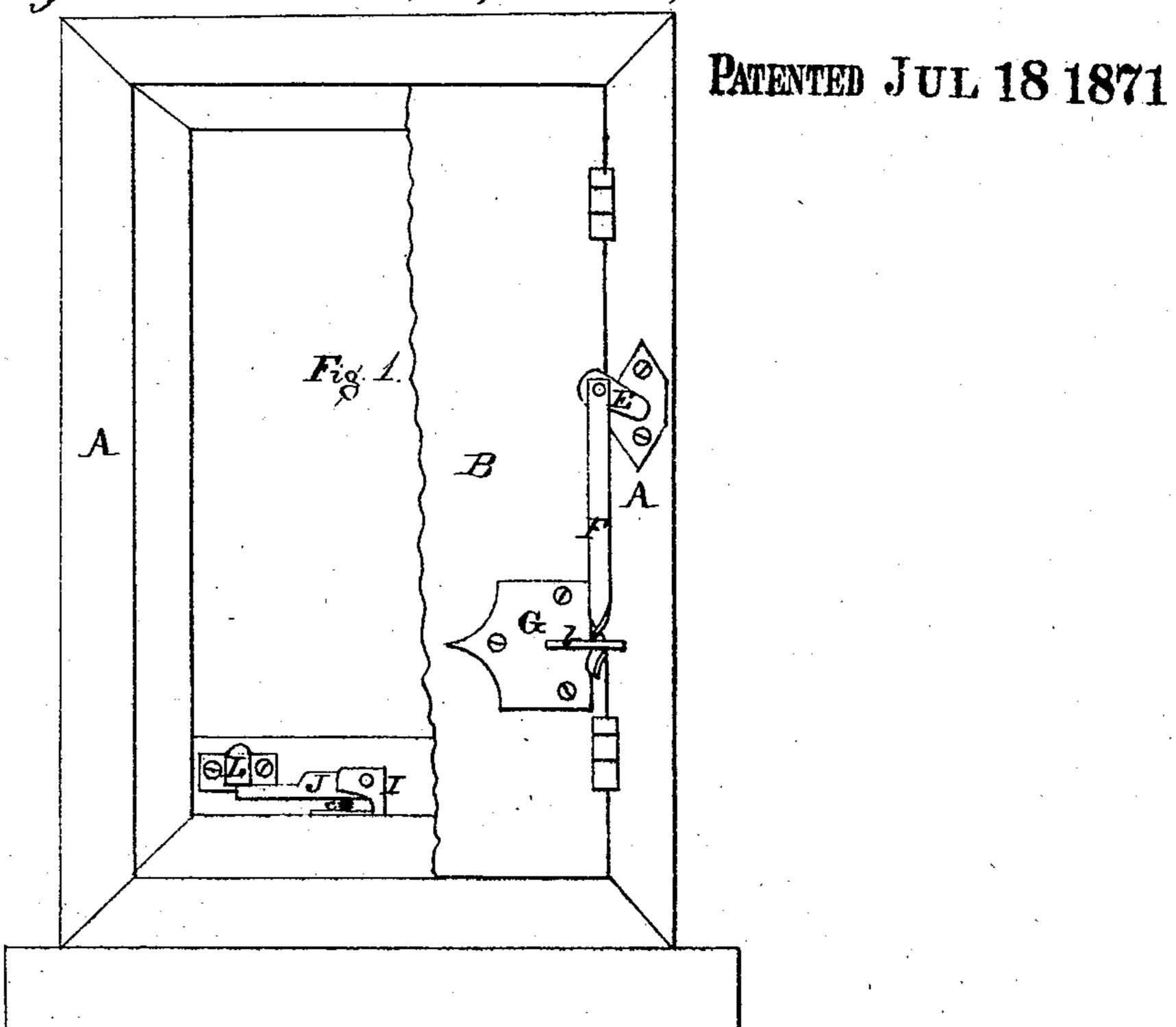
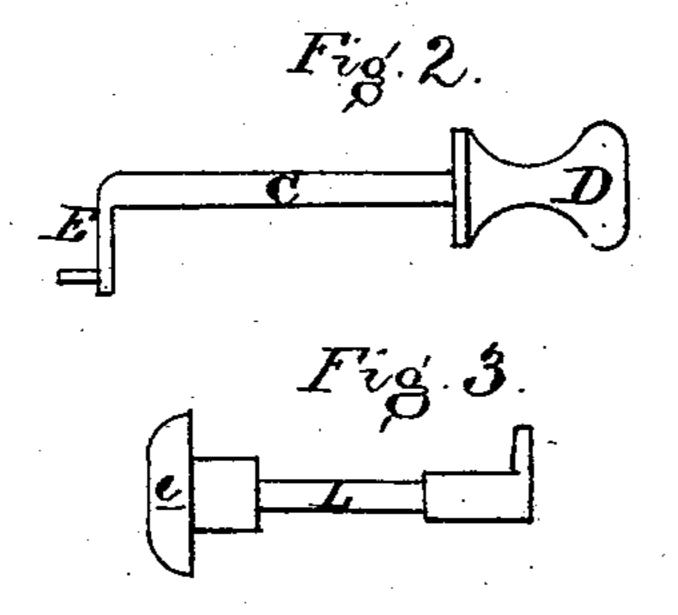
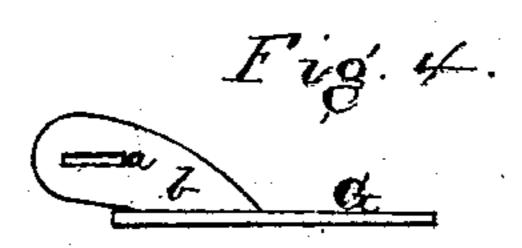
L.H. Watson's

Devices for Opening Closing Shutters.

117226







Witnesses.

Inventor.

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UNITED STATES PATENT OFFICE.

LEWIS H. WATSON, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. 117,226, dated July 18, 1871.

To all whom it may concern:

Be it known that I, Lewis H. Watson, of Pittsburg, Allegheny county, Pennsylvania, have invented certain new and useful Improvements in Devices for Opening and Closing Shutters, of which the following is a specification:

The nature of my invention consists in the construction of a cheap and simple device for opening and closing shutters, as will hereafter

be more fully set forth.

In the accompanying drawing, Figure 1 represents a side elevation of the exterior of a shutter to which my device is attached. Fig. 2 is a side view of the operating shaft for closing the shutter. Fig. 3 is a side view of the shaft for operating the spring-catch. Fig. 4 is a plan view of the plate through which the lever operates on the shutter.

A represents the window-sill and B the shut- | ter. Extending outward through the sill from the interior of the house is the shaft C, having a handle, D, upon its inner end, and a crank, E, upon the outer. Pivoted to the crank is the lever F, which consists of a flat bar, having its lower end twisted in the shape of an auger and passing through a small slot, a, cut in the ear b of the plate G. Secured to the sill is a small casting, I, in which is pivoted the catch J, and which is provided with a spring, c, so as to keep the catch always pressed upward. Extending

through the frame, and having a cam formed on its end, is the shaft L, by means of which the catch is depressed, so as to release the hook on the shutter.

The operation is as follows: When it is desired to open the shutter, the knob e on the end' of the shaft L is turned, causing the cam on its opposite end to bear down on the spring-catch J until the shutter-hook is released. The knob D on the end of the shaft C is then turned, causing the crank to force the auger-shaped end of the lever F downward into the slot a, thereby acting as a lever to swing the shutter outward. The shaft passes into the slot until the twisted or auger-shaped part is passed, when the flat portion acts as a stop, so as to prevent the shutter from being swung backward and forward.

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

The shaft C, crank E, lever F, and slotted plate G, when combined to operate as described. In testimony that I claim the foregoing as my own I hereby affix my signature in the presence of two witnesses.

LEWIS H. WATSON.

Witnesses:

R. H. Marsh, THOS. S. MERCER.