

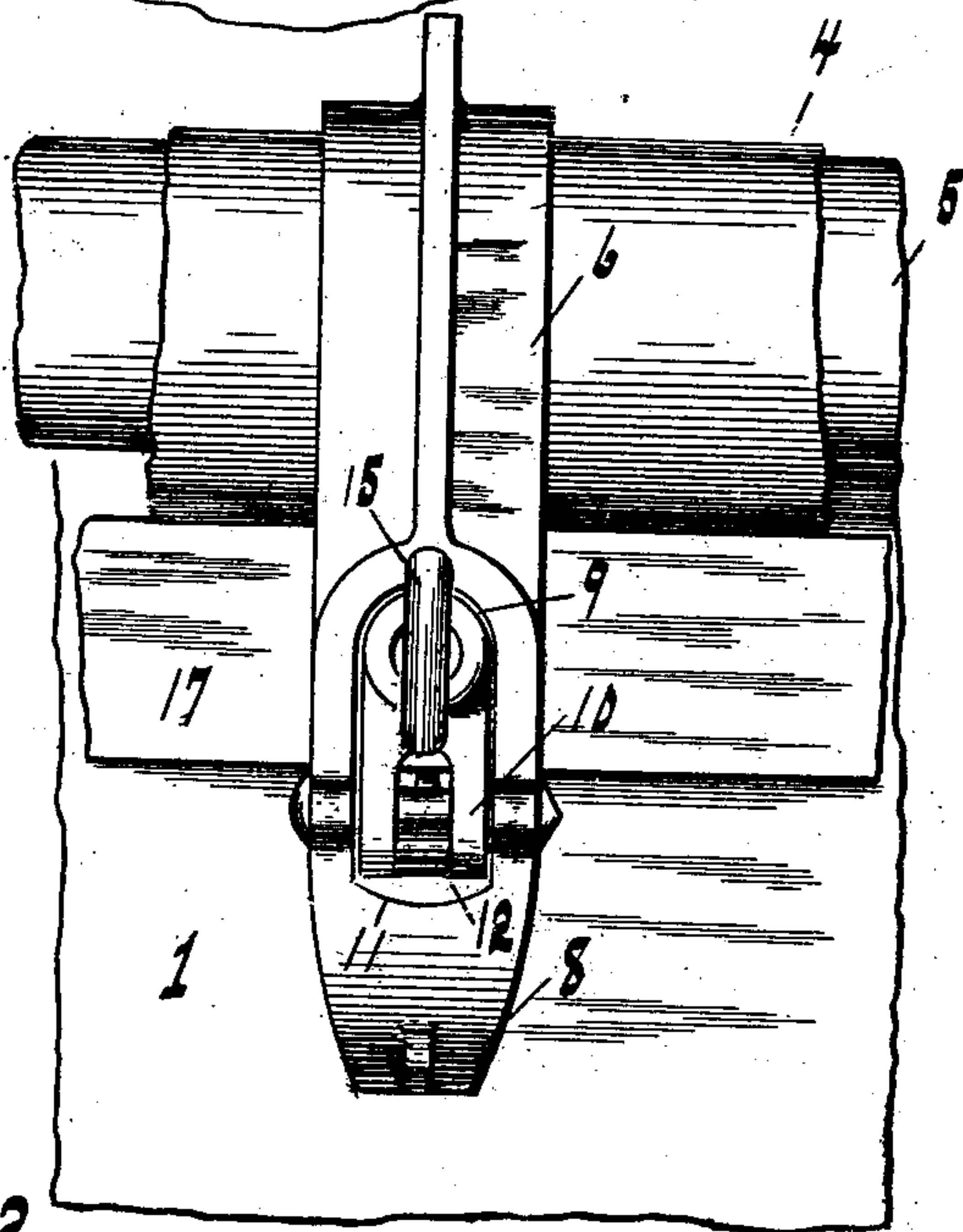
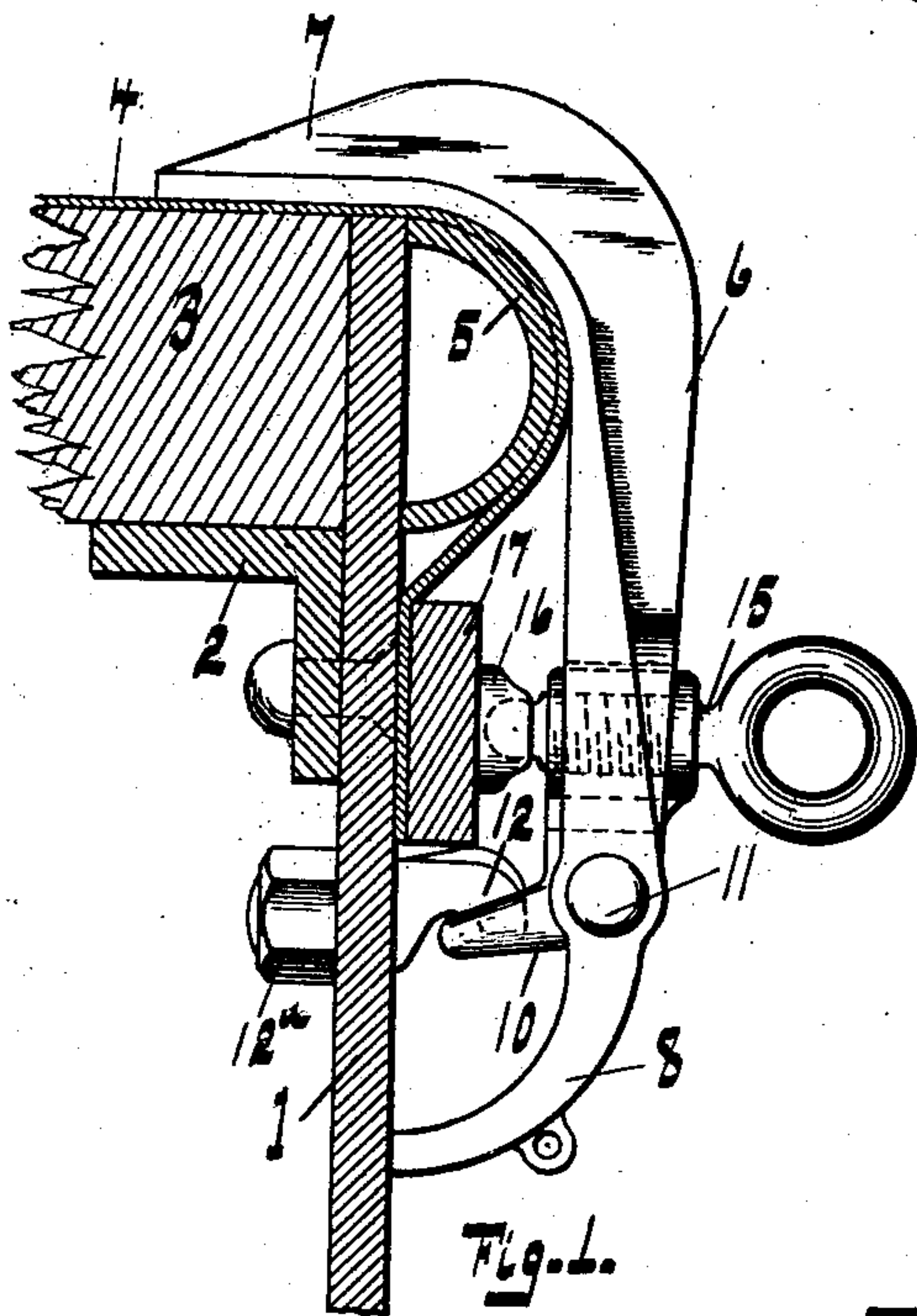
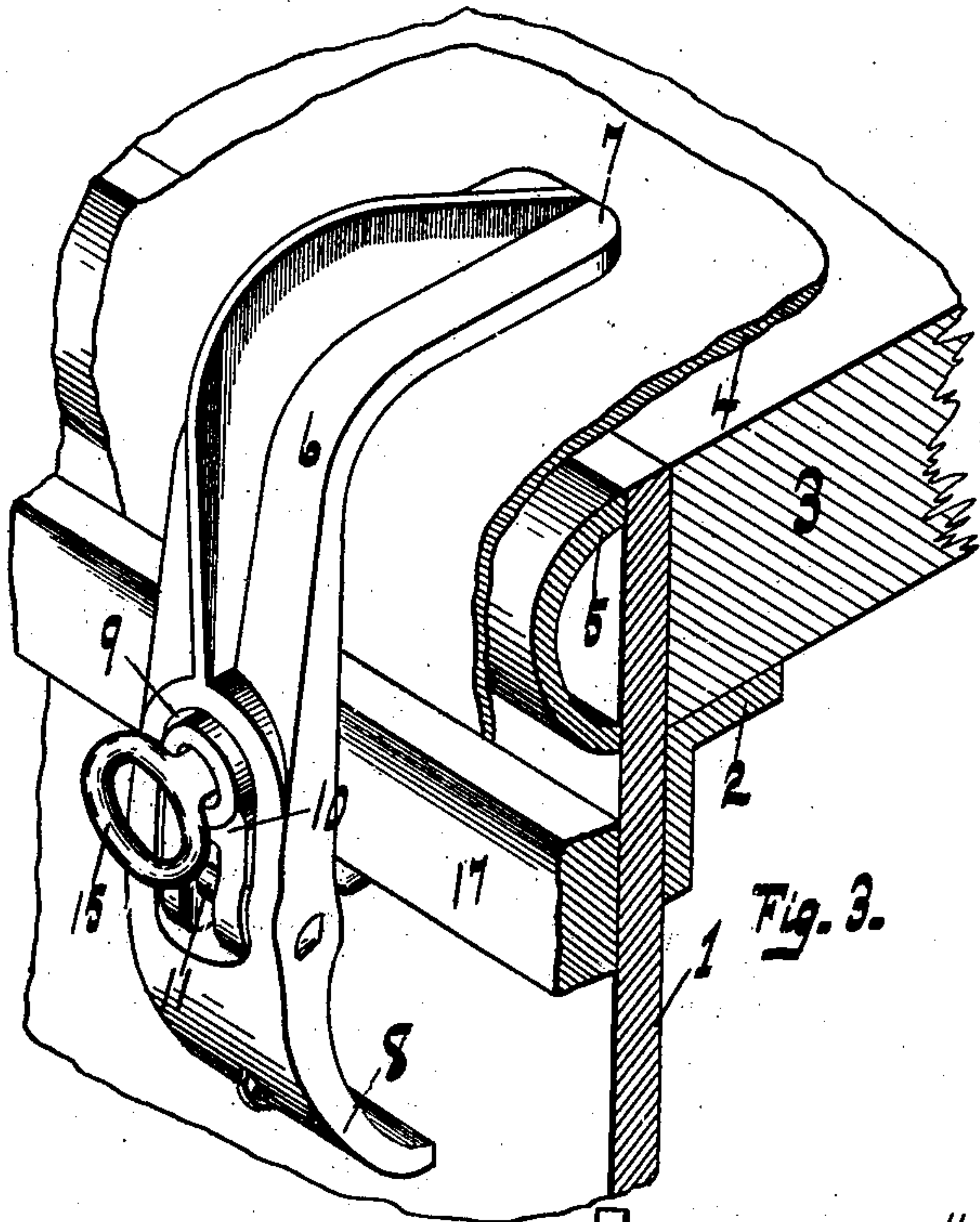
No. 685,237.

Patented Oct. 22, 1901.

C. M. HOLLEY.  
HATCH FASTENER.

(Application filed Apr. 26, 1901.)

(No Model.)



WITNESSES  
R. D. Parker.  
J. Massey

Fig. 2.

INVENTOR  
Clarence M. Holley  
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# UNITED STATES PATENT OFFICE.

CLARENCE M. HOLLEY, OF ANN ARBOR, MICHIGAN.

## HATCH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 685,237, dated October 22, 1901.

Application filed April 26, 1901. Serial No. 57,539. (No model.)

*To all whom it may concern:*

Be it known that I, CLARENCE M. HOLLEY, a citizen of the United States, residing at Ann Arbor, county of Washtenaw, State of Michigan, have invented a certain new and useful Improvement in Hatch-Fasteners; and I 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 pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to hatch-fasteners; and it has for its object an improved hook adapted to engage over a ship's hatch and fasten the cover securely to the coaming.

In the drawings, Figure 1 shows the fastener in side elevation. Fig. 2 shows it in front elevation. Fig. 3 shows it in perspective.

In all the figures the coaming and hatch-cover are shown either in section or broken away, so as to show only a part thereof.

The fastener comprises a hook, which engages over the upper side of the hatch-cover and against the vertical coaming and is provided with a lever which is pinned thereto and arranged to engage under a hook that is made fast to the coaming and to be swung to contract or force together the ends of the main hook and a hook which is fast to the coaming, thereby forcibly pressing down or holding down the hatch-cover against that part of the coaming which is arranged to support it.

In the drawings the appliance is shown as adapted to hold a wooden cover to a flange which projects inward from a vertical iron or steel coaming. This form of hatch coaming and cover is now in common use and presents some features of difficulty which are not found in the ordinary wooden coaming or wooden covers; but I do not wish to have it considered that my fastening is applicable only to what are known as "steel hatchways," because the appliance is equally applicable to either steel or wooden hatch structures.

1 indicates the steel coaming, near the top of which and inside of which is a cover-supporting flange 2, generally made by bolting an angle-bar to the coaming on the inside thereof and below the top, so that the wooden

cover 3 engages inside the coaming and on the flange 2. A half-round 5 is secured to the coaming outside and just below the top thereof in order to furnish a curved surface over which the canvas cover 4, commonly called a "tarpaulin," is drawn. The fastener comprises a hook 6, provided with a bill 7, that engages over the upper end of the coaming 1 and extends far enough inward beyond that to engage securely over the wooden cover 3. The hook 6 is provided at that end which is opposite the bill 7 with a tailpiece 8, that extends in a line approximating parallel with the bill 7 to engage against the upright side of the coaming 1. Between the bill 7 and the tail 8 the hook is provided with an opening 9, in which is inserted a bent lever 10, and the bent lever 10 is held in place by a pin 11, that is inserted through the walls that surround the opening and through the lever. The bent lever 10 is arranged to engage with a hook 12, that is made fast to the coaming. Preferably the bent lever 10 is provided with an opening through it through which the bent part of the hook 12 engages, and the hook 12 is made with a threaded stem that projects through the coaming 1 and is secured by a nut 12<sup>a</sup>, run onto the threaded part of the hook 12. The bent lever 10 is also provided with a threaded opening through which passes a screw 15. The screw is provided at one end with a means for turning it, the means shown in the drawings being a ring which may be used as the only means for turning it, or if more power is needed to turn the screw the ring furnishes a hold for a lever. The inner end of the screw 15 terminates with a ball that engages in a socket of a footpiece 16, and the footpiece 16 is arranged to engage against either the coaming or preferably a strip 17, that is laid over the hanging part of the tarpaulin 4.

In operation the hatch-cover is placed on the coaming or in the coaming, as the case may be, resting on the flange 2. The tarpaulin is properly placed and the holding-strip 17 is laid against the tarpaulin over the hook 12. The fastener is placed with the perforation in the lever 10 engaging under the curved part of the hook 12 and with the bill 7 engaging over the tarpaulin and the cover underneath it, and the fastener is pushed



until the foot 16 engages against the strip 17. The screw 15 is turned to force the upper end of the lever 10 out from the coaming, and this forces that end of the lever 10 which en-  
5 gages under the hook 12 toward the bill 7, with pressure which is only limited by the strength of the material of which the hook and lever and connecting parts are made. The hook when under reasonable pressure  
10 holds very securely in position, as the hook 12 forms a fulcrum which coacts with the tail part 8 to prevent the bill from being forced off from over the cover.

The same structure can be used with wood-  
15 en covers on a wooden coaming where the cover rests on the coaming and projects so that the edge of it takes the position occupied by the half-round 5.

What I claim is—

20 1. In a fastener for hatch-covers, the combination of a hook provided with a bill adapted to engage over the cover, a shank and a bent lever pivotally secured thereto, means for engaging the bent lever to the coaming,  
25 and means for forcibly swinging the engaging

end of the bent lever toward the bill of the hook, substantially as described.

2. In a fastening for hatch-covers, in combination with a hook provided with a bill adapted to engage over the hatch-cover, 30 means for engaging the hook to the hatch-coaming, a bent lever pivotally secured to the shank of the hook, and means for forcibly swinging the bent lever, substantially as described. 35

3. In a fastening for hatch-covers, the combination of a hook provided with a bill and a shank bent to parallelism with the hook, a bent lever pivoted to the shank of the hook, means for holding the hook to the coaming of 40 a vessel and a screw-forcing member, passing through an arm of the bent lever, and adapted to engage mediatly or immediately against the coaming, substantially as described.

In testimony whereof I sign this specifica- 45 tion in the presence of two witnesses.

CLARENCE M. HOLLEY.

Witnesses:

C. F. BURTON,  
MAY E. KOTT.