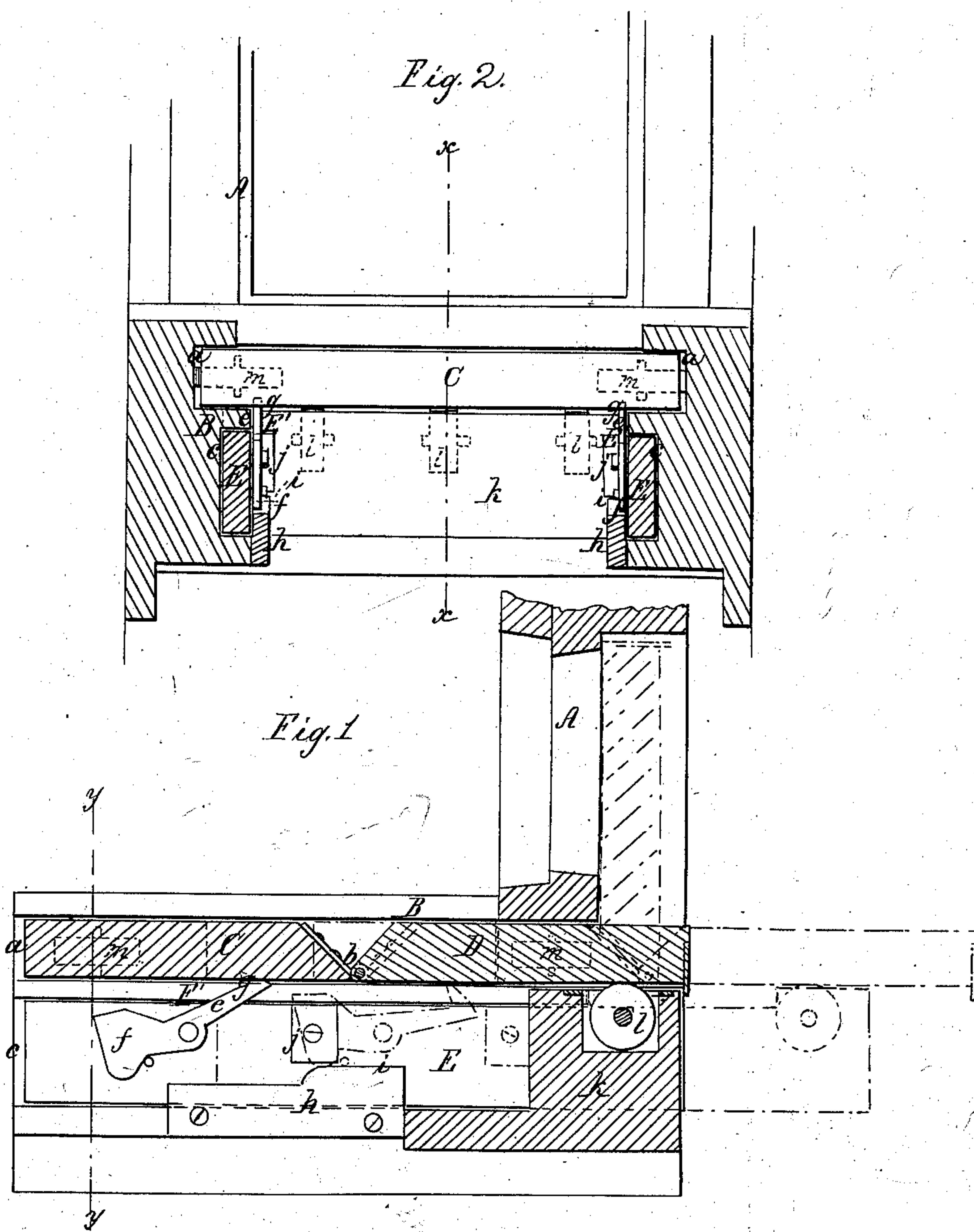


D. Rolan.
Window Shutter.

Nº 16,998.

Patented Apr. 7, 1857.



UNITED STATES PATENT OFFICE.

D. ROHAN, OF CINCINNATI, OHIO.

MODE OF ARRANGING AND OPERATING WINDOW-SHUTTERS.

Specification of Letters Patent No. 16,998, dated April 7, 1857.

To all whom it may concern:

Be it known that I, D. ROHAN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and improved device or arrangement whereby window-shutters may be readily adjusted and secured to windows and also readily removed therefrom and stowed away; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of my improvement; (*x*) (*x*) in Fig. 2, showing the plane of section. Fig. 2 is a transverse vertical section of the same; (*y*) (*y*) in Fig. 1, showing the plane of section.

Similar letters of reference indicate corresponding parts in both figures.

My invention consists in having the shutter hinged at its bottom or lower end to a slide, which is fitted in a box below the sill of the casing of the window; said slide being allowed to work horizontally in and out of said box and the shutter also when turned down in a horizontal position. Within the box and below the slide, bars are placed which are connected to the slide by catches and serve as supports to the shutter, when it is withdrawn from the box.

By this arrangement, as will be hereinafter fully shown and described, the shutter, when withdrawn from the box, swings upward in front of the window, closing it perfectly; and the shutter is removed and stowed away, by merely turning it down to a horizontal position, and shoving it within the box below or underneath the sill of the casing.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A, represents a window-casing; and B represents a box or recess which is made below or underneath the sill of the casing; said box extending backward within the store or building a requisite distance.

Within the box B, a slide C is fitted in grooves (*a*) (*a*); and to the front end of this slide the lower end of a shutter D is attached by hinges (*b*). The box B is equal in width to the casing so that the shutter D may be shoved therein, and the box of course must be sufficiently long to receive both the

slide C, and the shutter D, as shown in Fig. 1; the outer end of the shutter, when shoved within the box, being flush with the front end of the box. Within the box B, two bars E, E, are placed, one at each side. These bars are fitted, and work in grooves (*c*) in the sides of the box. To each bar E, a catch E¹ is attached. These catches are formed each of a rod (*e*) having a weight (*f*) at one end, and a hook (*g*) at the opposite end. The hooks (*g*) catch into recesses in the undersides of the slide C, and connect the bars E with said slide; the hooks being kept in the recesses in the slide by the weighted ends (*f*). To the inner sides of the box B, blocks (*h*) are attached; the upper surfaces of which have projections (*i*) upon them. The use of these blocks will be presently shown. To each bar E, a stop (*j*) is attached. At the front end of the box B, an upright ledge or projection (*k*) is placed; and in the upper part of this ledge or projection, friction-rollers (*l*) are placed, for the shutter B and slide C to rest on. Friction rollers (*m*), see dotted lines, are placed in the sides of the slide C and shutter D, to diminish friction.

When the slide C, and shutter D, are shoved within the box B, the outer end of the shutter will be flush with the ledge (*k*). When the shutter D is drawn out from the box B, the two bars E, E, are drawn out with it to a certain distance; as the catches E¹ connect the slide C and bars E together, the bars E move outward with the slide till the weighted ends (*f*) are raised by the projecting surfaces (*i*) on the blocks (*h*). This raising of the weighted ends (*f*) of the rods (*e*) of the catches, throws the hooks (*g*) out of the recesses in the slide C; and the bars E are thereby disconnected from the slide. The bars E, when drawn out from the box B, serve as supports for the shutter D, and prevent the hinges (*b*) from being subjected to any strain by the falling of the shutter. When the shutter is drawn fully out from the box B, it is elevated and covers the window, as shown by the dotted red lines in Fig. 1. The bars E are shoved back within the box B, when the shutter is elevated, and they are drawn out before the shutter D is lowered, in order that they may be ready to receive it, preparatory to its being shoved into the box.

The above invention is extremely simple, and the shutters may be adjusted to the windows, and removed therefrom and stowed away with the greatest facility. The
5 box B will not monopolize any room in stores, that is now rendered available for any special purpose. This improvement is designed chiefly for store-windows, and platforms are generally built back of the
10 windows, for the purpose of displaying goods. The top of the box B, therefore, will answer the purpose of the platform. In some cases, where the windows extend down quite low, the box may be placed beneath the
15 flooring.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is:

Attaching the lower end of the shutter D to the slide C or its equivalent, which is
20 fitted in the box B, below the sill of the window-casing A; the bars E, E, being used in connection with the slide, and connected at the proper time to the slide by the catches E¹, which are actuated by the weights (f)
25 and blocks (h), substantially as herein described, for the purpose set forth.

D. ROHAN.

Witnesses:

W. CHEDSEY,
W. H. THOMPSON.