SHUTTER-WORKER.

Application filed February 23, 1893. Serial No. 463,382. (No model.)

To all whom it may concern:

Be it known that I, JOHN VERNER STIRBLING, a citizen of the United States, residing at Richland, in the county of Oconee and State of South Carolina, have invented certain new and useful Improvements in Shutter Adjusters and Hinges Combined; 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 pertains to make and use the same.

This invention relates to certain improvements in a combined shutter hinge-lock and adjuster, whereby the shutter can be operated from the inside of the sash, and secured at any angle; and when closed will be securely locked, also the hinge will be retained in place should the hinge pin be removed from any cause, all of which will be hereinafter more particularly described and pointed out.

In the accompanying drawings forming part of this specification Figure 1 is a transverse section, of a part of a window frame, sashes, and shutter, showing the application of the hinge, lock, and adjuster. Fig. 2 is a side view of the box for the adjuster. Fig. 3 is an end view of Fig. 2. Fig. 4 is an edge view of the hinge, showing the threads on the segment. Fig. 5 is an inside view of the box partly in section.

A is the box frame of a window; A' the inside, and A'' the outside casing, and A''' the jamb; B, B' are the lower and upper sash stiles. These are all of the usual construction.

C is a cast metal box having on each side a flange c and at the ends bosses c', through which are holes c'' for the hinge pin; the upper part of the bosses c' have projecting caps g' to overlap the bosses g on the hinge E, when put together so that, should the pin break, or be removed violently, when the shutter is closed, the hinge can not be removed from the box. There is a web c' continuing around the shell of the box—which bears against the face of the outer casing A''—to brace the box in its place.

C' is a projecting plate against which the worm-screw D is supported.

E is the hinge which is secured to the shutter F by screws through the ears f, f'. E' is a segment having on its circumference the worm gear e e, &c., to correspond with the spiral thread on the screw D.

g, g, are bosses on the sides of the segment E'—through which is the hole for the hinge pin. The box C is secured to the window frame as shown in Fig. 1—by concealed screws from the inside. A screw d is shown through the body of the box and at d' Fig. 2—is shown a hole for the screw, to be used to fasten it to the casing, and another screw to be used immediately opposite to it—not shown in the drawings.

D' is a rod securely attached to the worm screw D—or the two may be cast in one piece. This rod D' extends some distance inside of the inner casing to receive a knob G or any other suitable fixture by which the screw can be turned. There is a scutcheon H, secured to the casing through which the rod D' passes.

The connection of the hinge E—with the box C and the screw D—is made as follows: The screw rod D' is passed through the orifice in the end of the box C—and the screw D dropped to its place—as in Fig. 1. The box C is then secured to the frame. The hinge E is then fastened to the shutter F. The shutter is then held at an angle to permit the hinge E to slide into the opening of the box C, as shown in broken lines Fig. 1, so that the bosses g, g will go under the caps of the bosses c'', e' in the rear of which are recesses g'' to permit the passage of the bosses g. The hinge pin is then inserted and secured. The screws and segments should be made “rights” and “lefts” so that the movements of the two shutters will be uniform.

I claim—

The hinge E having a coggled segment E' and projecting bosses g, g, in combination with the box C having bosses c', e', supplied with overhanging caps g' and the screw D with a worm D operated by the knob G whereby the shutter can be adjusted—opened and locked when closed substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN VERNER STIRBLING.

Witnesses:
S. K. Dendy, Jr.,
J. B. Hill.