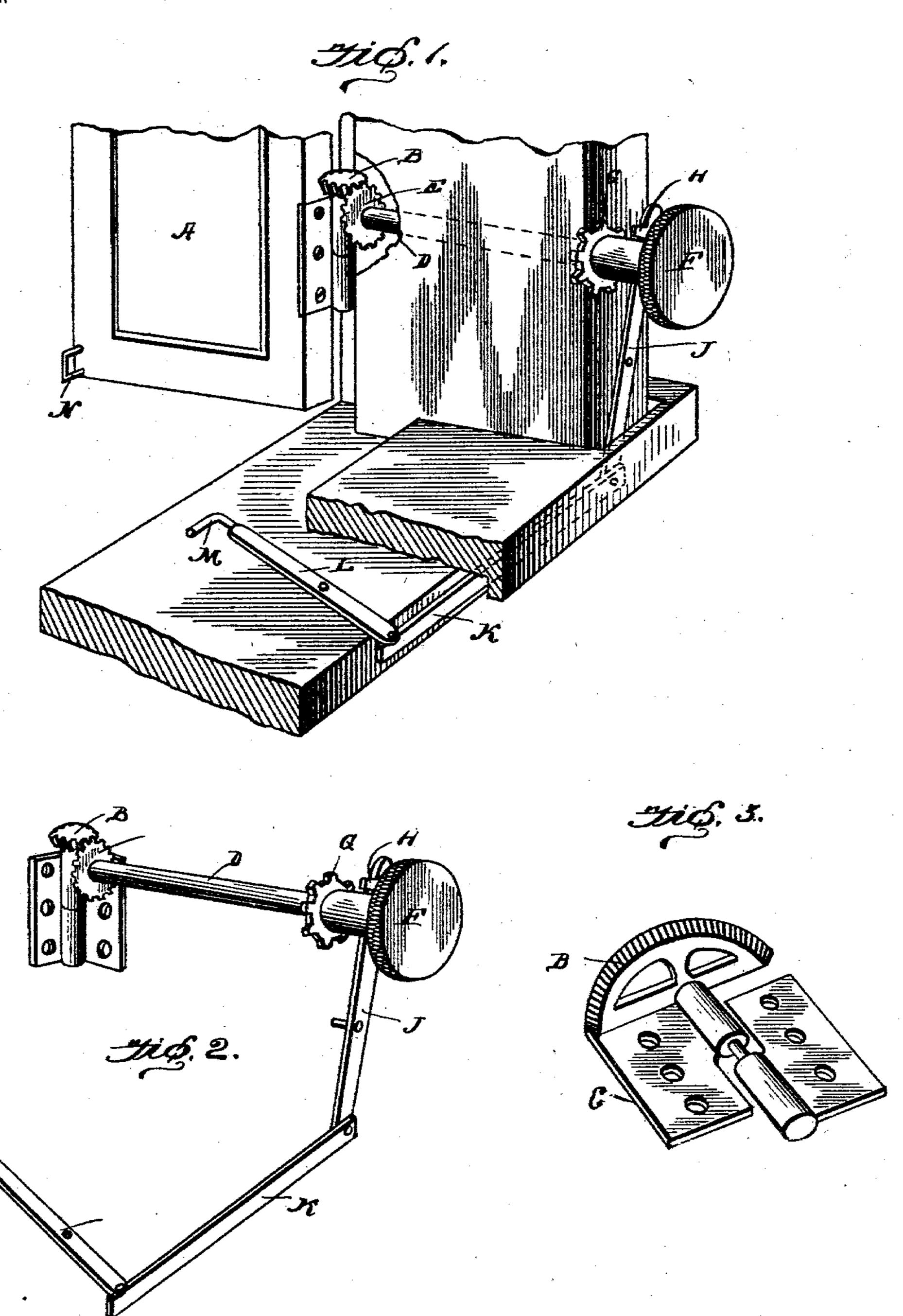
J. H. APPLEGATE. SHUTTER WORKER AND LOCK. APPLICATION FILED MAY 24, 1902.

NO MODEL.



Witnesses Bernard M. Offull. H. G. Crowley. John H. applegati by Camid Thoore, Attorney

UNITED STATES PATENT OFFICE.

JOHN H. APPLEGATE, OF CAMDEN, NEW JERSEY.

SHUTTER WORKER AND LOCK.

SPECIFICATION forming part of Letters Patent No. 720,874, dated February 17, 1903.

Application filed May 24, 1902. Serial No. 108,873. (No model.)

To all whom it may concern:

Be it known that I, John H. Applegate, a citizen of the United States, residing at Camden, in the county of Camden and State of New Jersey, have invented certain new and useful Improvements in Shutter Workers and Locks, of which the following is a specification.

My invention relates to improvements in shutter workers and locks; and the main object of the invention is the provision of a device which can be operated to readily swing open or close a shutter and which is provided with a lock to engage said opening or closing means and with a series of levers connected with said lock to engage the outer ends of the shutter and hold same closed.

Another object of the invention is the provision of a shutter worker and lock of very simple, durable, and inexpensive construction, as will presently appear from the description taken in connection with the drawings.

To attain the desired objects, the invention consists of a shutter worker and lock embodying novel features of construction and combination of parts, substantially as disclosed herein.

In the accompanying drawings, Figure 1 is a perspective view of a portion of window frame and shutter with my invention in use thereon. Fig. 2 is a similar view of the invention detached. Fig. 3 is a perspective view of a modified form of attachment for the shutter.

Referring to the drawings, A designates a shutter, which may be furnished with the usual hinges or may have the bevel-pinion B formed integral with the hinge. I prefer, however, to make this pinion as shown in Fig. 3, where it is semicircular and is provided with the plate C for attaching it to the shutter. Revolubly mounted in the window-frame is a shaft D, upon whose outer end is mounted the bevel-pinion E, which meshes with the pinion B, so that when the operating-knob F is turned

Mounted upon the shaft between the window-frame and the knob is a toothed wheel G, which is adapted to be engaged by the hooked end H of the pivoted arm J, which is pivotally 50 secured to the window-frame. The lower end of this arm is pivotally secured to one end of the connecting-rod K, whose other end is connected to the pivoted lever L, provided with the hook M to engage the eye N of the shut-55 ter to hold the shutter closed.

From the foregoing description it is evident that I provide a shutter worker and lock which is the embodiment of simplicity, durability, and cheapness and whose operation is readily 60 understood and is therefore very practical.

It will be seen that by releasing the lever or arm J from the toothed wheel the shutter if closed is unlocked and that by turning the knob the shaft is revolved, thus imparting 65 motion to the pinion B, which swings the shutter. Should it be desired to hold the shutter at any position, the arm J is caused to engage the toothed wheel, and thus the shaft is prevented from turning and the pinions are 70 locked.

What I claim as new is—

In a shutter worker and lock, the combination of a revoluble spindle, means to engage the shutter to cause same to swing as the 75 spindle is revolved, an arm pivoted and secured intermediate of its length to the window-frame and provided with means to engage the spindle and lock the same, a pivoted lever mounted on the lower strip of the window-80 frame adapted to engage the shutter with its outer end, and a connecting-rod pivotally connected to the inner end of said arm and to the lower end of said lever.

In testimony whereof I affix my signature 85 in presence of two witnesses.

JOHN H. APPLEGATE.

Witnesses:

HENRY MILLINGAR, THOMAS I. DUNLAP.