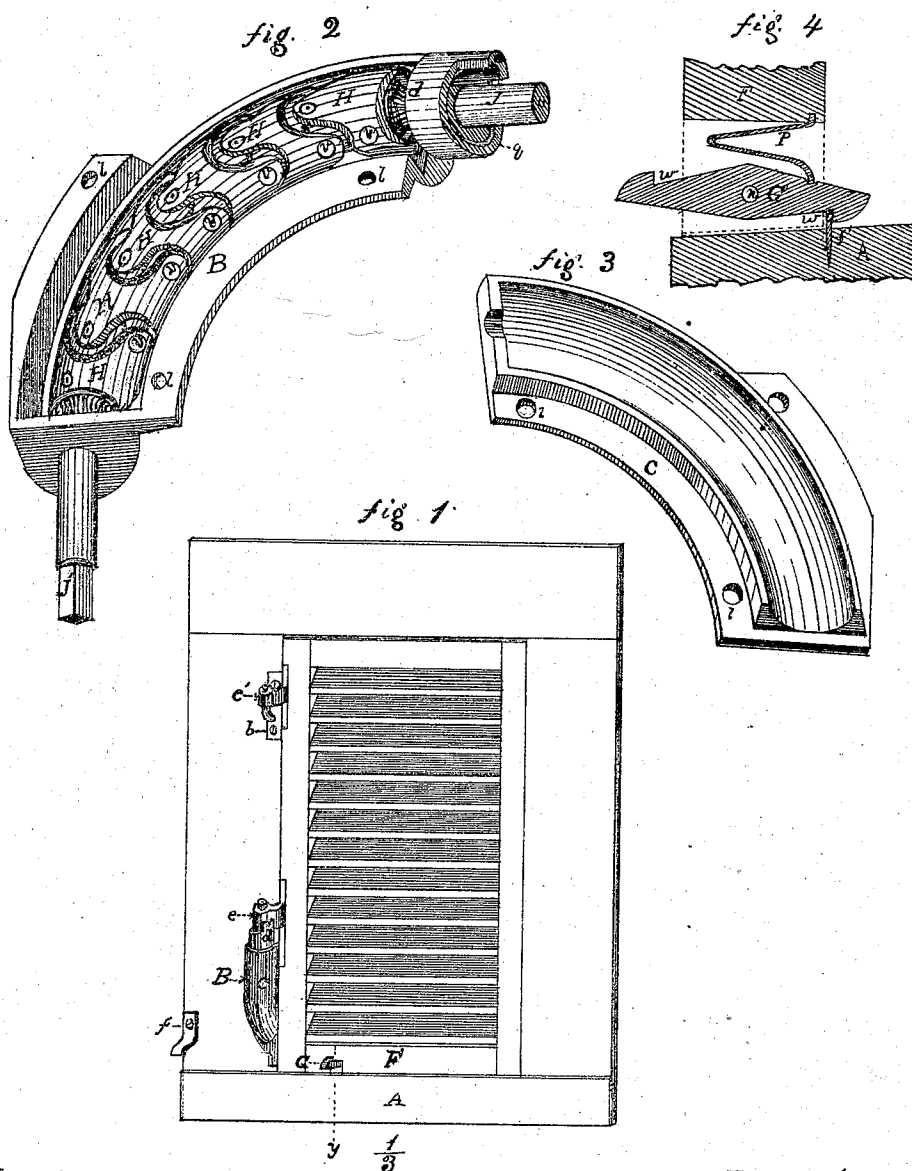


Chas. M. Brown's Imp'd. Attachment for Window Blinds

118190

PATENTED AUG 22 1871



Witness
Geo. A. Farrant
Chas. F. Hunt

Inventor
Charles M. Brown

UNITED STATES PATENT OFFICE.

CHARLES M. BROWN, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN SHUTTER-WORKERS.

Specification forming part of Letters Patent No. 118,190, dated August 22, 1871.

To all whom it may concern:

Be it known that I, CHARLES M. BROWN, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Attachments for Window-Blinds or Shutters, of which the following is a specification:

The nature of this invention relates to an improved method of hanging and operating window-blinds or shutters, and to other similar purposes; the principal feature of which consists in a novel method of transmitting power to open and shut the shutter or blind from a knob or key inside the room by means of a series of universal joints inclosed within a case, which forms a part of one of the hinges; the object of which is to open or shut, and fasten either open or shut, the said window-blinds or shutters from the inside of the window without the trouble of raising the window; this by means of a cam attached to one of the hinges, which is operated from the inside, and by which the blind is raised or lowered a short distance to either catch or be released from catches in the window-sill and side of the building, as may be desired.

Figure 1 is a perspective view of a window-frame and blind having my attachment, and showing the blind as closed. Fig. 2 is an interior view of the invention, showing the mechanism by which the cam is operated. Fig. 3 is the cap or cover to Fig. 2, and when these two are together they form a hinge. Fig. 4 is an enlarged vertical transverse section of A F, Fig. 1, on the line *y*.

In Fig. 1, A represents the window-frame; F, the blind; *e e'*, the hinges thereof; B *b*, the parts of the hinges which are fastened to the frame A; G, a double-ended catch hung in the blind F; *f*, a catch with which G engages for fastening the blind open. In Fig. 4 the catch G is shown in section with the pin *n*, on which it vibrates. P represents a spring, which holds the catch G in a certain position. The ends of the catch G are sloped from the notches *w w* toward the ends. These slopes, when the blind is swung either clear back or shut close, strike upon the catches *f* and *f'*, when the spring P gives way enough to allow the catch G to engage with and fasten to

f or *f'*. J is a pivot, on which the hinge *e* turns. *d* is a cylindrical hub or enlargement of J. The upper surface *q* of *d* is cut spirally around the axis of the same so as to form a cam, shown clearly at *d*, Fig. 1, also in Fig. 2. This cam, on being rotated under the hinge *e*, (which rests on the spiral surface *q*,) raises or lowers the blind, as desired. The cam *d* has on its upper surface a projection or ear, *o*, which projects upward above the lower surface of the neck of the hinge *e*, and when the cam has been turned far enough to raise or lower the blind so as to pass the catches *f* or *f'*, then the projection *o* presses against the neck of the hinge *e*, and thus moves the blind as desired. J' is a pivot, which projects into the room and having the end squared to receive a key or crank, by which motion is given to a series of universal joints, H H H H H H, which rotate the cam *d*. *s s s s s* are the internal parts of the joints H H H H H H, and are fastened to them in the usual way by means of pins *v v*, &c. If desired, a chain made with short thick links may be substituted for the universal joints H H H H H H, as a chain so constructed will operate in substantially the same manner. The parts B and C are fastened together and to the window-frame by screws passing through the holes *l l l*, made to receive them. When the parts B and C are together a recess is formed, the cross-section of which is a circle, and the longitudinal section that of a quadrant.

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

1. The cam *d*, in combination with the case B C, universal joints H H, &c., and shutter F, when made as and for the purposes hereinbefore specified.

2. A case made of two parts, B and C, in combination with a series of universal joints or their equivalent, and cam *d*, when made in the manner and for the purposes hereinbefore specified.

CHARLES M. BROWN.

Witnesses:

GEO. G. HUNT,
CHAS. F. HUNT.