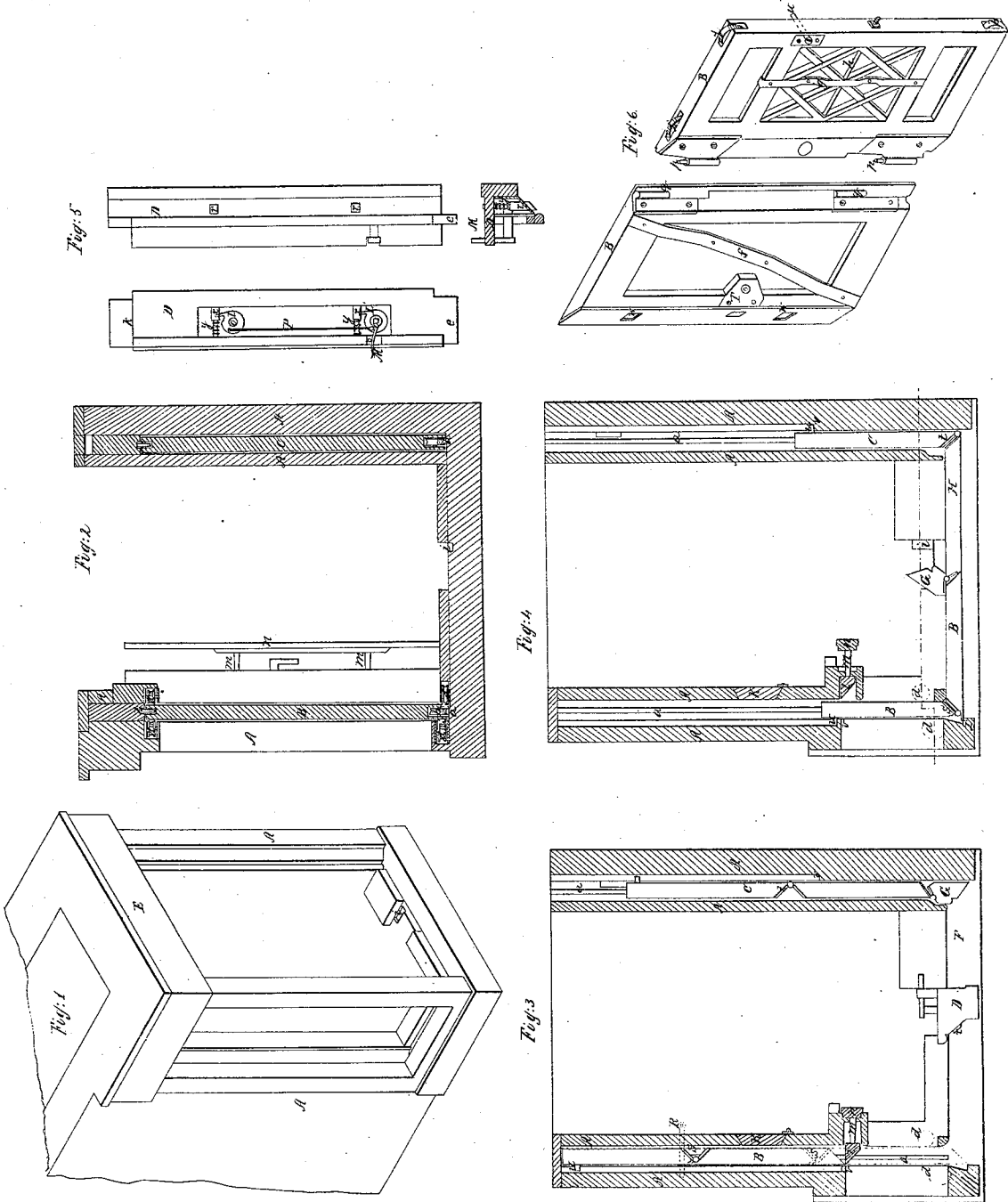


D. Rohan.
Window Shutter.

N^o 13,500.

Patented Aug. 28, 1855.



UNITED STATES PATENT OFFICE.

DAVID ROHAN, OF CINCINNATI, OHIO.

SHUTTER OR BLIND FOR STORES.

Specification of Letters Patent No. 13,500, dated August 28, 1855.

To all whom it may concern:

Be it known that I, DAVID ROHAN, of Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in the Methods of Constructing and Arranging the Sliding Doors or Blinds for Closing the Open Fronts of Stores, &c.; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part thereof, in which—

Figure 1 represents a perspective view of a corner front showing the windows and doors as open; Fig. 2, a vertical cross section; Fig. 3, a horizontal cross section showing the windows and doors as open; Fig. 4, a similar horizontal cross section showing the windows and doors as shut; Fig. 5, the rear side view and horizontal cross section of a bolt column described hereafter; Fig. 6, the sliding shutters in a perspective view detached.

The nature of this invention consists in an arrangement of sliding shutters which in combination with a bolt column can be used for shutting and closing stores or warehouses entirely or partially as specified hereafter.

Similar letters in the several figures refer to like parts.

A represents the walls of the building in which a recess is left for the sliding shutters B and C. These sliding shutters which can be drawn out horizontally move on their lower edge on rails *a* by means of rollers *b*, and are provided on their upper edge with rollers *z* which play in a groove they are held on both sides by horizontal rollers *d* to avoid the friction of the shutters to the inner side of the recess. The sliding shutters B are represented in a perspective view in Fig. 6; they can be made of wood or iron, and are strengthened by means of iron rails or bars as shown by the letters *f*, *g* and *h*; they are hinged together by means of loose joint hinges; the pivots *p* fitting into corresponding holes of the female hinges *g* for the purpose hereafter described.

In Fig. 3, the shutters B and C are represented as being drawn entirely into the recesses of the walls, thus leaving open both fronts of the store as represented also in the perspective view, Fig. 1.

The shutters can be operated in the following manner: The center column D in

front can be set in and out by placing its lower end *c*, Fig. 5, into a mortise *i* in the floor (Figs. 1 and 2) and fastening the upper end *k* of it into a notch in the cross beam E, Fig. 1, by means of a bolt or button; to draw the shutters B out of the recess a miter edge piece *l* has to be pushed back first; this piece is represented in a cross section, Figs. 3 and 4, and elevation Fig. 2 it is attached to a strip *n* by means of the pins or bolts *m*, which play in corresponding holes and thus can be moved to and fro; it serves to shut the opening of the recess when the shutters are drawn in and forms a complete finish with the side door of the store. The shutters can be drawn out now and can be brought into position marked in red in Fig. 3, where they can be kept stationary by inserting the pin R, or they can be drawn out still farther and the interior part of it can be turned to a right angle with the part remaining in the recess by means of hinges and then they will take the position as represented in Fig. 4 when they will form a finish with the center column and close the store with the exception of the door F; in this position they can be fastened to the center column by means of the bolts *r*, Figs. 3 and 5, which will fit into the notches of the shutters, Fig. 6. If it is desired to close the store entirely then the center column D is to be taken out; the shutters C can then be drawn out in the same manner as those B, and when they are drawn out the wing H can be turned so as to form a right angle with C by means of the hinges *t* and then the outmost part G which is attached to wing H by means of hinges can be turned in such manner as to form a center column to which the shutters B will fit tightly, forming altogether one even front as represented in Fig. 4. They can be fastened then by means of the lock T.

To prevent the shutters from being drawn out farther than it is intended they are provided with pins or projections *u*, which are screwed onto the shutters and are arrested at certain points by projections *v*. It is necessary that the shutters should be easily taken out of their recesses in case of repair. For this purpose the door *k* can be opened thus allowing the pin *u* to be unscrewed. This done the shutters can be run out freely and taken apart by means of the above described hinges, by lifting up one wing of the shutters. This is very essential as both

wings together are too heavy to be handled easily. It can be seen of Fig. 5 how the bolts r in the center column D can be operated, said bolts slide in respective holes in the center column. When the arm M , attached to the cam L' is pressed downward it turns the cam L' on its fulcrum o and imparts the same motion to cam L by means of the connecting rod P . The fingers w of the cams L and L' move the bolts simultaneously backward but as soon as the action on the arm M ceases they are pushed forward by the action of the springs y . By this arrangement it is difficult for burglars to open the shutters by simply pressing back of the bolts because the action on one bolt from the outside does not impart any motion to any of the other bolts. This arrangement allows any desired number of bolts being used which can all be worked in the same manner by one arm M .

The mitered joints in the shutters admit of the joints when closed being behind the

pilaster or permanent upright as seen at z' on the left of Fig. 4 and thus protects or prevents the shutters from being forced from their hinges as the hinges may be entirely concealed.

Having thus fully described the nature of my invention what I claim therein as new and desire to secure by Letters Patent is—

1. Hinging the shutters together by mitered joints so that when closed the joint or hinges may be concealed as herein described.

2. I also claim in connection with the mitered shutters B C , the hinged piece G , which serves the double purpose of post against which said shutters abut, and to which they may be locked when the front is closed, and also as a finish to one of the shutters when it is run back as represented.

DAVID ROHAN.

Witnesses:

T. HIGDON,
H. N. CLARK.