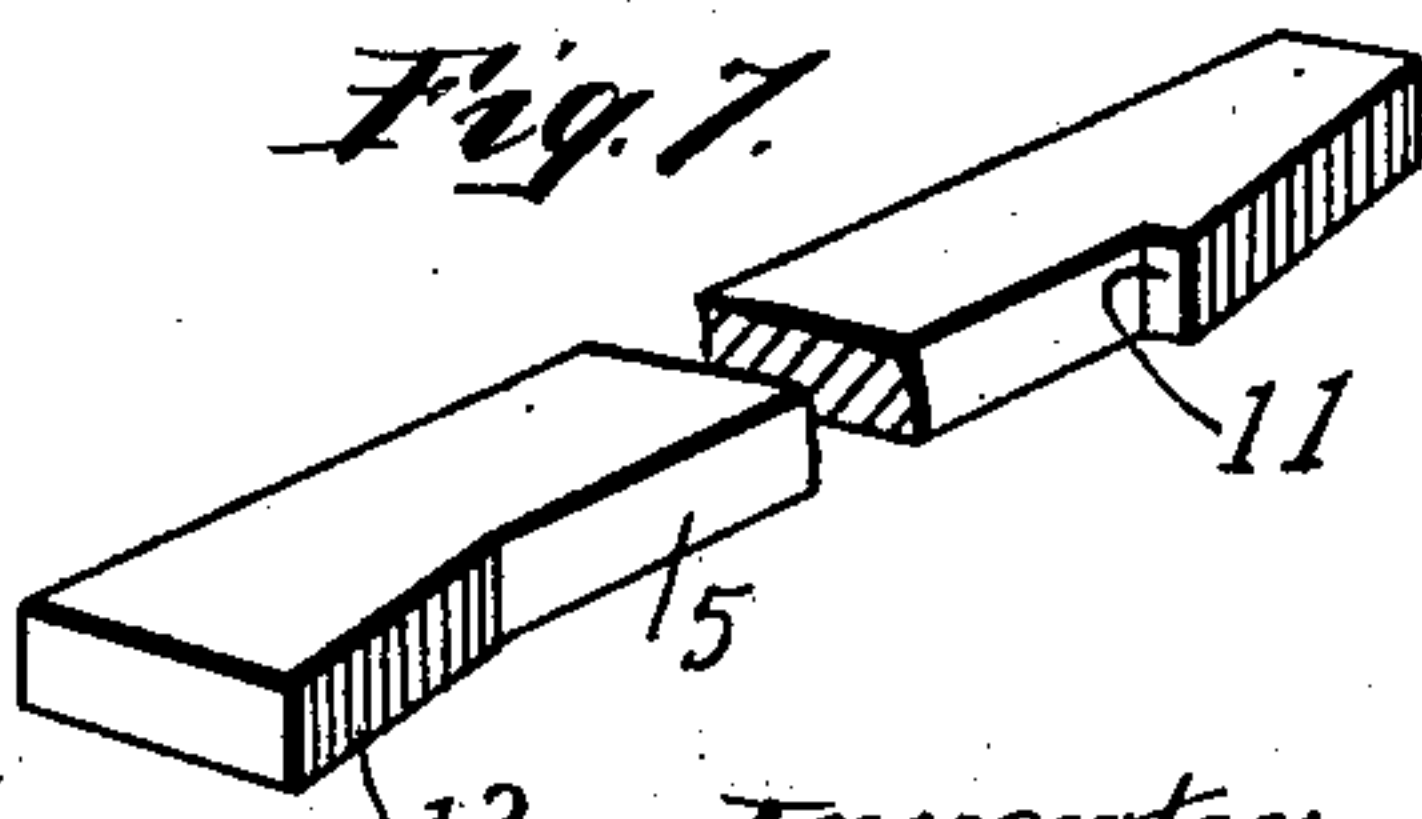


Fig. 7



Witnesses
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UNITED STATES PATENT OFFICE.

HOLLAND E. VICK, OF ALLIANCE, OHIO.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 708,100, dated September 2, 1902.

Application filed May 15, 1902. Serial No. 107,429. (No model.)

To all whom it may concern:

Be it known that I, HOLLAND E. VICK, a citizen of the United States, residing at Alliance, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Saw-Sets; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making apart of this specification, and to the figures of reference marked thereon, in which—

Figure 1 is a side view. Fig. 2 is a perspective view. Fig. 3 is an end view showing the saw in section. Fig. 4 is a view showing a saw-blade and the dies in proper relative position, also showing the position of the punch for setting the teeth of the saw. Fig. 5 is a detached view of a modified form of punch. Fig. 6 is a transverse section of the dies, also showing manner of setting a tooth. Fig. 7 is a detached view of the wedge-bar, showing the center portion thereof broken away.

The present invention has relation to saw-sets; and it consists in the novel arrangement hereinafter described, and particularly pointed out in the claims.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, 1 represents one of the die-clamping jaws or bars which is substantially of the form shown, which bar is provided with the lateral hooked arms 2, which hooked arms may be and preferably are formed integral with the bar 1, or they may be made separate and attached in any convenient and well-known manner. For the purpose of providing a means for holding the bar 1 in a fixed position by any suitable device, such as a vise, said bar may be provided with the downward-extending flange 3. The hooked arms 2 are formed of such a length that the movable jaw 4 can be placed in the position illustrated in Figs. 2 and 3, and at the same time the clamping-bar 5 can be placed in the position illustrated and held by means of the hooked arms 2. The jaw 4 is preferably formed of the shape illustrated and is so formed for the purpose of providing a means for supporting said jaw upon the clamping-bar 5, which

clamping-bar is held by means of the hooked arms 2, which hooked arms are formed so that their inward-extending portions 6 will come under the clamping-bar 5, as illustrated in Figs. 2 and 3. The jaw 4 is provided with the downward-extending flange 7, to which flange is preferably connected the toothed segmental head 8, said segmental head being provided with the teeth 9, which teeth mesh with the teeth 10, formed upon the bottom or under side of the clamping-bar 5. The clamping-bar is provided with the inclined faces 11 and 12, which inclined faces are located opposite the hooked arms 2. For the purpose of imparting a sliding movement to the clamping-bar 5 the toothed segmental head 8 is provided with the operating-handle 13, which operating-handle is formed of such a length that proper leverage will be provided.

The die-clamping jaws 1 and 4 are each provided with short pins or stops 20, which are for the purpose of holding in proper relative position the dies 14, which dies are located substantially as illustrated in the drawings, and of course are between the jaws 1 and 4. The upper inner edges of the dies 14 are beveled throughout their entire length and are so beveled for the purpose of providing room to give to the teeth of saws the desired amount of set.

In use the saw-blade is placed between the dies 14, and when brought into proper position with reference to the dies the clamping-bar 5 is moved endwise in the direction to force the jaw 4 away from the hooked ends of the lateral arms 2, and thereby clamp the dies between the jaws 1 and 4, this being brought about by means of the handle 13, the toothed segmental head 8, and the teeth 10, formed upon the clamping-bar 5. It will be understood that when the clamping-bar is moved in the direction to bring the wider portions of the wedge-shaped ends between the hooked ends of the arms 2 and the jaw 4 said jaw will be moved so as to bind the dies and when moved in the opposite direction will release the dies and the saw-blade.

For the purpose of providing means for setting the saw-blade in proper relative position the set-screws 15 are provided, which set-screws are located in screw-threaded aper-

tures formed in the hooked arms 2, and of course when their lower ends are above the tops of the dies the teeth of the saw can be brought above the dies the distance equal to
 5 the space between the tops of the dies and the lower ends of the set-screws 15.

It will be seen that I am not obliged to change the position of the saw-blade during the time the teeth are being set.

10 Another advantage of my improved saw-set is that after the teeth have been properly set the blade may be elevated above the dies 14 and the saw properly filed.

In use, after the saw-blade has been properly
 15 adjusted and clamped, punches, such as 16 and 17, are employed to set the teeth of the saw, the punch being inserted so as to bend or set the teeth of the saw, this feature being illustrated in Fig. 6. When it is desired to set
 20 two teeth at one time, a punch 19, such as shown in Fig. 5, may be employed, which punch has a divided setting end or, in other words, recessed sides, the recess 18 being formed so that the tooth opposite the recess
 25 will not be affected by the action of the punch.

It will be understood that by my improved saw-set I am enabled to hold a saw-blade in a clamped position and set the teeth of the saw throughout the entire length of the saw-set
 30 proper, which may be of any desired length.

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

1. In a saw-set, the combination of a fixed
 35 and movable jaw, said jaws provided with pins or stops and one of the jaws provided

with hooked arms, a clamping-bar provided with wedge-shaped ends located opposite the hooked arms, means for imparting longitudinal movement to the clamping-bar, and dies 40 provided with beveled upper edges, said dies located between the jaws, substantially as and for the purpose specified.

2. The combination of jaws one movable and the other fixed, hooked arms extended 45 laterally from the fixed jaw and at the ends of said jaw, said hooked arms provided with set-screws, a clamping-bar carried by the hooked arms and located adjacent to the movable jaw, dies located between the jaws, and 50 means for imparting a reciprocating movement to the clamping-bar, substantially as and for the purpose specified.

3. The combination of jaws provided with downward-extending flanges, one of the jaws 55 movable and the other fixed, a toothed segmental head provided with an operating-handle pivotally attached to the flange of the movable jaw, a clamping-bar provided with teeth adapted to mesh with the teeth of the 60 segmental head, and the clamping-bar provided with wedge-shaped ends, hooked arms carrying the movable jaw and the clamping-bar and dies located between the jaws, substantially as and for the purpose specified. 65

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HOLLAND E. VICK.

Witnesses:

JOSEPH C. BELL,
 J. M. GILBERT.