C. Reed & E. Howe, Jr.,

Shutter Worker.

No. 6,748. Patented Sep. 25, 1849.

Fig. 2.

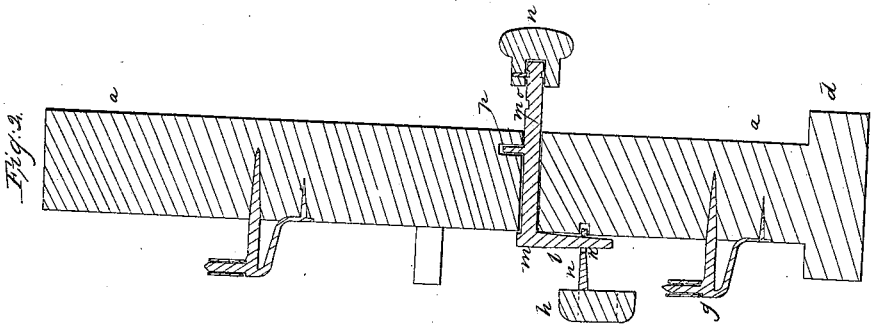


Fig. 3.

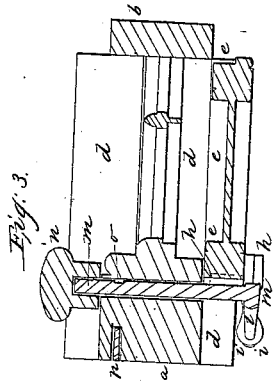
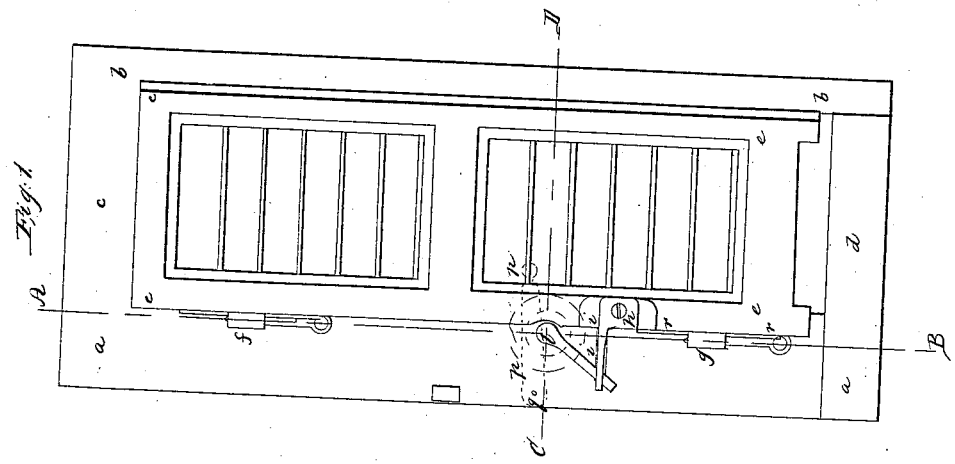


Fig. 1.



UNITED STATES PATENT OFFICE.

CHENEY REED AND ELIAS HOWE, JR., OF CAMBRIDGEPORT, MASSACHUSETTS.

APPARATUS FOR OPENING AND CLOSING BLINDS.

Specification forming part of Letters Patent No. **6,748**, dated September 25, 1849.

To all whom it may concern:

Be it known that we, CHENEY REED and ELIAS HOWE, Jr., both of Cambridgeport, in the county of Middlesex and State of Massachusetts, have invented a new and useful Apparatus for Opening and Closing Window-Blinds, &c.; Without Raising the Sash, and we do hereby declare that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein we have set forth the nature and principles of our said invention, by which it may be distinguished from others of a similar class, together with such parts as we claim and desire to have secured to us by Letters Patent.

The figures of the accompanying plate of drawings represent our invention.

Figure 1 is an exterior elevation of a narrow window-frame and a single blind hinged thereto with our new apparatus attached. Fig. 2 is a vertical section of the same, taken in the plane of the line A B, Fig. 1; and Fig. 3 is a horizontal section taken in the plane of the line C D, Fig. 1.

By recent inventions the same object and result have been aimed at and attained as are secured by our new apparatus—that is, opening and closing blinds without raising the sash and fastening them in either the opened or closed position; but all the contrivances have been so much more intricate and consequently more expensive than the ordinary appliances for fastening blinds that they have not been successfully introduced into general use. Our new apparatus, however, is exceedingly simple in construction and can be applied at as cheap a rate as most of the blind-fasteners which have been in use, and must eventually supercede them.

a a b b are the two sides of the window-frame. *c* is the cap, and *d* the sill, of the frame, constructed and put together as shown in the drawings or in any other suitable manner.

e e e e is the blind, which is hung or hinged to the side *a a* of the window-frame by means of the two common hinges *f g*, Figs. 1 and 2. Just above the lower hinge and secured to the same side rail of the blind to which the sockets of the hinges are attached is firmly fastened the right-angular metallic cleat *h h*. (Shown partly by dotted lines in Fig. 3.) A horizontal arm *i i* is cast on one side of this cleat, so as to project out some distance from the side rail of the blind in the direction shown in Figs. 1 and 3, and said arm has an elongated oval slot or space *k* formed near its outer end, as shown in the drawings. A lever-arm *l* (cast on and projecting at right angles from a horizontal sliding and turning rod *m m*) fits near its lower end into the slot *k* of the horizontal arm *i i*, as shown in the several drawings. The rod *m m* moves forward and back and turns in a proper hole or bearing bored through the side *a a* of the window-frame, and this rod should be so arranged as that its axis shall be in the same vertical plane with the axes of the two hinges by which the blind is hung. One end of the rod *m m* projects into the interior of the apartment and has a knob *n* fitted thereon, and from the above-described connection of parts it will readily be seen that by moving said rod *m m* in and out and turning it a little in its bearings the blind may be moved at pleasure in either direction and be under entire and perfect control from the room while the sash is closed.

In order to fasten the blinds when opened or closed, we cut a notch *o* in proper position on two sides of the turning rod *m m* and form a proper mortise across the side *a a* of the window-frame, in which we insert a common latch *p p*, which turns on a fulcrum or pin *q*, and is shown by dotted lines in Fig. 1 and in section in Figs. 2 and 3, and said latch falls into the aforesaid notches when the blind is opened or closed, and of course fastens it in either position.

It will be evident from inspection of the drawings of our improved apparatus that the slotted arm *i i* may be cast on the plate *r r* of the lower hinge, instead of the independent cleat *h h*, and that the latch *p p* may be arranged on the inside of the window in lieu of being placed in a mortise in the same. It will also be seen that the sliding rod may be arranged in its mortise, so as to turn or swivel laterally as well as move forward and back, being connected to the arm on the blind by a hinge-joint or otherwise; but this arrangement we deem to be substantially the same in principle as that we have described above.

Another method of fastening the blinds when opened or closed has occured to us as a

modification of that above explained. It is simply to form a proper notch on the under side of the sliding rod *m m* near the knob *n*, which notch should be so arranged as to hook over a stationary catch and hold the blind as desired.

Having thus described our new contrivance for opening and closing blinds we shall state our claims as follows:

What we claim as our invention, and desire to have secured to us by Letters Patent, is—

The apparatus hereinabove described for opening and closing blinds from the interior of the house without opening the sashes, said apparatus consisting of a horizontal slotted arm fastened to and projecting from the blind, as described, and a lever-arm cast on and projecting at right angles from a sliding and turning rod passed through the window-frame, as described.

CHENEY REED.
ELIAS HOWE, JR.

Witnesses:
EZRA LINCOLN, Jr.,
JOHN R. FAIRFIELD.