

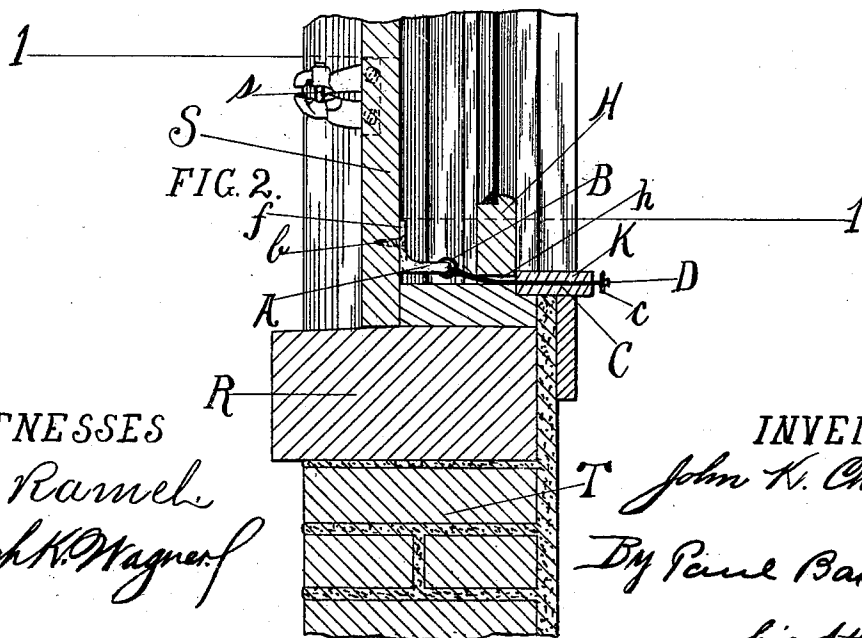
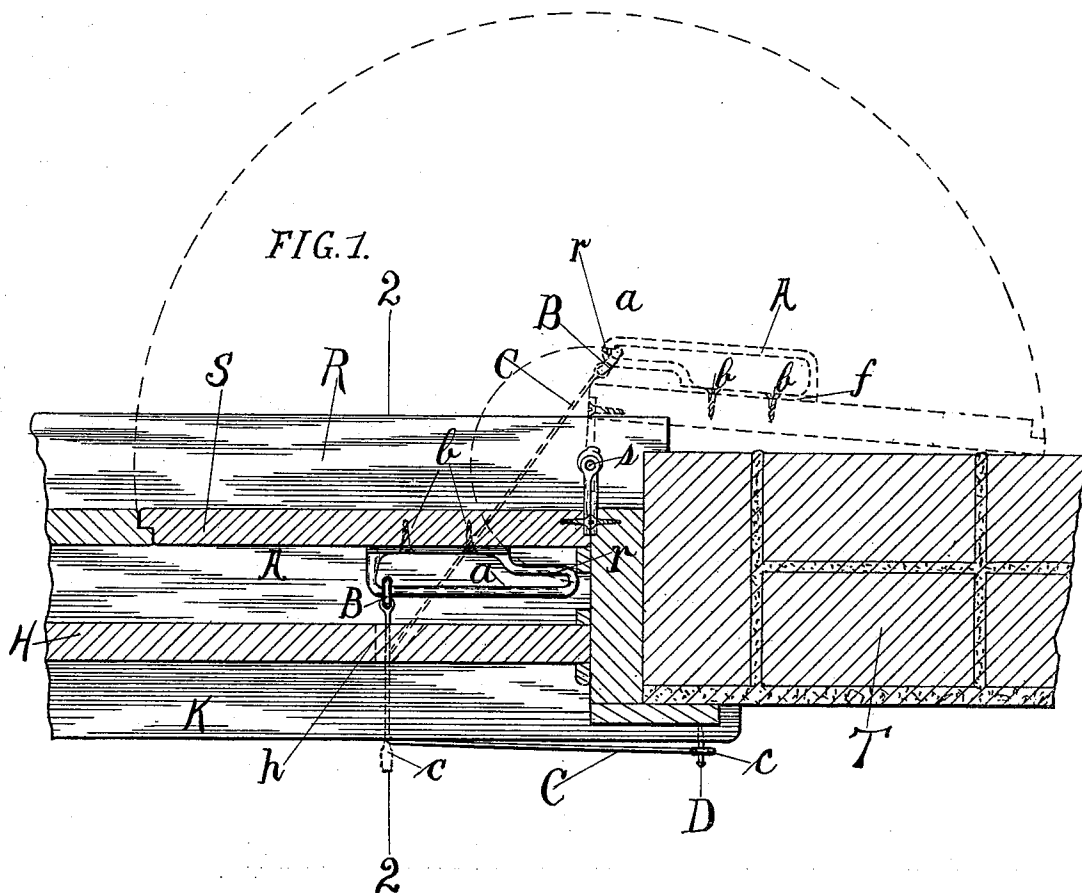
(No Model.)

J. K. CHRISTY.

COMBINED SHUTTER CLOSER AND FASTENER.

No. 508,404.

Patented Nov. 14, 1893.



WITNESSES

A. Ramele
Hugh K. Wagner

INVENTOR.

John K. Christy,
By Paul Bakewell
his Attorney

UNITED STATES PATENT OFFICE.

JOHN K. CHRISTY, OF ST. LOUIS, MISSOURI.

COMBINED SHUTTER CLOSER AND FASTENER.

SPECIFICATION forming part of Letters Patent No. 508,404, dated November 14, 1893.

Application filed June 9, 1893. Serial No. 477,035. (No model.)

To all whom it may concern:

Be it known that I, JOHN K. CHRISTY, a citizen of the United States; residing in the city of St. Louis, State of Missouri, have invented certain new and useful Improvements in a Combined Shutter Closer and Fastener, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of the specification, wherein like symbols of reference indicate like parts wherever they occur, and in which—

Figure 1 is a plan view of my device in position, the drawing as a whole being a horizontal cross-section taken on the line 1—1 in Fig. 2. Fig. 2 is a side view of my device in position, the drawing as a whole being a vertical cross-section taken on the line 2—2 in Fig. 1.

My invention relates to means for closing and fastening outside shutters. It has for its object to provide means whereby the shutter may be both conveniently closed and locked from the inside without raising or opening the window.

The features of my invention reside first, in the combination of the peculiarly shaped piece fastened to the shutter and the sliding ring by means of which the cord or wire is attached to this piece, thus preventing a "dead center" of motion in the closing pull of the shutter, which would otherwise occur if the cord or wire were rigidly secured to the piece fastened to the shutter, or to the shutter itself, when the point of attachment had revolved, with the shutter, to a point on a line between the center of the shutter hinge and the end of the aperture through which the cord or wire is passed to the interior of the building; second, in providing suitable means for securing the shutter from outside opening after it is closed. These objects I attain by the construction illustrated in the accompanying drawings, hereinafter described, in which—

A indicates the bracket piece fastened to the shutter S by means of screws or bolts *b*.

B indicates a ring which slides freely upon the part *a* of the bracket piece A. The part *a* is of circular section.

C indicates a cord or wire fastened to, or formed itself with a loop corresponding to, the

ring B, and also formed with a loop or ring *c* on the end inside the building.

D indicates a hook or pin placed at a suitable distance over which the ring *c* may be slipped to secure the shutter after closing.

H indicates the lower sash of the window preferably formed with a notch or recess *h* to accommodate the wire C therebeneath.

K indicates the inside sill of the window.

f indicates a flange or ear on the piece A, providing means whereby the piece as a whole may be secured, by the screws *b* to the shutter S.

R indicates the sub-sill.

T indicates a portion of the building.

r indicates a recurved portion of the part *a* of the bracket piece A.

The operation of the device is as follows:—

When it is desired to close the shutter, the ring or loop *c* is seized and a pull exerted inwardly on the cord or wire C. This pull will be transmitted by the ring B to the bracket-frame A, and will tend to revolve the shutter and bracket frame, and also the ring B, in a circle, having as its center the center of the hinge *s*. The pull on the ring B however, tends to move the ring B in a straight line toward the recess *h*. The fact of the ring B being slidably mounted on the part *a* of the bracket-frame A, permits the ring to constantly maintain a position which will keep up an effective inward or closing pull upon the shutter S, whereas, if the cord or wire were rigidly secured to the shutter S, the pull would cease to be effective when the point of fastening to the shutter had reached a point on a straight line between the center of the hinge *s* and the outer end of the recess *h*, and would only partially close the shutter. When the shutter S is open the recurved portion *r* prevents the sliding-ring R from approaching the pivot point of the hinge or shutter mounting, thereby maintaining the initial leverage at the beginning of the closing operation. After the shutter is closed the ring or loop *c* may be passed over or hung on the hook or pin D, thus securely fastening the shutter against outside opening.

It is obvious that the shape of the shutter-piece A, the manner of fastening said piece to the shutter, the method of forming the loops or rings B and D on the cord, wire or

chain C, and other minor details may be modified or changed to suit different circumstances without departing from the essential features of my invention. Consequently I do not desire to confine myself to the exact construction and arrangement of the parts as shown in these drawings and described in this specification.

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

In a shutter closer and fastener, the combination with the shutter, of a bracket frame

formed with a re-curved portion, secured thereto, a ring slidingly mounted on said frame, a cord secured to said ring and passing inside the building, and means for securing the cord on the inside of the building, substantially as described.

In testimony whereof I have hereunto affixed my signature, in presence of two witnesses, this 3d day of June, 1893.

JOHN K. CHRISTY.

Witnesses:

HUGH K. WAGNER,
A. RAMES.