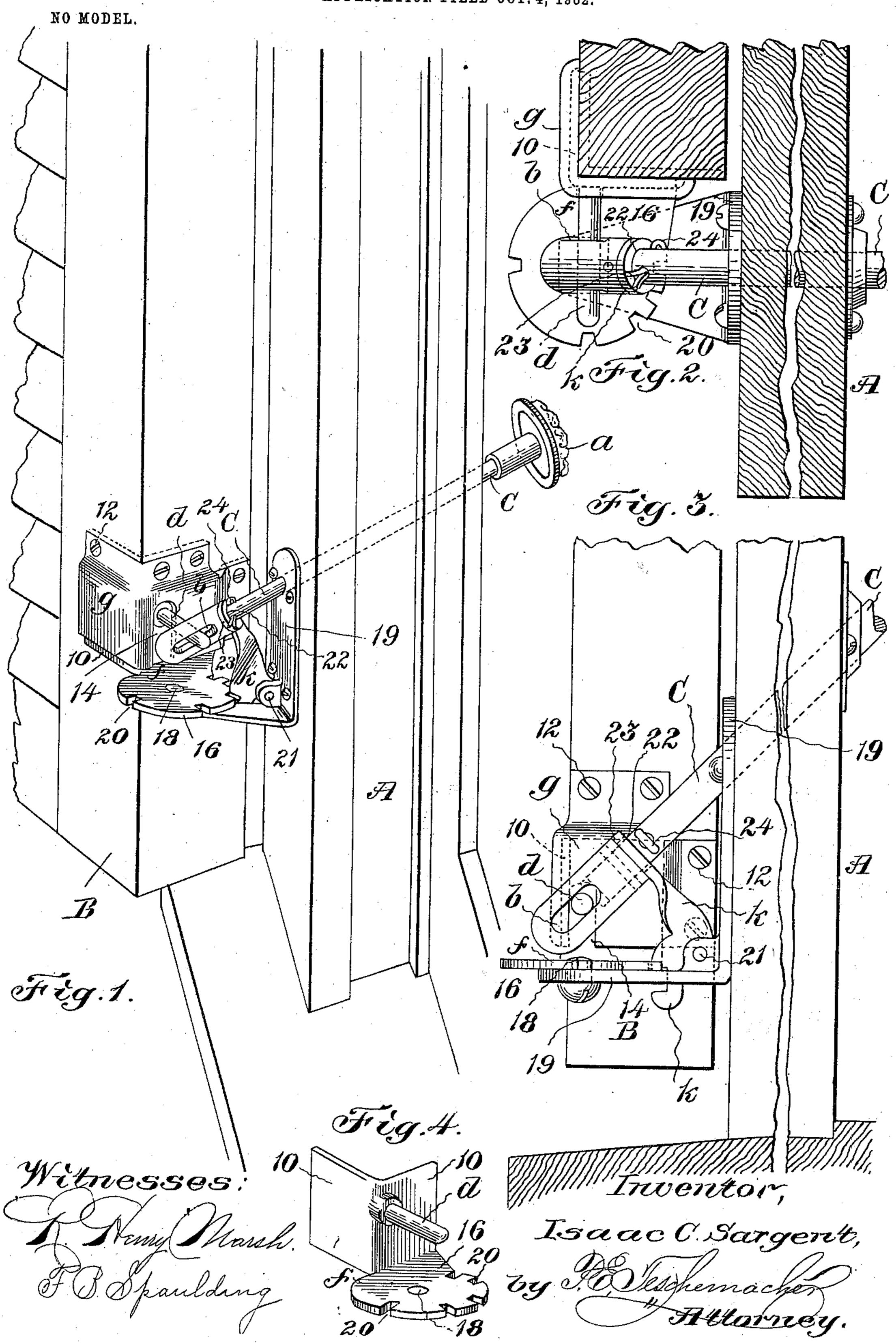
I. C. SARGENT.
WINDOW BLIND OPERATOR AND LOCK.
APPLICATION FILED OUT. 4, 1902.



## United States Patent Office.

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## WINDOW-BLIND OPERATOR AND LOCK.

SPECIFICATION forming part of Letters Patent No. 731,408, dated June 16, 1903.

Application filed October 4, 1902. Serial No. 125,963. (No model.)

To all whom it may concern:

Be it known that I, ISAACC. SARGENT, a citizen of the United States, residing at Somerville, in the county of Middlesex and State of Massachusetts, have invented an Improved Window-Blind Operator and Lock, of which the following is a specification.

My invention has for its object to provide a simple and effective device for closing and opening window-blinds from the inside of a building and for locking the blind when

swung into the desired position.

To this end my invention consists in a window-blind operator comprising an inclined 15 shaft passing through the window-casing and provided on the inner side of the same with a handle and at its outer end with a longitudinal slot through which passes a pin projecting horizontally from the adjacent edge of 20 the blind, forming a universal joint, whereby a partial rotation of the inclined shaft acting on the pin will cause the blind to be swung on its hinges to close or open the same; and my invention also consists in the combina-25 tion, with the blind-operating mechanism, of a locking device for securely holding the blind when adjusted in position, said device being controlled by the inclined blind-operating shaft, as hereinafter more fully set forth 30 and claimed.

In the accompanying drawings, Figure 1 is a perspective view of a portion of a window-casing and a window-blind having my invention applied thereto, the blind being shown partially open. Fig. 2 is a sectional plan view of the same. Fig. 3 is a side elevation. Fig. 4 is a detail in perspective.

In the said drawings, A represents a portion of a window-casing, and B a blind or

40 shutter.

C is an inclined shaft passing through and having its bearing in the window-casing A, on the inner side of which it is provided with a knob or handle a, by which it may be partially rotated in either direction, said shaft being also capable of a limited movement in the direction of its length for a purpose to be hereinafter described. The inclined shaft C is provided at its enlarged lower or outer end with a longitudinal slot b for the reception of a pin or stud d, projecting horizontally from

the vertical portion 10 of an angle-plate f, which forms one section or leaf of the lower blind-hinge and is detachably secured to the adjacent edge of the blind by means of a 55 socket-plate g, bent at right angles to fit around the edge of the blind and secured thereto by screws 12, said plate g, which is offset from the blind to leave a space for the reception of the plate f, having a vertical 60 slot 14 for the passage of the pin d, whereby the blind may be lifted off the lower hinge without requiring the sections of the latter to be disconnected, the upper hinge being of the ordinary construction which permits one 65 part to be lifted out of engagement with the other. The horizontal portion 16 of the plate f, which is of segmental form, is pivoted at 18 to an angle-plate 19, secured to the window-casing A and forming the stationary sec- 70 tion or leaf of the said lower blind-hinge. The horizontal pin d in passing through the slot b of the shaft C forms a universal joint which is directly in line with the vertical axis or center around which the blind swings, 75 and by partially rotating this shaft C the walls of its slot b are caused to bear against and exert a lateral pressure on the pin d, thereby causing the blind to be swung on its hinges to close or open the same, according to 8c the direction in which the shaft is turned.

It will be obvious that instead of the pin d passing through a slot in the shaft C the pin d may be made axially rotatable and provided with a horizontal slot for the reception 85 of the end of the shaft C, the same result be-

ing produced in either case.

The segmental plate 16 is provided at its periphery with notches 20, which are adapted to be engaged by a locking-lever k, fulgorized at 21 in the plate 19 and having its upper arm provided with an aperture 22, through which loosely passes the inclined shaft C, which is provided on one side of the lever with a shoulder 23 and on the other side 95 with a cotter-pin 24, whereby said lever may be operated by a longitudinal movement of the shaft C to cause its lower arm to engage any desired notch in the disk to lock the blind when open or closed or in an intermetic diate position. When the blind is to be operated, it is merely necessary to slightly draw

up the shaft C to disengage the locking-lever k from its notch in the plate 16, which leaves the blind free to be swung in the desired direction by a partial rotation of the shaft C by means of its handle.

What I claim as my invention, and desire

to secure by Letters Patent, is-

1. A window-blind operator and lock comprising an inclined shaft having its bearing to in the window-casing or wall of a building and provided at its inner end with a handle and at its outer end with a longitudinal slot, said shaft being also movable in the direction of its length, a pin or stud projecting hori-15 zontally from the adjacent edge of the blind and engaging said slot to form a universal joint, a supporting-bracket on the windowcasing forming one member of the blindhinge, a horizontally-arranged segment pro-20 jecting from the blind and having peripheral notches and forming the other member of said hinge and being pivoted at its center to said support vertically in line with the center of said universal joint, a locking-lever adapted 25 to engage the notches of said segment, one arm of said lever embracing the inclined shaft, the latter being provided with stops on each side of said lever, whereby the latter may be

operated by a longitudinal movement of said inclined shaft to lock the blind in the desired 30

position.

2. In a window-blind operator, the combination with an inclined shaft having its bearings in the window-casing or wall of a building and provided at its inner end with a han- 35 dle and at its outer end with a longitudinal slot, of a blind-hinge, one member of which consists of an angle-plate detachable from the blind and having its vertical portion provided with a pin or stud projecting horizon- 40 tally therefrom and engaging the slot of said inclined shaft to form a universal joint, and a socket-plate permanently secured to the blind and adapted to receive the said vertical portion of the blind-hinge and provided 45 with a vertical slot for the passage of the said horizontal pin or stud, whereby the blind may be removed from the hinge without disconnecting the leaves or sections thereof.

Witness my hand this 2d day of October, 50

A. D. 1902.

ISAAC C. SARGENT.

In presence of— P. E. TESCHEMACHER, F. B. SPAULDING.