No. 891,326.

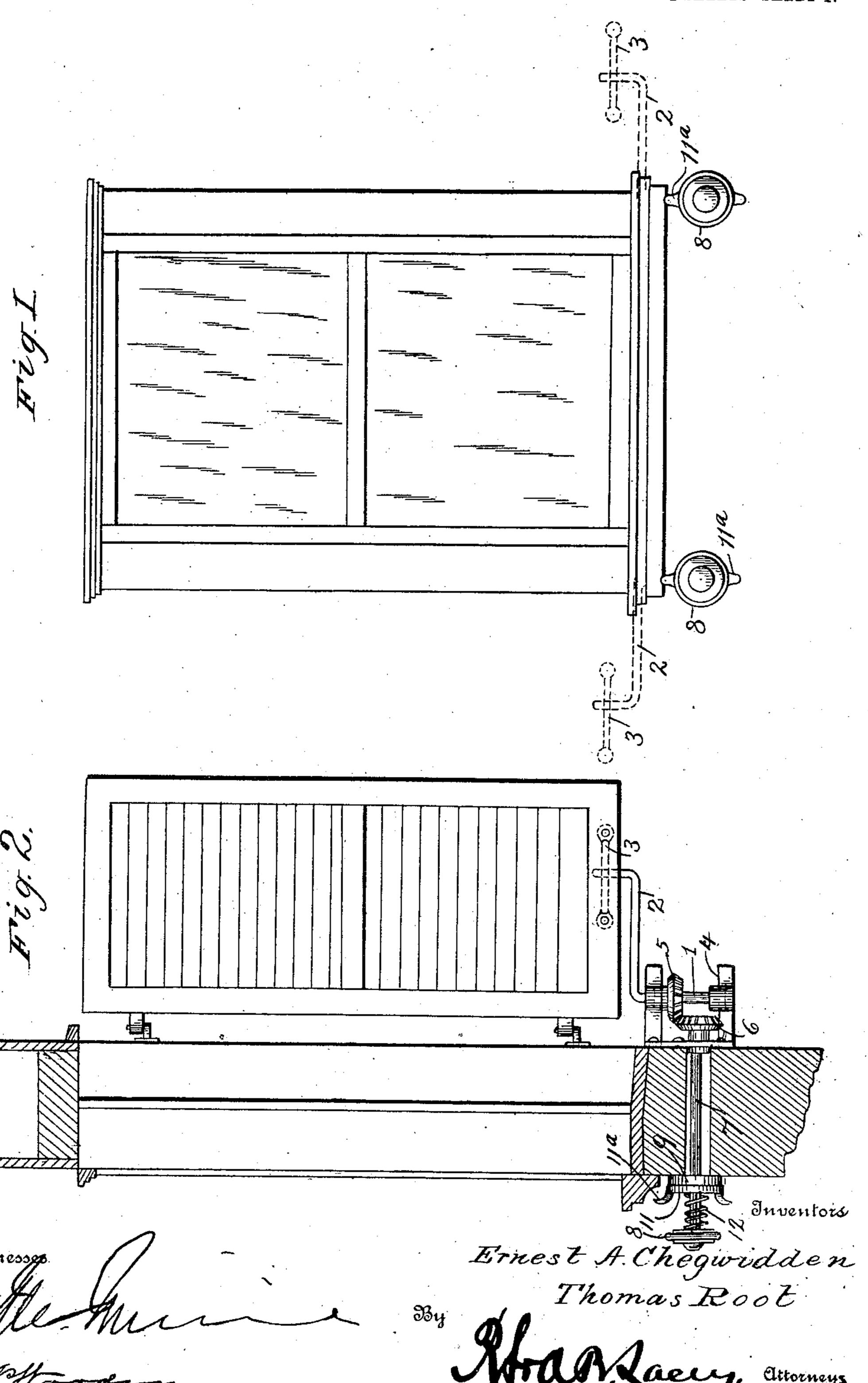
PATENTED JUNE 23, 1908.

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DEVICE FOR OPERATING SHUTTERS.

APPLICATION FILED NOV. 6, 1907.

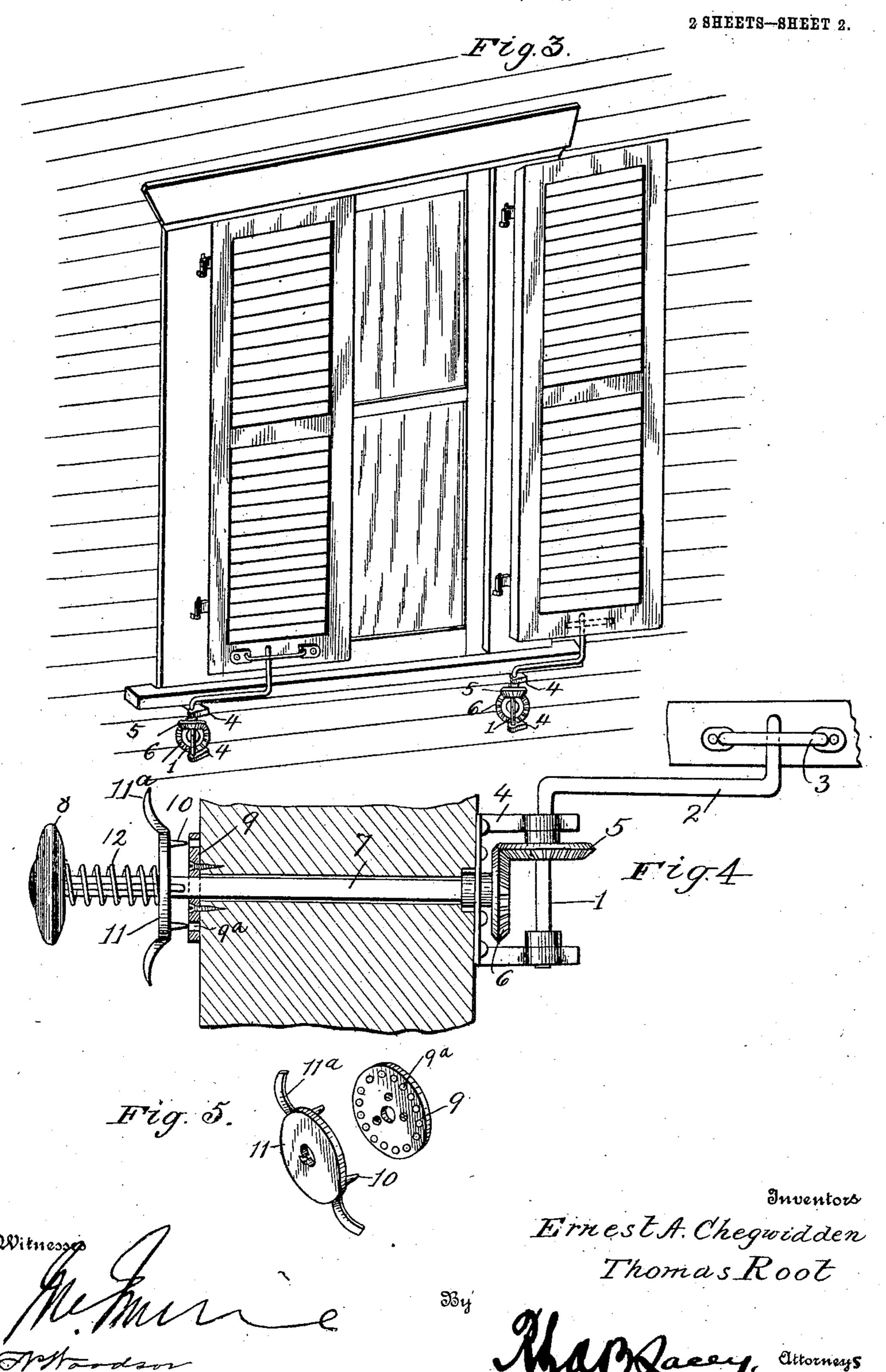
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UNITED STATES PATENT OFFICE.

ERNEST A. CHEGWIDDEN AND THOMAS ROOT, OF WEST FITCHBURG, MASSACHUSETTS.

DEVICE FOR OPERATING SHUTTERS.

No. 891,326.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed November 6, 1907. Serial No. 400,980.

To all whom it may concern:

Be it known that we, Ernest A. Chegwidden and Thomas Root, citizens of the United States, residing at West Fitchburg, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Devices for Operating Shutters, of which the following is a specification.

This invention has for its object an improved apparatus for working shutters, and the invention consists in certain constructions, arrangements and combinations of the parts that will enable the shutters to be opened and closed from the inside of a building, without the necessity of raising the window sashes and leaning out of the window.

For a full understanding of the invention, reference is to be had to the following decription and accompanying drawings, in which:

Figure 1 is a view of the inner side of the window sash or frame at which two of our improved shutter operating devices are located; Fig. 2 is a vertical sectional view through the window; Fig. 3 is a perspective view of the outer side of the window with the invention applied; Fig. 4 is an enlarged transverse sectional view of the apparatus; and, Fig. 5 is a detail perspective view of the latch plate and its keeper.

Tespect to the knob 8 that the two together will form an effective hand-hold in manipulating the shaft 7 to open or close the shutter. It is also evident that one of our improved shutter operating apparatus may be provided for each shutter of a window.

From the foregoing description in connection with the accompanying drawings, it will be seen that we have provided a very simple durable and efficient construction of appara-

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Our improved shutter working apparatus comprises a crank shaft 1 which is provided at its upper end with a horizontally disposed crank 2 having an upwardly turned extremity accommodated in a guide plate 3 which is provided with ears or the like, as shown, so that it may be screwed or otherwise attached to the outer side of a shutter near the lower edge thereof.

The crank shaft 1 is journaled to turn about a vertical axis in the upper and lower horizontally disposed members of a bracket 4 which is screwed or otherwise secured to the outer side of a window sill, as shown.

The shaft 1 carries a bevel pinion 5 which meshes with a similar pinion 6 on the outer end of the shaft 7. The shaft 7 is journaled in the vertical member of the bracket 4, as clearly illustrated in the drawings and extends inwardly to the inner side of the room. It is provided on its inner end with a handle

or knob 8 of any desired design or ornamentation intended to be grasped by the operator when actuating the apparatus.

A locking plate or keeper 9 in the form of a 60 disk is screwed or otherwise secured to the inner side of the window sill and encircles the actuating shaft 7, and said keeper is formed with a circular series of apertures 9^a intended to receive the locking pins 10 pro- 65 jected from the outer face of the latch plate 11. Said latch plate is formed at diametrically opposite points with outstanding ears 11^a by which the operator may slide the latch plate backwardly on the shaft 7, 70 against the tension of the spring 12 that encircles the shaft. It is to be understood that the latch plate 11 is splined or similarly mounted on the shaft 7 so that it may slide longitudinally thereon, but be held to turn 75 therewith. It is to be noted that the latch plate 11 with its ears 11^a is so arranged with respect to the knob 8 that the two together lating the shaft 7 to open or close the shut- 80 ter. It is also evident that one of our improved shutter operating apparatus may be provided for each shutter of a window.

From the foregoing description in connection with the accompanying drawings, it will be seen that we have provided a very simple durable and efficient construction of apparatus for opening and closing shutters from the inside of a room, it only being necessary for the operator to grasp the ears 11° of the 90 latch plate 11 and pull the latch plate backwardly to disengage it from the keeper 9 and, while still holding to the latch plate, turn the shaft 7 in the required direction, with the palm of the hand pressing against and par-95 tially surrounding the knob 8.

It will be seen that the device is composed of comparatively few parts that may be cheaply manufactured and easily assembled, and that will not be liable to get out of order. 100 When the latch plate 11 is released, its spring 12 will force it outwardly so that its pins 10 will enter the apertures of the keeper 9 and thereby lock the apparatus with the shutter held in the desired position, either fully open 105 or closed, or partially so.

Having thus described the invention, what is claimed as new is:

An apparatus of the character described, comprising a crank shaft, means for opera- 110 tively connecting said crank shaft with the shutter, an actuating shaft having a driving

connection with the crank shaft, a support pansive spring encircling the actuating shaft for the shafts, a keeper disk encircling the ac- and bearing against the knob and latch plate. tuating shaft and adapted to be secured to the inner side of a window frame, a handle knob 5 rigidly secured on the end of the actuating shaft, a latch plate having a splined connection with the actuating shaft and arranged for locking engagement with the disk, said latch plate being formed with outstanding 10 ears designed to form finger grips, and an ex-

In testimony whereof we affix out signatures in presence of two witnesses.

> ERNEST A. CHEGWIDDEN. THOMAS ROOT.

Witnesses:

CLARENCE F. LACEY, EDITH M. CHEGWIDDEN.