

(No Model.)

W. Z. BROWN.
WINDOW SHUTTER SLAT LOCK.

No. 550,940.

Patented Dec. 10, 1895.

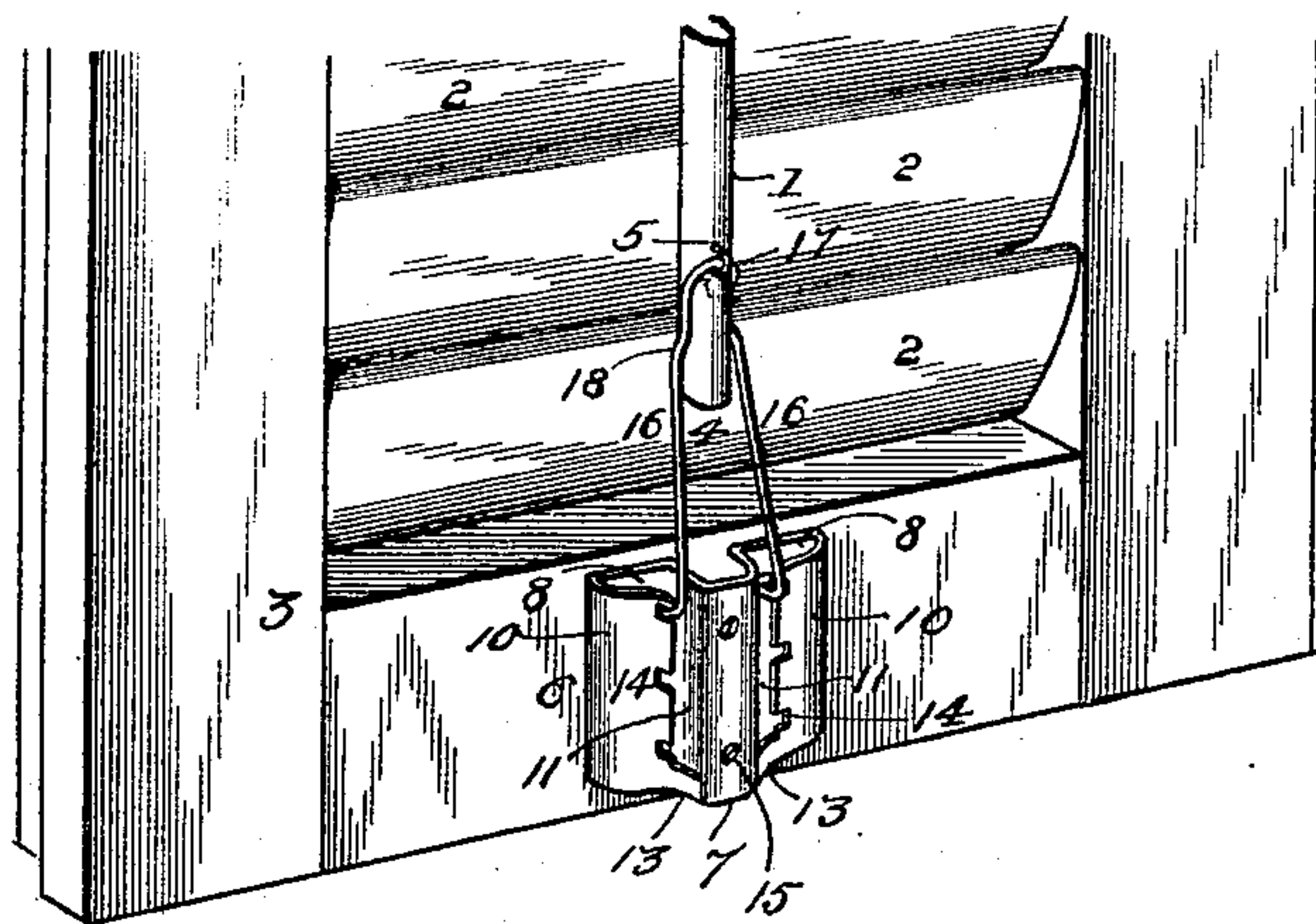


Fig. 1.

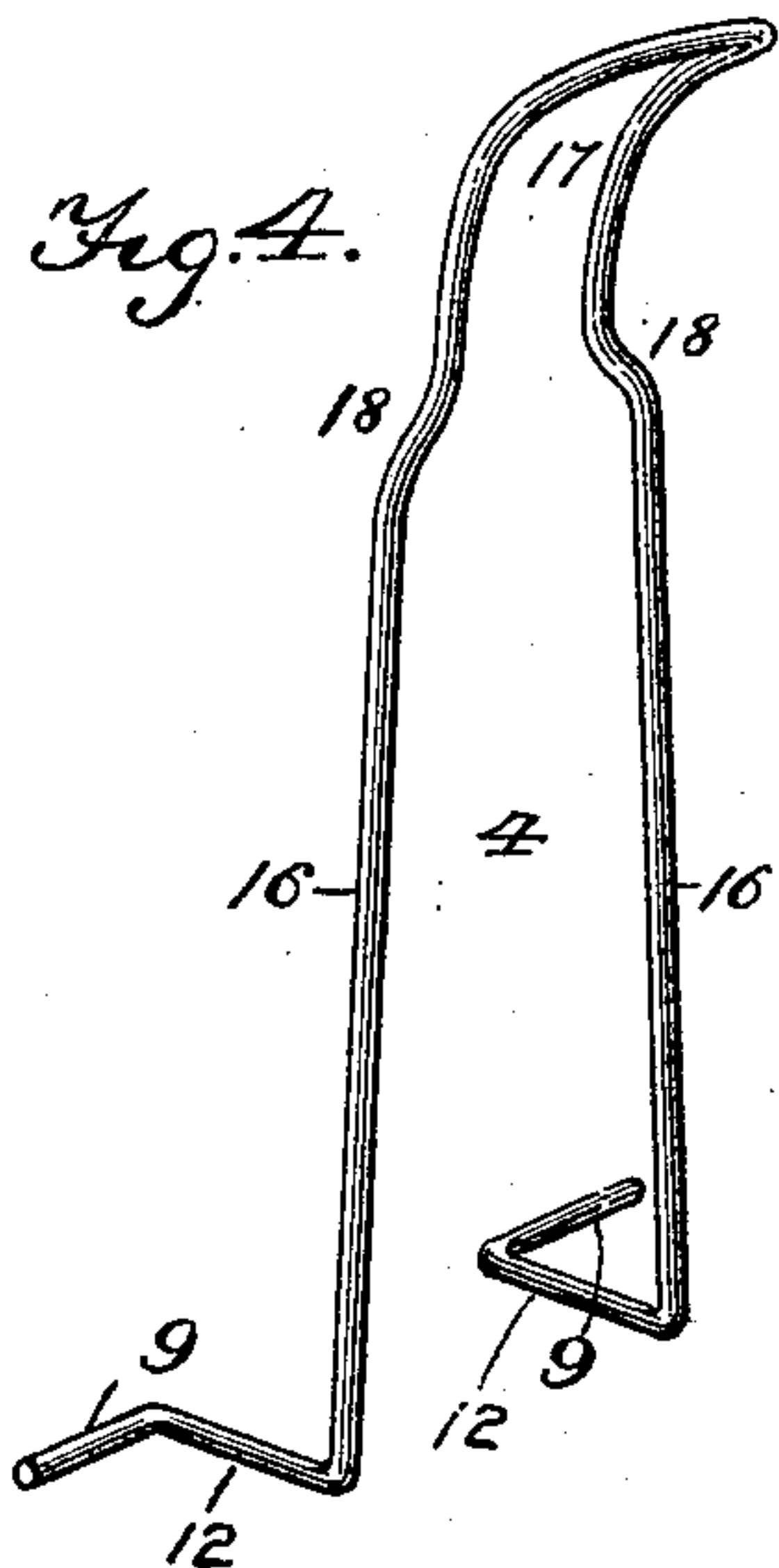


Fig. 4.

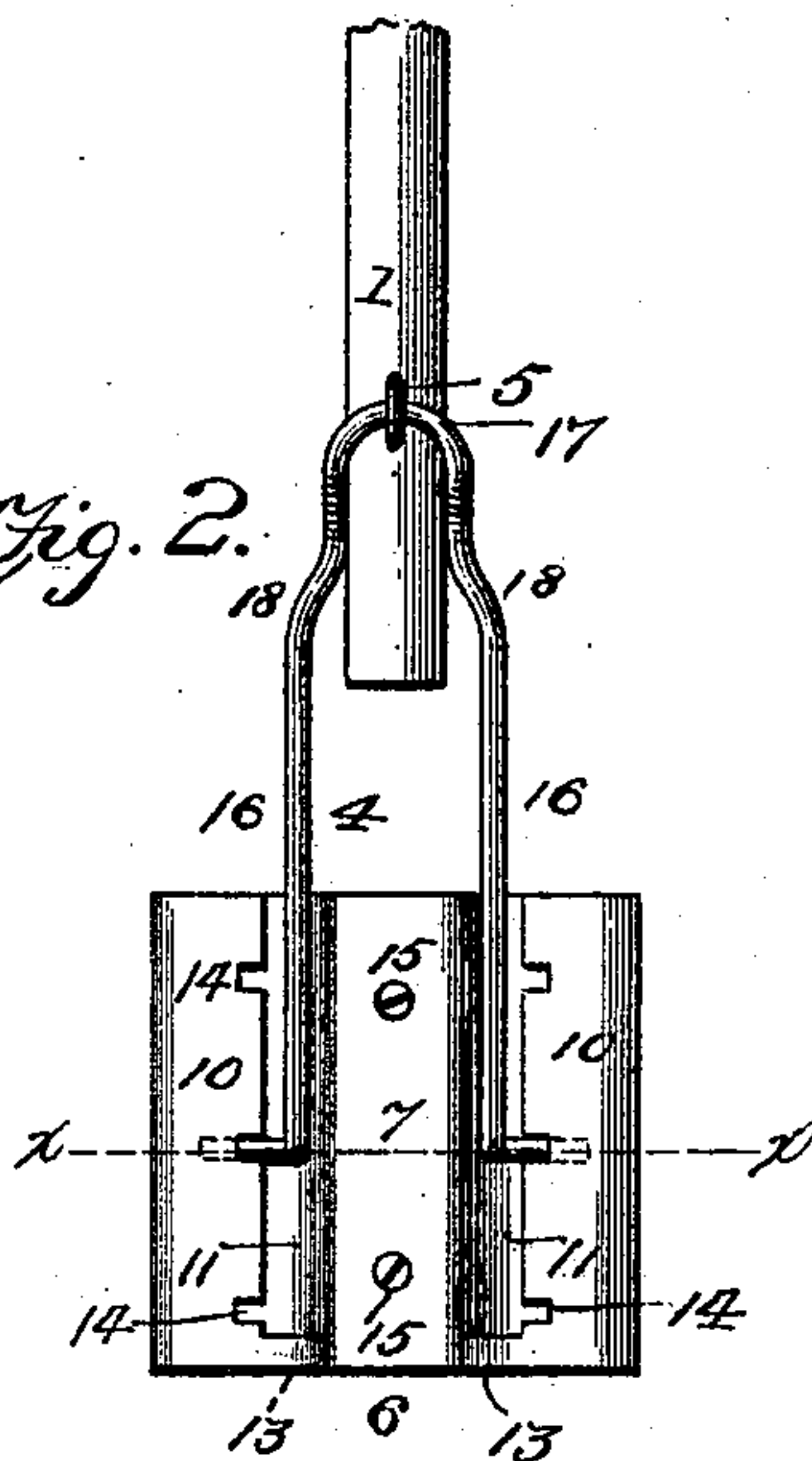


Fig. 2.

Fig. 5.

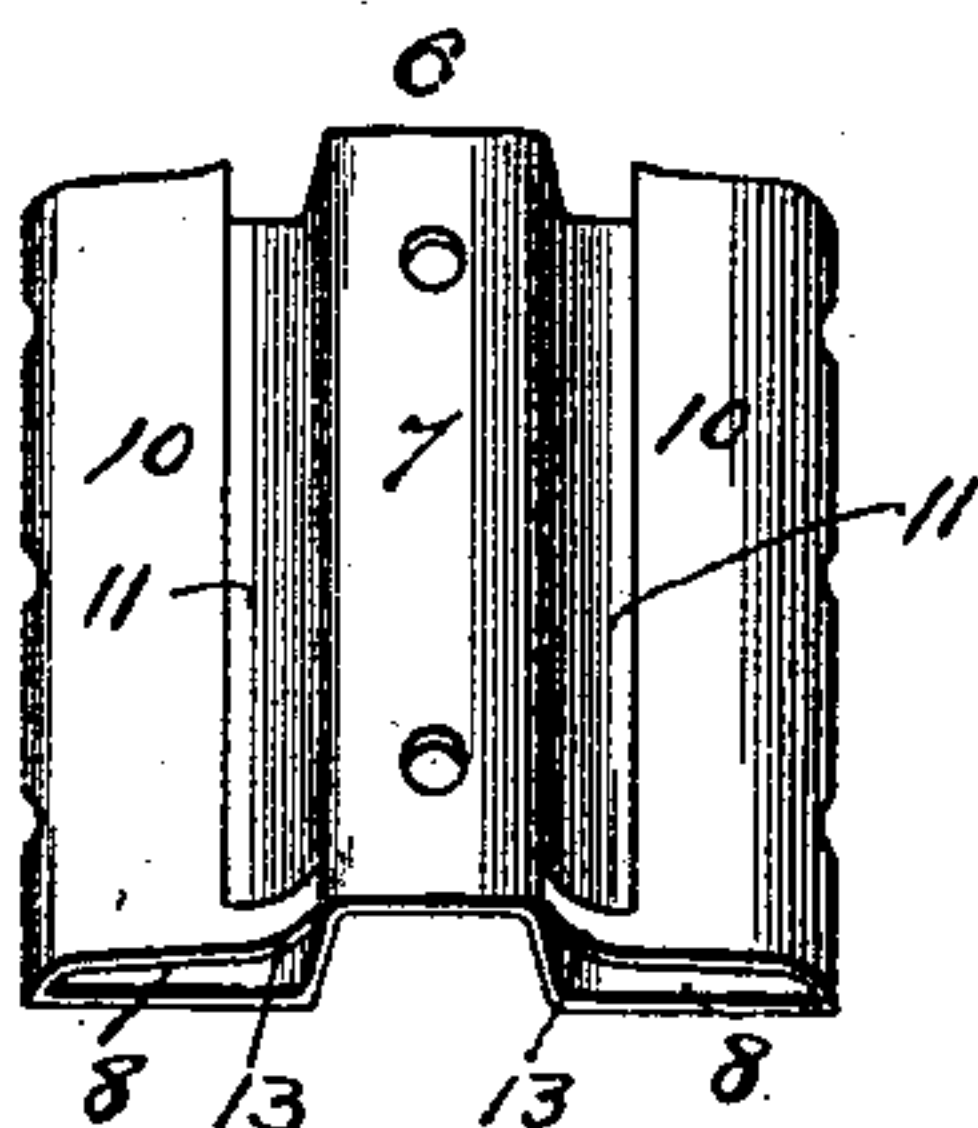
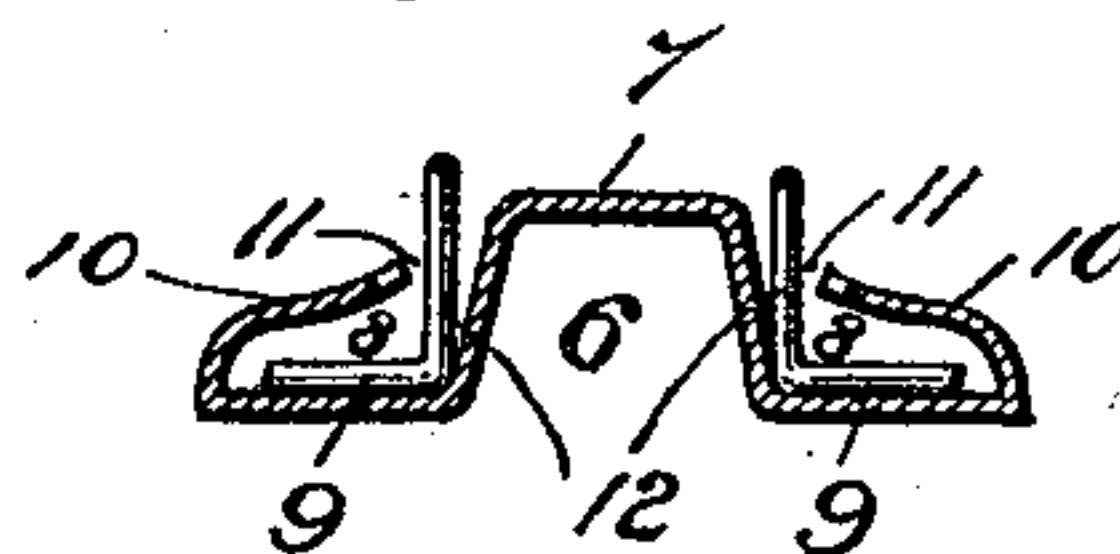


Fig. 3.



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Witnesses

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By his Attorneys,

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UNITED STATES PATENT OFFICE.

WILLIAM Z. BROWN, OF QUINCY, ILLINOIS, ASSIGNOR OF ONE-HALF TO
MORRIS GOODMAN, OF SAME PLACE.

WINDOW-SHUTTER SLAT-LOCK.

SPECIFICATION forming part of Letters Patent No. 550,940, dated December 10, 1895.

Application filed April 24, 1895. Serial No. 547,024. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM Z. BROWN, a citizen of the United States, residing at Quincy, in the county of Adams and State of Illinois, have invented a new and useful Window-Shutter Slat-Lock, of which the following is a specification.

The primary object of the present invention is to provide an improved lock for securing the slat-operating bar of a slat-blind in the located position and which can be readily applied to different makes of blinds and when in operation will prevent interference of the co-operating parts and provide a guide to direct the spring-operating loop in its movements and prevent the disengagement thereof from the keeper when pressing the separated ends of the said loop together to release the said loop for the purpose of adjusting the slat-operating bar.

Other objects and advantages will appear from the following detailed description and the accompanying drawings, in which—

Figure 1 is a perspective view of the lower portion of a slat-blind, showing the application of the invention thereto. Fig. 2 is a front elevation of the invention detached, showing the parallel members of the spring-loop pressed together and against the sides of the central guide provided in the keeper. Fig. 3 is a cross-section on the line X X of Fig. 2. Fig. 4 is a detail perspective view of the spring-loop. Fig. 5 is a modification.

The reference-numeral 1 represents the slat-operating bar or rod, which is secured to the slats 2 of a slat-blind 3 in the usual manner. The spring-loop 4 is attached at its closed end to the bar 1 by a staple 5 or in any convenient way. The keeper 6 is fastened to the lower stile of the blind by sprigs or like fastenings and is formed of sheet metal, which is deflected or bent upward along a line midway between its edges to form a guide-rib 7, for the purpose hereinafter to be described, and which has its edge portions folded to provide ways 8 for the outwardly-bent ends 9 of the spring-loop 4 to travel in when operating the bar 1. These re-entrant or folded-edge portions 10 terminate a short distance from the sides of the guide-rib 7, whereby a passage 11 is formed between the edge of each part 10 and the opposing side of the guide-

rib 7 for the bent end 12 of each member of the spring-loop 4 to operate in. The lower portions of the re-entrant parts 10 are extended and project across the passages 11 and are bent up against the sides of the guide-rib 7 and form stops 13, which limit the downward movement of the spring-loop 4 by engagement with the bent ends 12 thereof, as will be readily understood. The edges of the parts 10 have registering notches 14 to receive the bent parts 12 of the spring-loop 4 to hold the slat-operating bar 1 in the located position. The sprigs or fastenings 15, by means of which the keeper 6 is secured to the blind, pass through openings in the guide-rib 7, and hence do not interfere with the free movement of the spring-loop 4 when adjusting the bar 1.

The spring-loop 4 is formed from a length of spring-wire which is folded upon itself, forming two approximately parallel members 16, which have their end portions bent at approximately right angles, as shown at 12, and again outward, as shown at 9, the bent portions 12 operating in the passages 11 and engaging with the notches 14 and the bent ends 9 working in the ways 8 so as to prevent disengagement of the spring-loop from its keeper. The folded end 17 of the loop is bent outward in an opposite direction to the bent ends 12, so as to form portions to embrace the sides of the bar 1, and offsets 18 are formed contiguous to the outwardly-bent end 17, which results in spreading or separating the parallel members 16, so that the latter will not engage with the sides of the bar 1 and interfere with the free movements of the parts.

The co-operating elements being assembled substantially in the manner set forth and it being required to adjust the slats, the parallel members 16 of the spring-loop are grasped between the fingers of the hand close to the bent ends 12 and are pressed inward until the said bent ends 12 touch the sides of the guide-rib 7, when by moving the spring-loop up or down the desired adjustment is attained. On releasing the members 16 they will spring apart and compel the bent ends 12 to enter the notches 14 opposite thereto.

The guide-rib 7 projects above the plane of the re-entrant parts 10 and serves to limit the inner movement of the members 16 and

guides the latter in their vertical movements and prevents the disengagement of the bent ends 9 from the ways 8, and also prevents the destruction of the elasticity of the spring-loop 4, which would occur if the members 16 were pressed together. Moreover, when the bent portions 12 are in engagement with the sides of the guide-rib 7 the free-end portion of the spring-loop 4 cannot move laterally so as to engage with the notches 14 and interfere with the free movements of the said loop when adjusting the slats. If preferred, the inner edges of the re-entrant or folded-edge portions 10 may be straight and uninterrupted, and the folds may have a series of openings 19 formed therein for the reception of the bent ends 9. This construction is shown most clearly in Fig. 5.

Changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described the invention, what is claimed as new is—

1. A slat lock and adjuster for slat blinds, comprising a keeper having a centrally-disposed guide rib and having folded edge portions on each side of the said guide rib, and constructed to be attached to the stile of the slat, and a spring loop to be attached to the slat operating bar and having its free end portions bent to operate on each side of the said guide rib, which limits their inner movement and directs them in their vertical movements, said bent ends of the spring loop being adapted to engage with the folded portion of the keeper to retain the slats in their adjusted position, substantially as set forth.

2. A slat adjuster and lock comprising a keeper having a central guide rib and folded

edge portions on each side of the said guide rib which are notched in their inner edges and form passages between said edges and the opposing sides of the guide rib, the lower portions being extended across the respective passages to form stops, and a spring loop having the end portions of its parallel members bent inwardly at about right angles to operate on each side of the said guide rib and in the said passages and again outward to work in the ways provided by the said folded edge portions, substantially as described for the purpose set forth.

3. The herein shown and described slat adjuster and lock, comprising a keeper constructed of sheet metal provided with a centrally-disposed guide rib and having the edge portions on each side of the said guide rib folded and notched in their inner edges, said edges terminating short of the sides of the guide rib and having their lower portions extended across the passages provided on each side of the guide rib to form stops, and a spring loop having its folded portion bent outwardly at about right angles and formed with offsets contiguous to the folded portion for the purpose described, and having the end portions of the parallel members bent inwardly at about right angles to operate in the passages on each side of the said guide rib and again outwardly to work in the ways provided by the said folded edge portions, substantially as described for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WILLIAM Z. BROWN.

Witnesses:

JOSEPH NAUERT,
GEORGE NAUERT.