E. C. WHIPPLE.

BLIND SLAT WORKER.

No. 189,292. Patented April 3, 1877.

Fig. 3.

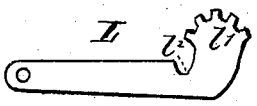


Fig. 1

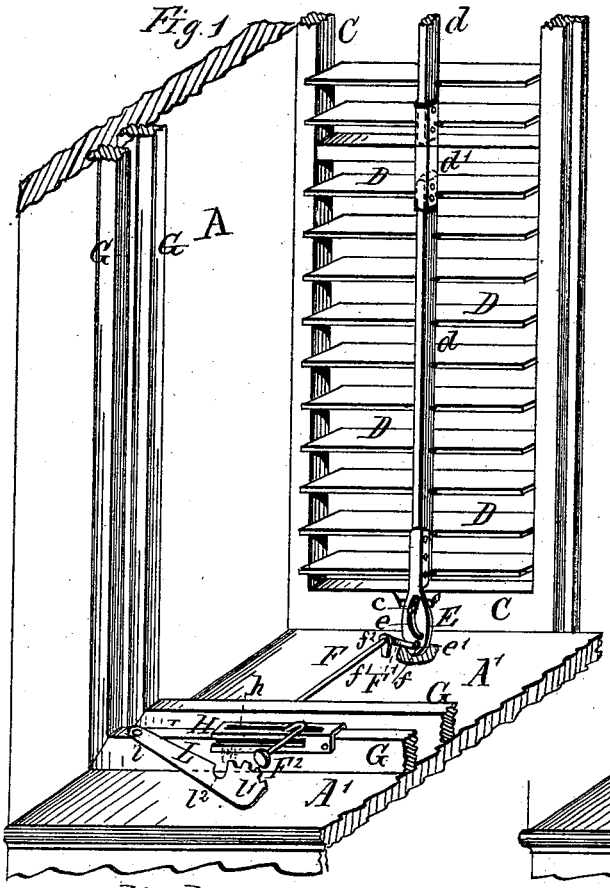
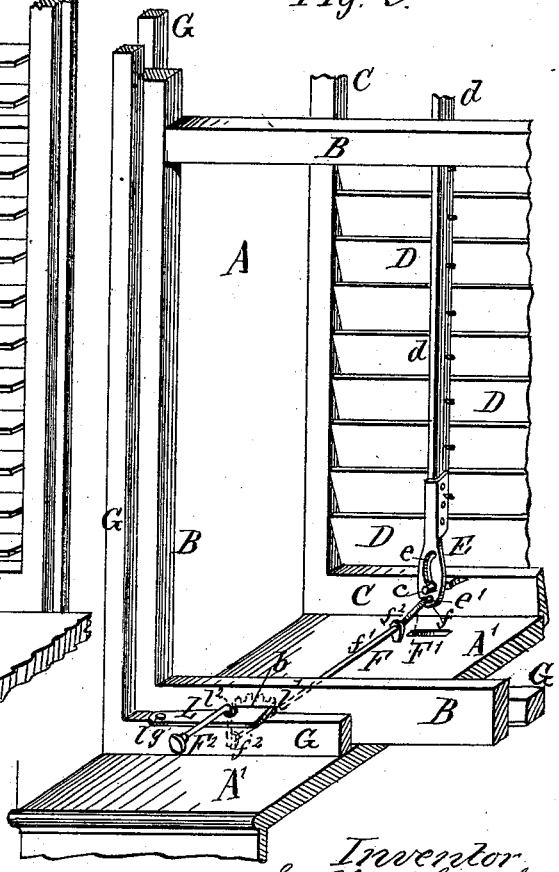


Fig. 2.



Witnesses.

Alfred L. Leonard

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UNITED STATES PATENT OFFICE.

EDMUND C. WHIPPLE, OF DAVENPORT, IOWA.

IMPROVEMENT IN BLIND-SLAT WORKERS.

Specification forming part of Letters Patent No. **189,292**, dated April 3, 1877; application filed January 27, 1877.

To all whom it may concern:

Be it known that I, EDMUND C. WHIPPLE, of the city of Davenport, in the county of Scott and State of Iowa, have invented certain new and useful Improvements in Blind-Slat Workers, of which the following is a specification:

In the accompanying drawings, Figures 1 and 2 are perspective views, partly in section, of my improved blind-slat worker; and Fig. 3 is a plan view of the locking-lever.

My invention consists in the novel construction, combination, and arrangement of a blind-slat worker, consisting of a double-crank lever actuating a plate having a segmental slot in a vertical direction rigidly connected with a blind-slat rod, or a series of such rods rigidly connected together with a locking-lever of peculiar construction, so arranged that the blinds may be held open or closed at any desired point, and also to lock said blinds closed together with the window sash or frame, as will be hereinafter more fully described and definitely claimed.

A is the window-frame; B, the sash; C, the blinds, and D the blind-slats, the working-rods *d* of which are connected together by means of a coupling-sleeve, *d'*, or other rigid connection, when the blind-slats are arranged in two sections in the blind-frame, as is frequently the case, and as shown in Fig. 1. The lower end of the slat-rod *d* is provided with a downwardly-projecting plate, E, forming practically an extension of the rod *d*. This plate E is provided with a segmental slot, *e*, traveling on a pin, *c*, made fast to and projecting from the blind-frame C. The arc of the circle described by the slot *e* is an arc of the circle described by the crank-lever F, to impart a vertical reciprocating motion to the rod *d* and the blind-slats as the crank-lever is turned to the right or left. The lower end of the plate E has a perforation, *e'*, for the reception of the operating or working shank *f* of a double-crank lever, F, the shaft f^1 of which may be supported upon bearing-rods f^2, one in close proximity to the plate E, and the other within a recess in the parting-strip upon the sill A'; or the sill may be suitably recessed to receive the shaft f^1, and the outer crank F^1 of the double-crank lever F, as well as the lower extremity of the slotted plate E. In this manner the crank-shaft may be laid flush with the sill, its handle projecting from the parting-strip on such sill, or the shaft, passing clean over the width of the sill, bringing the handle thereof to its inner edge; but, for reasons hereinafter explained, I prefer to have the crank-handle F^2 of the lever F project from the parting-strip on the sill A'. Upon the parting-strip G is affixed a slotted plate, H, through the slot *h* of which the crank-handle F^2 of the double-crank lever F projects. The plate H is sufficiently raised from the face of the inner strip G to permit the lever L to pass between said plate and the face of the strip; or the strip may be recessed, and the plate and lever arranged as shown in Fig. 2. This lever L is pivoted at one end, *l*, to the face of the strip G, or within a recess, *g*, as in Fig. 2, the free end of such lever being in the form of a toothed sector or segment, l^1, considerably enlarged, and the shank is recessed, as at l^2, immediately behind the toothed segmental portion, the latter serving to lock the lever F into any desired position, and consequently hold or lock the blind-slats into a relative position more or less open. The recess l^2 serves to lock the blind-slats closed, so that they cannot be opened from the outside. The segmental portion l^1, being considerably enlarged, will pass beyond the parting-strip, when the arm of the crank F^2 is within the recess l^2, and penetrate within a slot, *b*, formed for its reception in the sash B, as shown by Fig. 2. In this manner the blind-slats and sash are locked simultaneously. The shank *f* of the crank F^1 of the operating-lever F is free to enter or leave the perforation of the slotted plate E, so that the blinds may be readily opened or closed when desired.

From the description of the devices as above given, the working thereof may be readily understood without further explanation.

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

1. The blind-slat rod *d*, or a series of such rigidly connected together, the plate or extension E having a segmental slot, *e'*, in a vertical direction, the guide-pin *c*, and the

double-crank lever F, all combined, constructed, and operating substantially as and for the purpose set forth.

2. In a blind-slat worker, the combination of the crank-arm F^2 of the double-crank lever F with the segmental toothed enlargement l^1 on the pivoted locking-lever L, all constructed and operating substantially as described, for the purpose specified.

3. In a combined blind-stop and sash-fastener, the combination of the crank-arm F^2 of the double-crank lever F and the sash-frame, provided with a slot or recess, *b*, with the segmental enlargement l^1, and the notch or recess l^2 on the pivoted locking-lever L, all arranged, constructed, and operating substantially as described, for the purposes specified.

In witness that I claim the foregoing I have hereunto set my hand this 23d day of January, 1877.

EDMUND C. WHIPPLE.

Witnesses:

F. OTTO HORN,

JAMES A. WOOD.