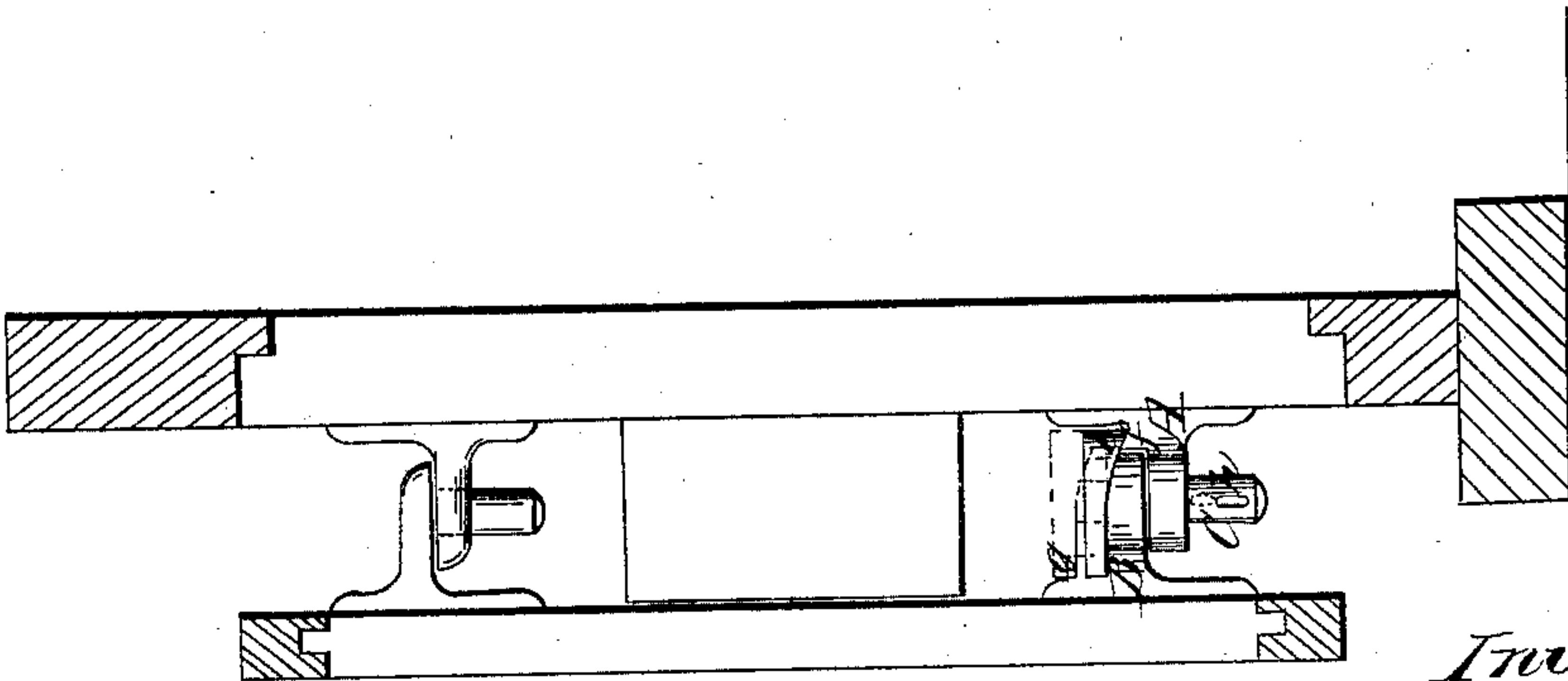
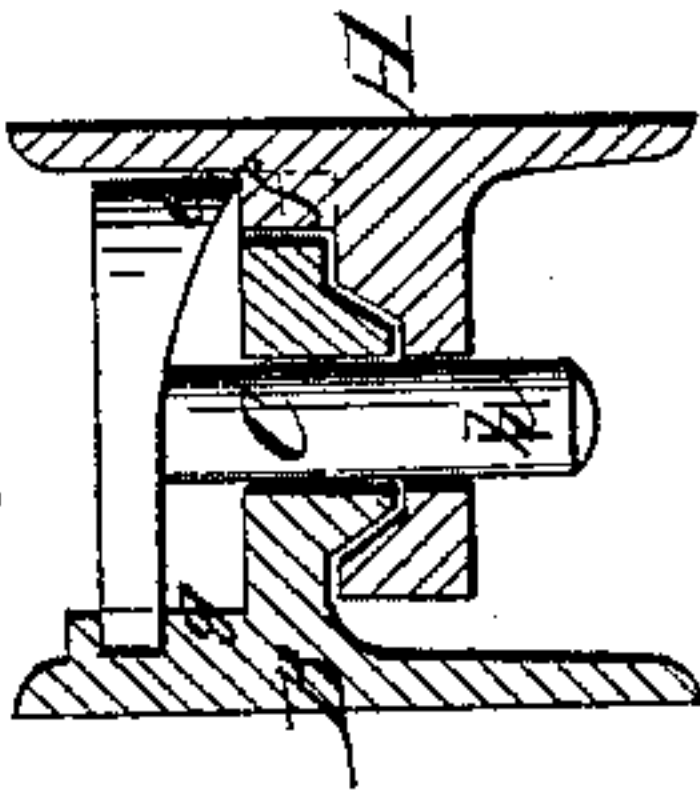
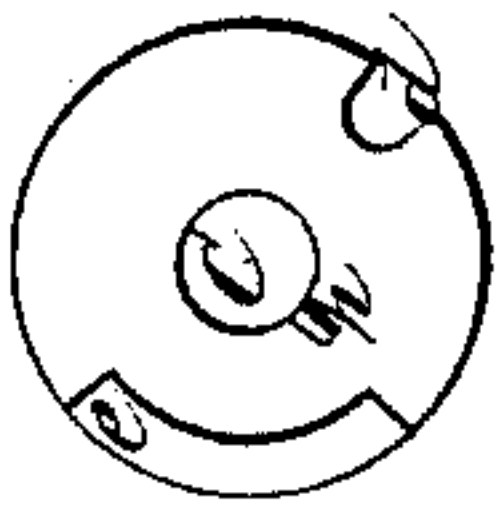
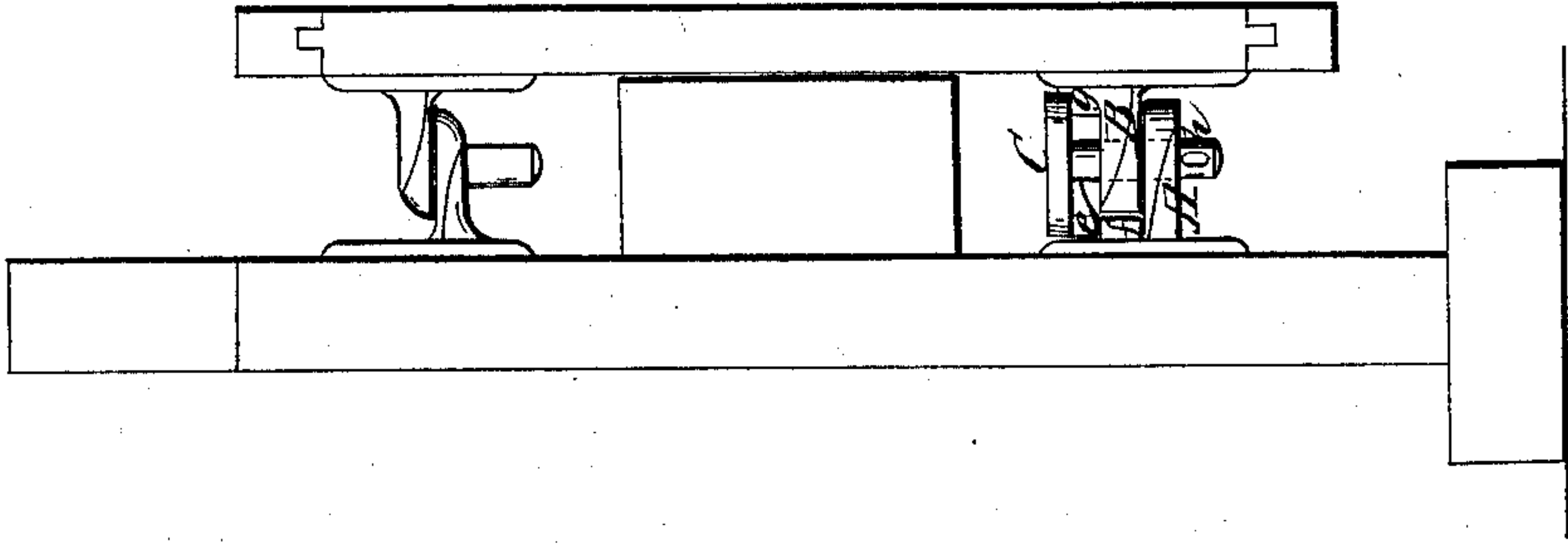


*O. S. Garretson,*

*Lock Hinge.*

*N<sup>o</sup> 55,643.*

*Patented June 19, 1866.*



Witnesses  
James Calkins,  
Jay Mayall.

*Inventor:*  
C. S. Carretson  
by his attorneys  
J. Fraser & Co

# UNITED STATES PATENT OFFICE.

O. S. GARRETSON, OF BUFFALO, NEW YORK.

## IMPROVEMENT IN BUTTS FOR BLINDS.

Specification forming part of Letters Patent No. 55,643, dated June 19, 1866.

*To all whom it may concern:*

Be it known that I, O. S. GARRETSON, of the city of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Butts or Hinges for Blinds, Shutters, &c.; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is an elevation, showing my improved butt as applied to hanging a shutter, which is represented as open and locked by the action of the pin C. Fig. 2 is a like elevation, showing the butt from the opposite direction at the time when, in the act of opening, the pin has been raised and is about to fall and lock the shutter. Fig. 3 is a detached view of the pin C in an inverted position. Fig. 4 is a vertical section through the two wings of the butt, showing the pin in elevation, and raised by the cam.

Like letters designate corresponding parts in all of the figures.

My invention belongs to that class of hinges which are self-locking when opened; and it consists in the peculiar construction of a loose pin provided with a cam and notch on the head thereof, which are actuated by means of nibs or stops on the wings, so that the pin rises by the turning of the hinge and drops over a locking-stop when open; and, also, in a conical seat and bearing between the wings, so that they turn on an axis of their own, leaving the pin free to move up or down with little friction.

As represented in the drawings, A is the lower, and B the upper, wing of the hinge, and C the loose connecting-pin. The wing A is formed with a conical seat or recess surrounding the hole which receives the pin, and B has a corresponding bearing which fits it, as shown most clearly in Fig. 4. So constructed, it is apparent that the hinge would open and close, one part turning on the other, without the pin C, which in my invention has other functions than that of merely forming the axis of the two wings, as will presently be explained.

A and B are provided each with a hole concentric with the bearing described, through

which loosely passes the stem of the pin C. The pin is provided with a broad flat head, on the periphery of which is a notch, *d*, and nearly opposite to it, on the under side of the head, is an inclined flange or cam, *e*, projecting downward. The wing A is provided with a nib or stop, *f*, in a position to engage the cam, and the wing B has a vertical rib or flange, *g*, which fits in the notch *d* when all parts of the hinge are together.

The pin is provided with a nib, *h*, at its lower end, which passes through grooves in the eyes or holes of the wings when the butt is partially opened and in a certain position in which both grooves correspond, the office of which is to prevent the pin being removed by mischievous and designing persons.

The operation of the hinge is this: On opening the blind or shutter the wing B, being attached thereto, turns with it, and the pin C, being connected with the notch *d*, with this part of the hinge, necessarily revolves with it. This causes the cam *e* to traverse the stop *f*, raising the pin until the point of full opening is attained, when, the apex of the cam being passed, the weight of the pin C causes it to fall with its perpendicular side *e* beyond the stop *f*, securely locking the blind in this position. To again close the blind it is only necessary to touch the lower end of the pin C and raise it, so that the cam will pass the stop.

The simplicity of this device renders it very effective for the purpose. It is necessary that the pin should play freely in the eyes or holes in the hinge-knuckles, and this freedom is secured by the conical seat and bearing of the two wings, as described, so that they produce no friction whatever on the pin. The extended head or cap excludes rain and snow and dirt from the joint, so that it cannot become obstructed with rust or foreign substances. The form of the hinge is very compact and not uncouth, while it possesses strength and durability.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The loose pin C, provided with the cam *e* and notch *f*, in combination with the wings A B, provided, respectively, with the flange *f*



and stop *g*, arranged and operated substantially in the manner and for the purpose set forth.

2. In combination with the loose pin *C*, the conical seat and corresponding bearing of the parts *A B*, or their equivalents, arranged and operating as shown and described.

3. The free axial pin or bolt *C*, operated by its own weight, in connection with suitable

stops on the wings of the butt for forming a self-fastening hinge, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

O. S. GARRETSON.

Witnesses:

JAY HYATT,  
LYMAN P. PHILLIPS.