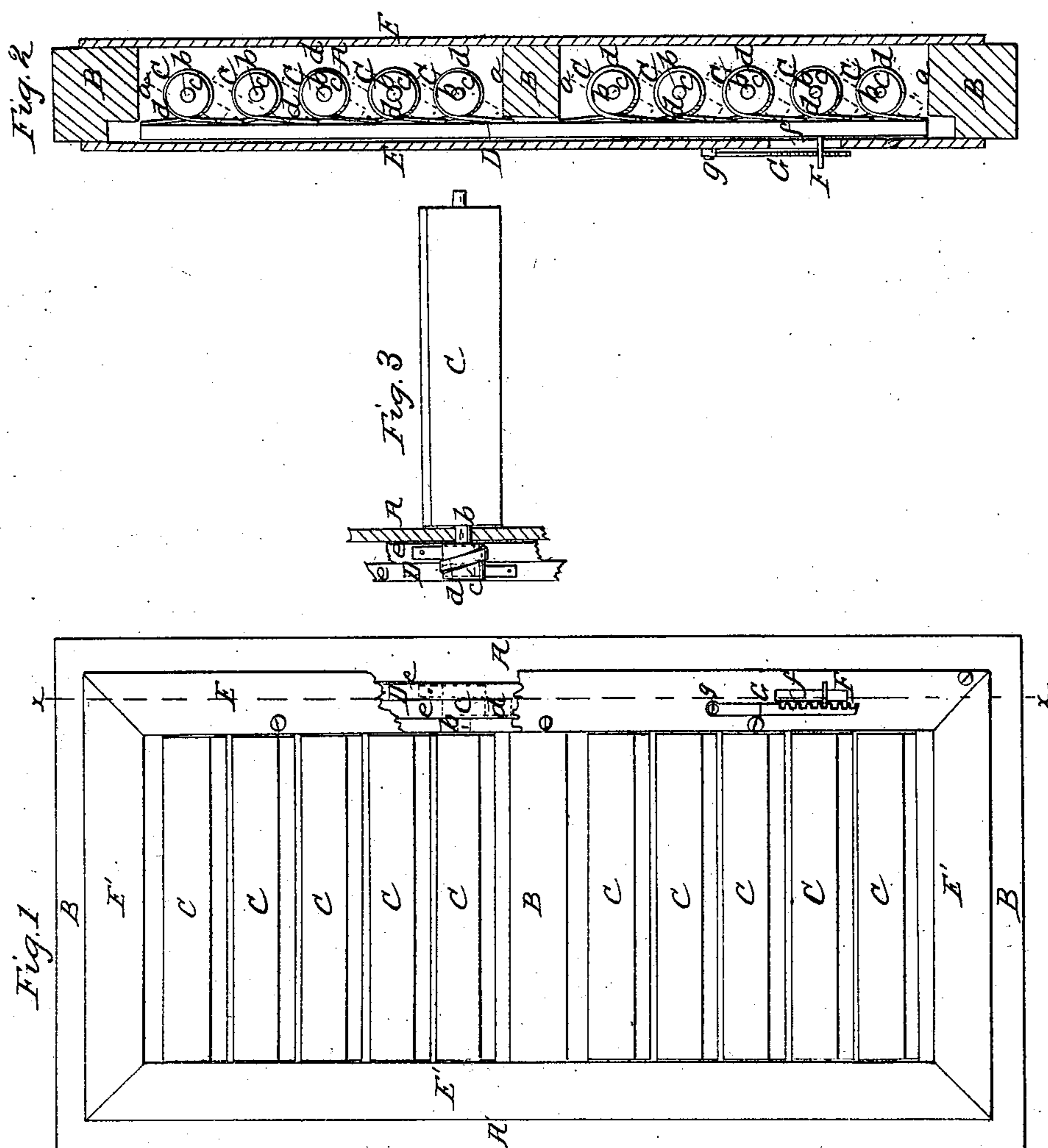


*T. Christian,*  
*Blind Stop.*

*N<sup>o</sup> 19,488.*

*Patented Mar. 2, 1858.*



# UNITED STATES PATENT OFFICE.

THEODORE CHRISTIAN, OF NEW YORK, N. Y.

## OPERATING WINDOW-BLINDS.

Specification of Letters Patent No. 19,488, dated March 2, 1858.

*To all whom it may concern:*

Be it known that I, THEODORE CHRISTIAN, of the city, county, and State of New York, have invented a new and Improved Mode of Opening and Closing Blind-Slats; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an inside view of a blind, having my invention applied; part of the exterior of one of the stiles being broken away to expose the internal device for operating the slats. Fig. 2 is a vertical transverse section of the same, through one of the stiles, in the plane indicated by the line *x, x*, of Fig. 1. Fig. 3 is an outside or front view of one of the slats and the device for operating it, detached from the blind.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in tightening the straps by adjusting the rods to which the ends of the straps are attached.

A, A', are the stiles of the blind.

B, B, B, are the crosspieces; and C, C, are the slats.

The stile A has a cavity, as shown at *a, a*, in Figs. 1 and 2, the full length of each panel of slats. The blind represented contains two panels. The mortises for the tenons which are received in the stile A, are cut from the inner side of the stile through into the cavities *a, a*; and the tenons *b, b*, which are received in that stile are made long enough to reach all across the said cavity *a, a*, and each one has tightly secured to it, within the cavity *a, a*, one of the pulleys *c, c*, which are all of uniform size. The tenons which are received in the other stile are fitted in the usual manner to mortises in the stile.

D, is a rod, made in two pieces *e, e*, secured together side by side as shown in Figs. 1 and 3, of a length to extend from the top of the upper cavity *a, a*, to the bottom of the lower one.

*d, d*, are a series of bands, each of which passes completely around one of the pulleys *c, c*, and having their ends secured to the rod D.

E, E, are strips of wood covering the cavities *a, a*, and screwed to the stile A, so as to inclose all the pulleys and the rod D.

The stile A', and the upper and lower

cross-pieces B, B, B, are finished externally to correspond in appearance with the strips E, E, as shown at E', E', E', in Fig. 1.

F, is a button secured to the rod D, and working through a slot *f*, in the strip E, on the back or inner side of the blind, to serve as a handle to move the rod D up and down, by which movement the bands *d, d*, are made to turn all the pulleys *c, c*, simultaneously and thus to turn all the slats.

G, is a swinging catch, attached to the strip E, on the back or inner side of the blind by a pivot screw *g*, and provided with a series of notches to receive the button F, and hold it in different positions, and thus to secure the slats either closed or opened at various angles.

The blind may be hinged either by the stile A, or A', but as a general rule, I prefer to hinge it by the stile A', opposite to that which contains the devices for operating the slats. If desired, a short rod may be used for each panel of slats to allow each panel to be operated separately, instead of the long one D, operating both panels simultaneously.

By making the rod D, in two pieces *e, e*, provision is made for tightening the bands *d, d*, if they become slack, as by slightly moving the rods in the proper longitudinal direction relatively to each other, all the bands may be tightened together. The two parts of the rod require to be firmly secured together by screws or otherwise.

I do not claim, broadly, the simultaneous moving of the slats of blinds by means of mechanism located in the casing. Examples of this are seen in the patents of W. E. Worthen, July 17th, 1855, and Stevens and Ellithorp, June 26, 1855. In neither of the above devices are there seen straps which pass around the ends of the tenons of the slats; the ends of the straps being attached to vertical rods. Nor is there any method of tightening the straps when they become loose, as is seen in my improvement.

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

Tightening the straps (*d*) by adjusting the pieces (*e, e*) as described.

THEODORE CHRISTIAN.

Witnesses:

W. TUSCH,

I. L. COHEN.