

No. 667,521.

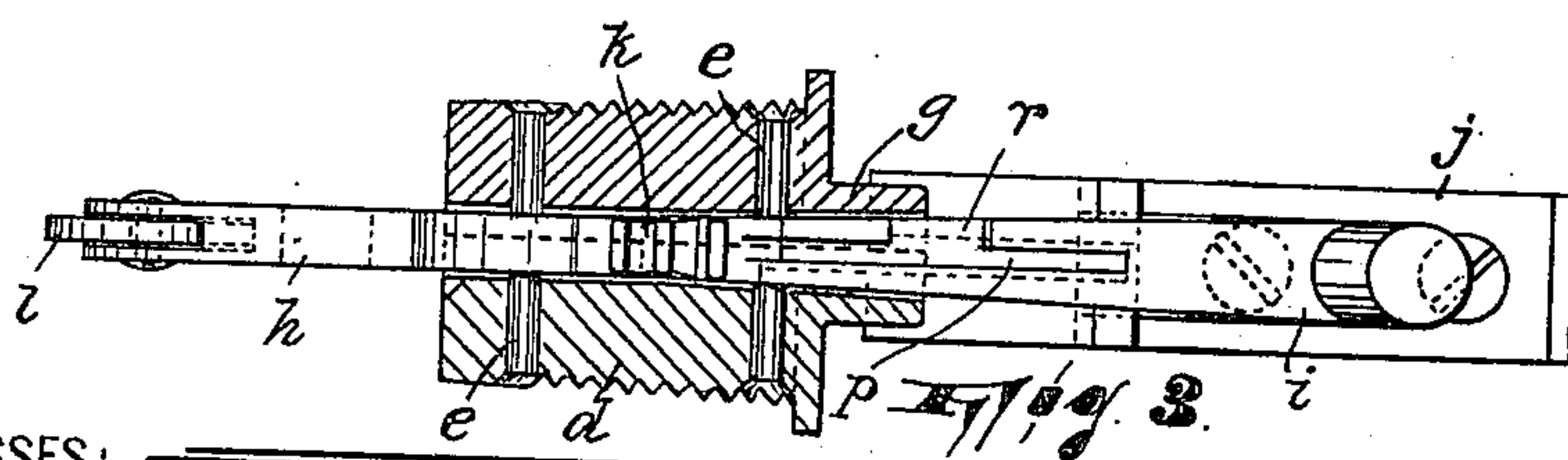
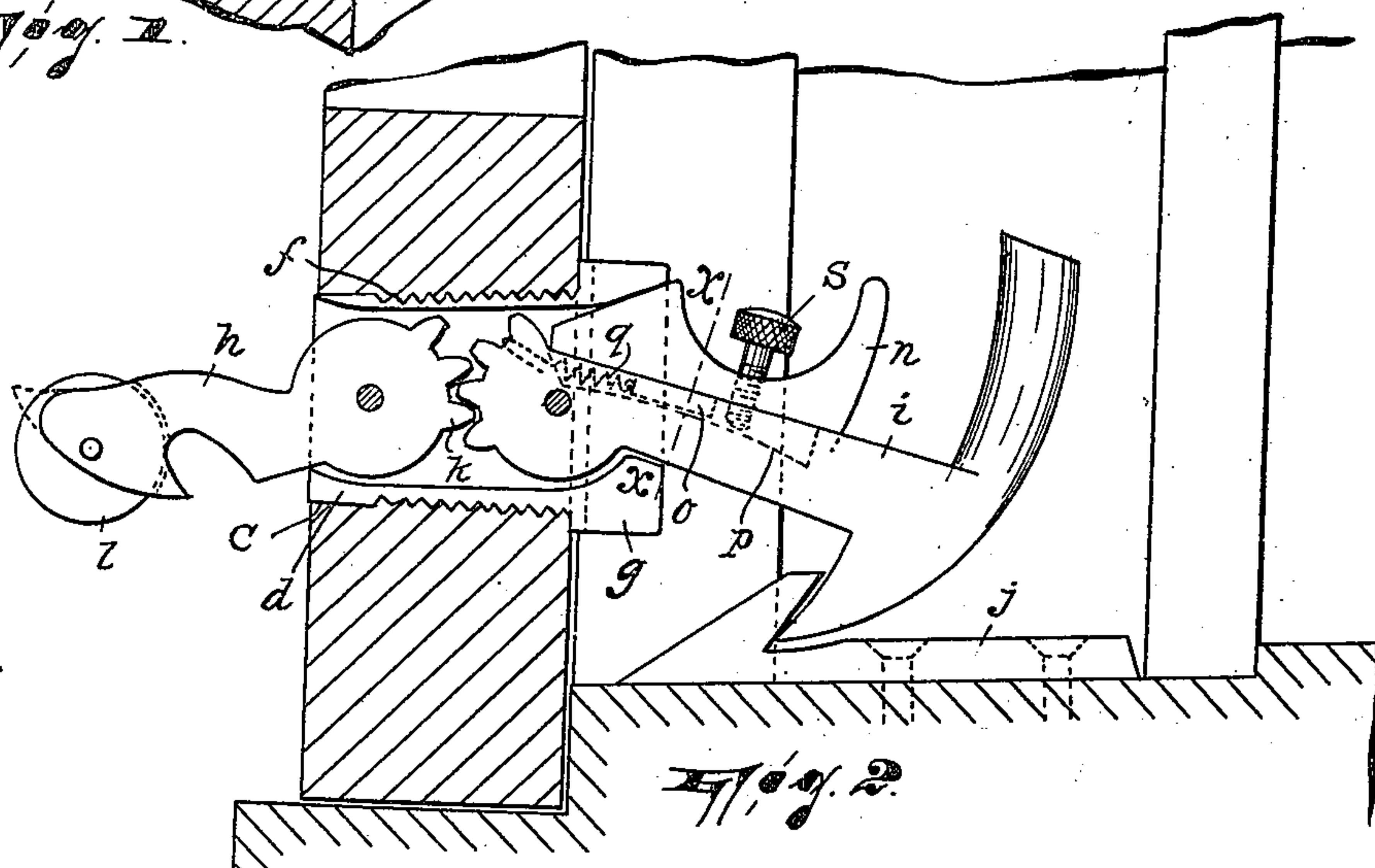
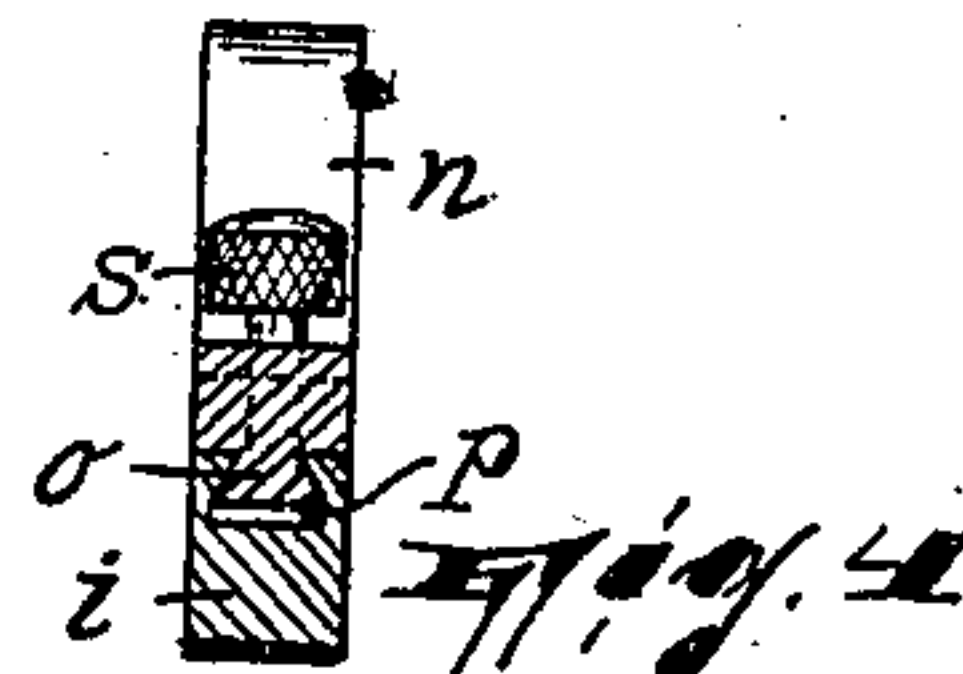
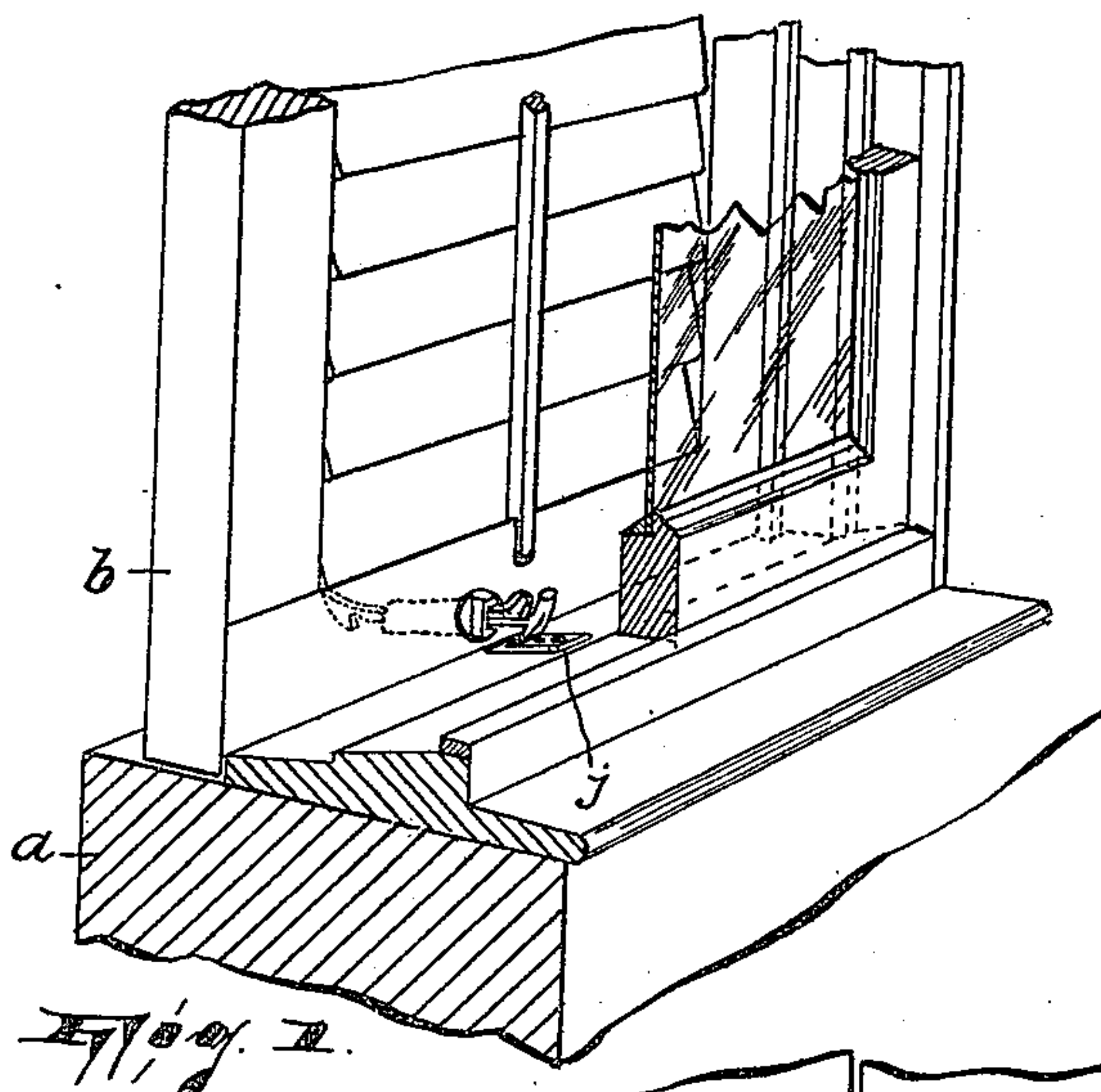
Patented Feb. 5, 1901.

C. HILL.
SHUTTER FASTENER.

(Application filed July 25, 1900.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES:

Wm. D. Bell.
Robert J. Pollitt

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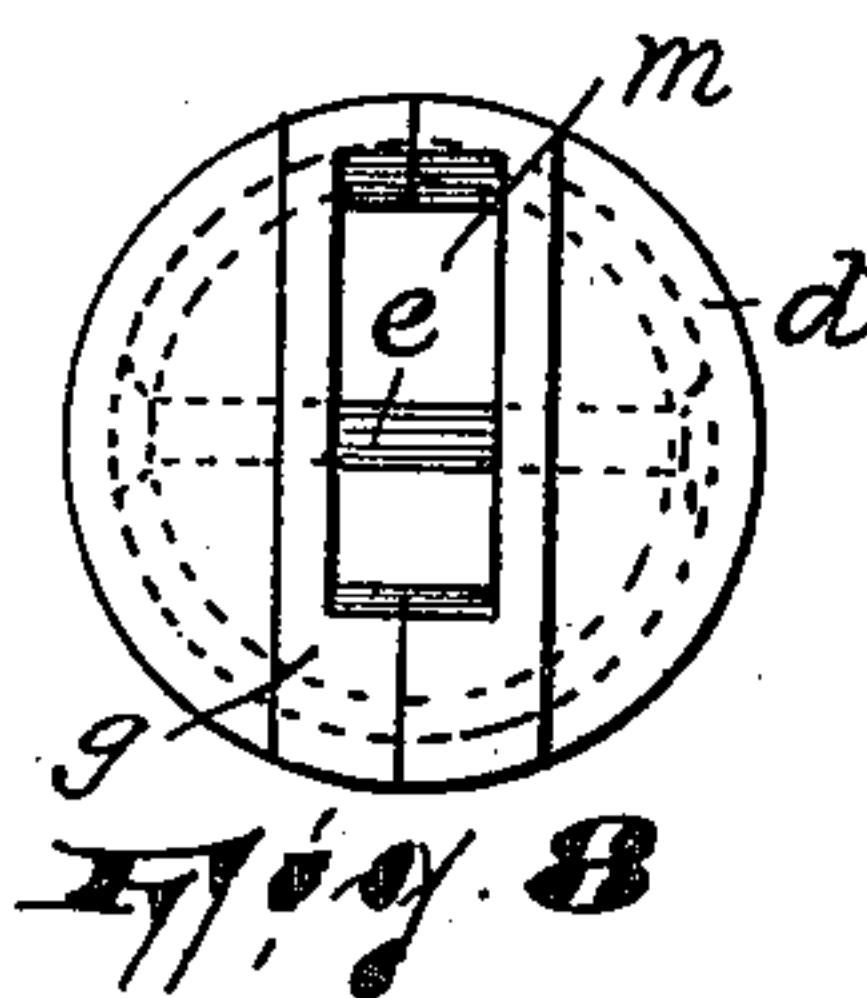
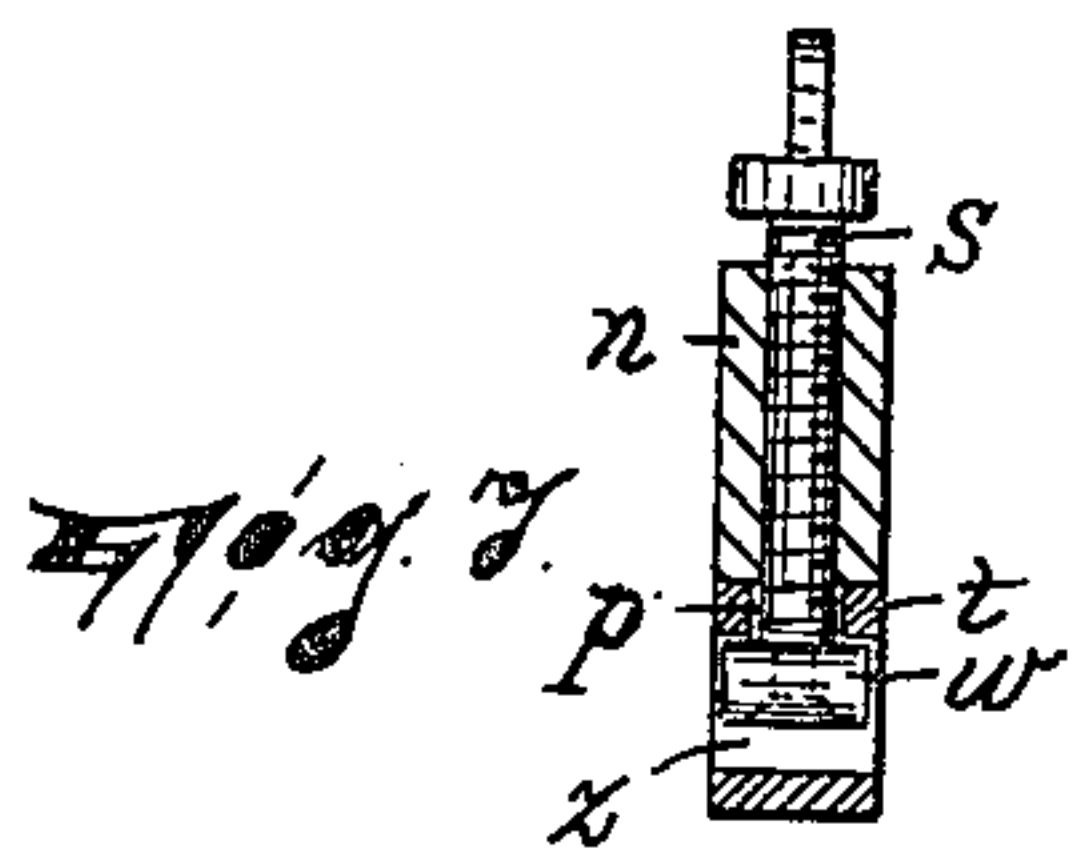
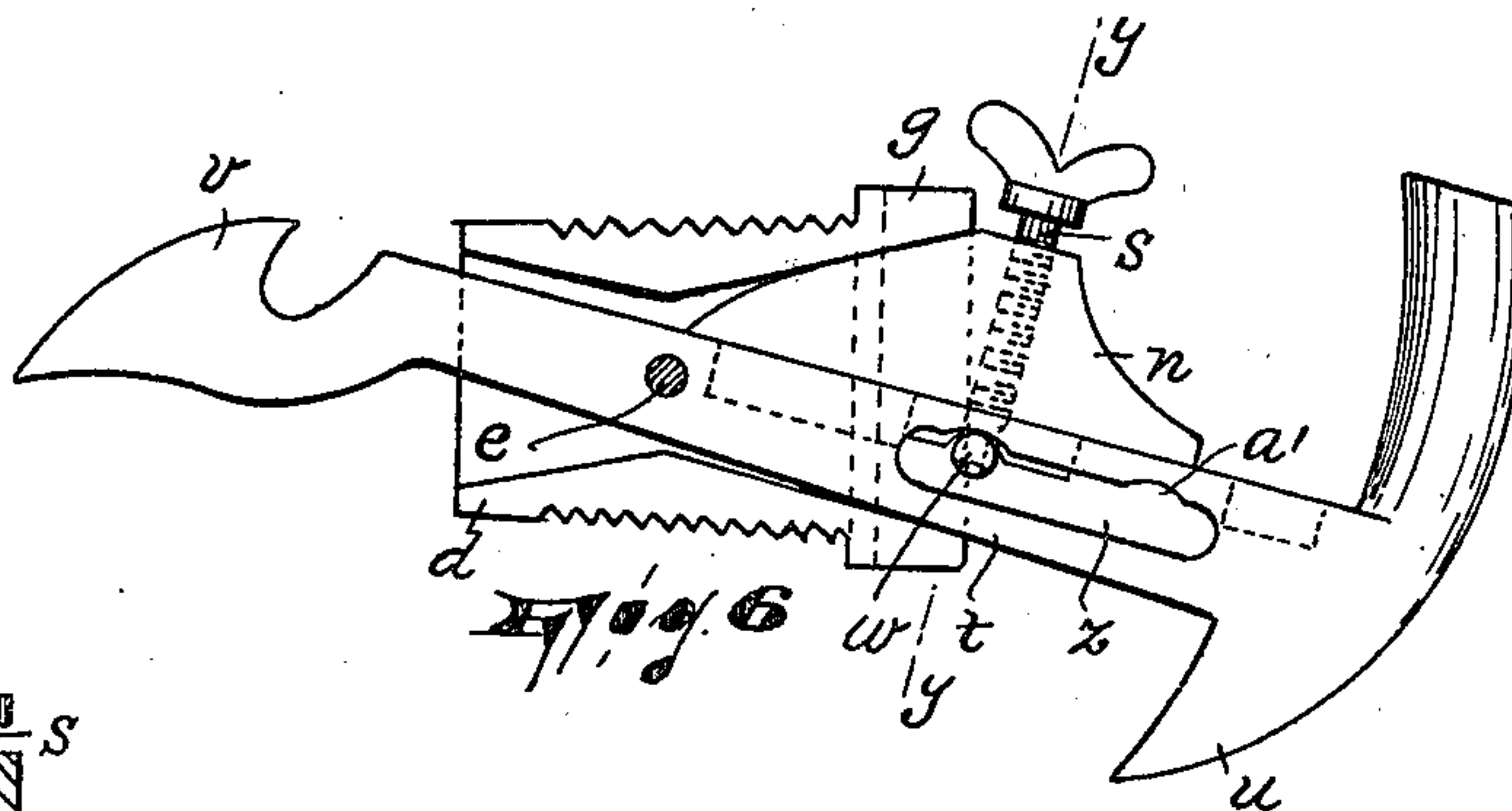
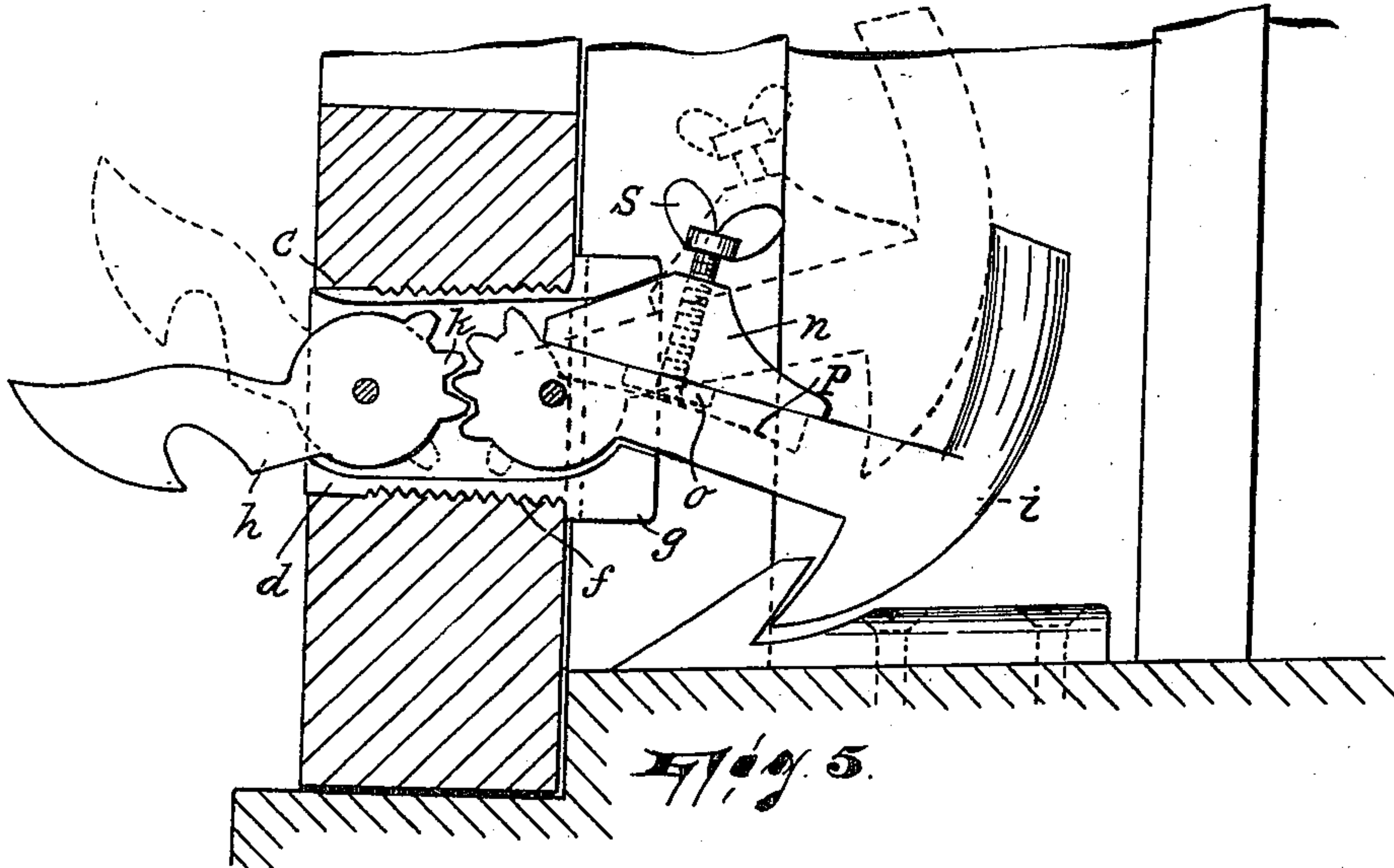
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2 Sheets—Sheet 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES HILL, OF PATERSON, NEW JERSEY.

SHUTTER-FASTENER.

SPECIFICATION forming part of Letters Patent No. 667,521, dated February 5, 1901.

Application filed July 25, 1900. Serial No. 24,753. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HILL, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Blind Catches and Locks; and I do hereby 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 appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to fasteners adapted to secure blinds or shutters in either an open or a closed position; and it has reference particularly to that class of such devices which are provided with means whereby to lock them when holding the shutter or blind closed, so that the latter cannot be opened from the outside.

The invention consists in the improved shutter-fastener and in the combination and arrangement of its various parts, substantially as will be hereinafter pointed out, and finally embodied in the clauses of the claim.

In the accompanying drawings, wherein corresponding letters of reference designate like parts, Figure 1 is a perspective view of a portion of a window, showing my improved shutter-fastener in operative position. Fig. 2 is an enlarged sectional view of substantially what is shown in Fig. 1, my improved shutter-fastener being shown in elevation. Fig. 3 is a view, partly in section and partly in plan, of my improved shutter-fastener, certain parts being removed. Fig. 4 is a transverse sectional view of the shutter-fastener on the line *x x* in Fig. 2. Fig. 5 is a view substantially similar to Fig. 2, but showing a modified form of my improved shutter-fastener. Fig. 6 is a view in side elevation of another modified form of the shutter-fastener, one member of the casing being removed. Fig. 7 is a transverse sectional view on the line *y y* in Fig. 6, and Fig. 8 is an end view of a certain two-part tubular casing in which the movable parts of the fastener are arranged and which is adapted to be secured in the shutter.

In the accompanying drawings, *a* designates the frame of the window, and *b* denotes one of the blinds, the same being hinged therein at one side in the usual manner. In the lower portion of the frame of the shutter is formed an aperture *c*, into which fits a longitudinally-divided tubular casing *d*. The members of this casing may be secured together by pins *e*, having their ends riveted, and in order to prevent the casing from working loose out of the shutter-frame it may be provided with surrounding corrugations or screw-threads *f*. If screw-threads are provided, a substantially rectangular projection *g*, extending from the inner end of the casing, will afford a hold for a wrench whereby to screw the casing into position.

There are preferably two of the pins *e*. On the outer one is pivoted a hook *h*, while on the inner one is pivoted another hook *i*, the former being adapted to engage the usual staple or other catch on the outside of the building, near the window-frame, and the latter being adapted to engage the catch *j*, which is ordinarily secured on the bottom rail of the window-frame. These hooks are provided at their adjacent ends with intermeshing toothed segments *k*, so that when one is manipulated movement will be imparted to the other. If desired, the hook *h* may be provided with a roller *l*, which facilitates its automatically engaging the outside staple when the blind is thrown open. The hook *i* extends through a rectangular orifice *m*, which is formed in the projection *g*.

The top edge of the body of the hook *i* is substantially flat, and thereon is arranged a block in the form of a wedge *n*, which is provided with a dovetailed projection *o*, adapted to engage a corresponding slot *p*, formed in the body of the hook. The reduced or tapering end of the wedge is adapted to enter between the upper edge of the hook and the top of the opening *m* when the hook is in the position in which it appears in the drawings, and in order to normally draw it into this position a spiral spring *q*, arranged in the slot *p* and connecting the projection *o* and the inner end of the hook *i*, as best shown in dotted lines in Fig. 1, is provided. In order that the projection *o* may be introduced into

the slot *p*, a recess *r*, entering the same from the side thereof and formed in the hook, is provided.

s designates a set-screw which is carried by the wedge and is adapted to be manipulated so as to bind against the bottom of the slot *p* and so secure the wedge back against the tension of the spring *q*, as when the lock which the wedge affords is not in use.

The device shown in Fig. 5 is substantially like that already described, with the exception that the roller *l* and the spring *q* are eliminated.

In both the forms of the device already described it is preferred that the bottom of the slot *p* be slightly deeper at its rear end than at a point in the bottom thereof which is opposite the set-screw when the wedge is forward. Thus the set-screw may be screwed down into the depression thus formed far enough so as to effectively hold the wedge back, but not necessarily so far as to bind it and make it difficult to subsequently unscrew it.

In the modification shown in Fig. 6 instead of providing two hooks each adapted to have an overengagement with its respective staple or catch the two hooks are made as one.

t designates a lever which serves as a shank for the hooks *u* and *v*, the former being adapted to engage the catch *j* on the window-frame, having an overengagement therewith, and the latter being adapted to engage the outside staple, with which it has an underengagement. The lever is pivoted upon the pin *e*, in this case there being only one of said pins. The lever carries the wedge *n*, which, as in the case of the devices already described, has the dovetailed projection (*o*) and slot (*p*) engagement with the shank *t*. On the lower end of the screw *s*, which is also provided in this case, being arranged in the wedge *n*, is swiveled a small cross-piece *w*, which is movable in a longitudinal opening *z*, formed in the shank and communicating with the slot. Near its ends the opening is provided with depressions or recesses *a'*, with either of which the cross-piece is adapted to engage to hold the wedge in either of its limits of motion when the screw has been secured to draw the cross-piece into the recess.

It is thought that the manner of manipulating the device will be obvious without further description.

It should be remarked that although my invention is particularly applicable to that class of shutter-fasteners which are so con-

structed that they are capable of being locked to obviate manipulation from the outside, nevertheless by virtue of the fact that the hooks of my device have intermeshing teeth it can be made use of where it is desirable that it be operative from both the inside and the outside.

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

1. In a shutter-fastener, the combination of a casing adapted to be arranged in the shutter, and hooks having intermeshing teeth and pivoted in said casing, one of said hooks being adapted to engage the outside catch and the other of said hooks being adapted to engage the inside catch for said shutter, substantially as described.

2. In a shutter-fastener, the combination of a casing adapted to be arranged in the shutter, hooks having intermeshing teeth and pivoted in said casing, one of said hooks being adapted to engage the outside catch and the other of said hooks being adapted to engage the inside catch for said shutter, and means for locking one of said hooks against actuation, substantially as described.

3. In a shutter-fastener, the combination of a casing adapted to be arranged in the shutter, hooks having intermeshing teeth and pivoted in said casing, one of said hooks being adapted to engage the outside catch and the other of said hooks being adapted to engage the inside catch for said shutter, and a sliding element carried by one of said hooks and adapted to be interposed between the same and the casing to lock said hook against actuation, substantially as described.

4. In a shutter-fastener, the combination of a casing adapted to be arranged in the shutter, a hook pivoted in said casing and adapted to engage a suitable stationary catch, said hook having a depression, a sliding block carried by said hook and adapted to be interposed between the same and the casing to lock said hook against actuation, and a securing device for said block, said device being adapted to engage said depression, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 19th day of July, 1900.

CHARLES HILL.

Witnesses:

ALFRED GARTNER,
JOHN W. STEWARD.