Sept. 18, 1951 A. DEN DULK, SR 2,568,324

WINDOW SHUTTER

Filed Feb. 17, 1947

Fig. 1

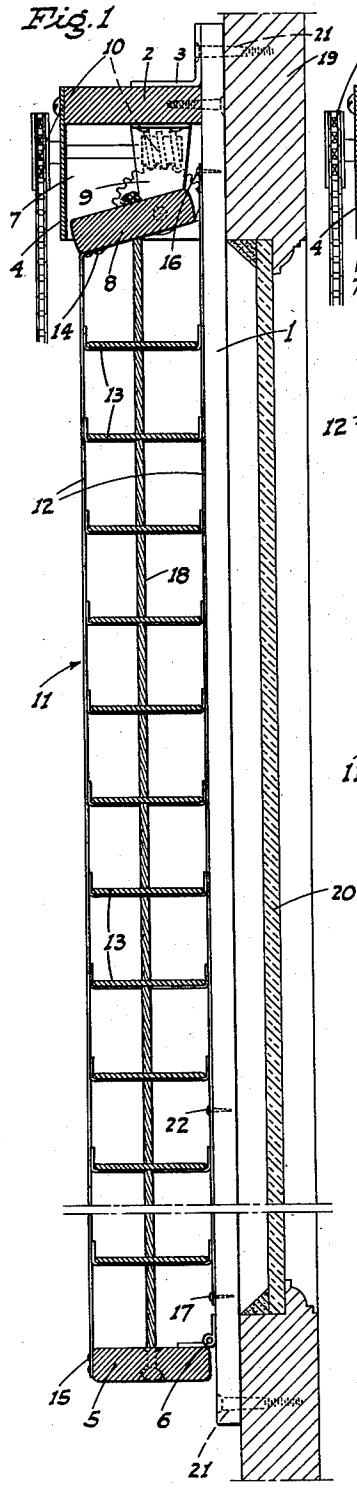


Fig. 2

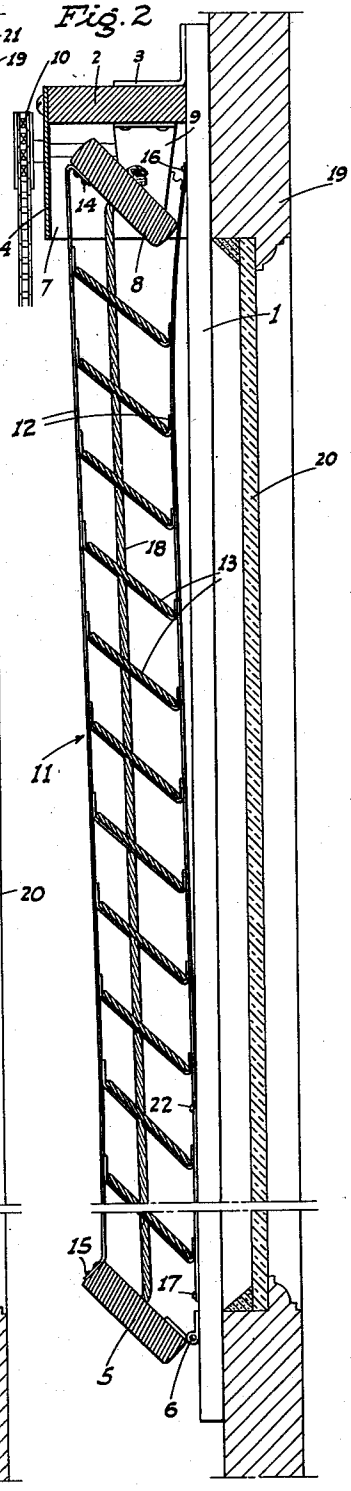
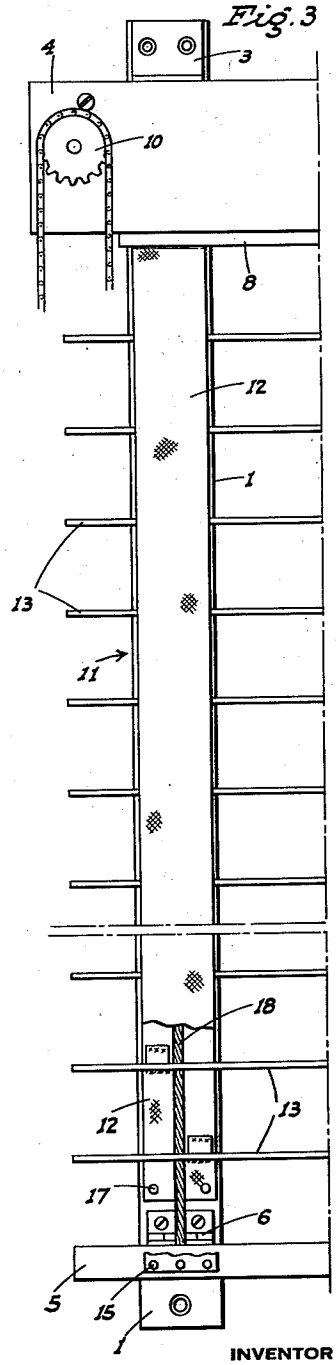


Fig. 3



INVENTOR

Arie den Dulk Sr.

ATTORNEYS

Patented Sept. 18, 1951 2,568,324

UNITED STATES PATENT OFFICE

2,568,324

WINDOW SHUTTER

Arie den Dulk, Sr., Ripon, Calif., assignor to Herbert den Dulk, Ripon, Calif.

Application February 17, 1947, Serial No. 729,157

1 Claim. (Cl. 20—62)

1

This invention is directed to, and it is an object to provide, an improved window shutter.

Another object of the invention is to provide a window shutter especially adapted for use on a door having a window; the essential feature being the provision of means to prevent the shutter from swinging out and back to strike the door when the latter is opened or closed.

A further object of the invention is to provide a non-swinging window shutter, as above, which includes a mount which does not restrict tilting of the shutter slats to selected positions of use.

A further object of the invention is to produce a simple and inexpensive device, and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects are accomplished by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claim.

In the drawings:

Fig. 1 is a cross sectional elevation, foreshortened, of the improved window shutter showing the slats in a substantially horizontal position of adjustment.

Fig. 2 is a similar view, but shows the slats tilted upwardly.

Fig. 3 is a fragmentary front elevation of the window shutter, foreshortened, and partly broken away.

Referring now more particularly to the characters of reference on the drawings, the shutter comprises a pair of vertical, transversely spaced uprights 1 of relatively rigid material, such as wood, preformed metal, or the like. The uprights 1 are connected together, in unitary relation, by a fixed head rail 2 disposed adjacent the upper ends of said uprights 1 and connected thereto by angle brackets 3.

The head rail 2 is horizontal and projects forwardly, and a facia 4 depends from such head rail at its outer edge and at the ends.

The uprights 1 are connected together, adjacent their lower ends, by a horizontally disposed bottom tilt rail 5 hinged to said uprights, as at 6, for vertical swinging movement. The head rail 2 and the bottom tilt rail 5 extend at the ends somewhat beyond the adjacent uprights 1.

Within the pocket 7 formed by the dependent facia 4, the shutter includes a horizontal top tilt rail 8; such tilt rail 8 being pivoted, for vertical swinging movement, in connection with brackets 9 attached to, and depending from, the head rail 2 within said pocket 7. The tilt rail 8 is adapted

2

to be swung vertically, or rotated, by means of a conventional tilt control mechanism, indicated generally at 10.

A window shutter assembly, indicated generally at 11, extends between the top tilt rail 8 and the bottom tilt rail 5, and includes transversely spaced ladder tapes 12 carrying the window shutter slats 13; said ladder tapes being disposed directly in front of the uprights 1. The front straps of the ladder tapes 12 connect to the top tilt rail 8 and bottom tilt rail 5, as shown at 14 and 15, respectively, whereas the back straps of said ladder tapes are tacked at top and bottom to the corresponding upright 1, as shown at 16 and 17, respectively.

Suspension and tilt control cords 18 extend through the shutter within the ladder tapes 12 and are affixed, at opposite ends, to the top and bottom tilt rails, respectively.

Each of the uprights is secured at the top and bottom thereof by screws 21 to a door 19 adjacent one side of the window 20 in said door.

When the window shutter is mounted on the door in the manner described, the shutter cannot swing out and back to strike the door when the latter is opened or closed.

In order to prevent the window shutter assembly 11 from billowing away from the window 20 intermediate the top and bottom tilt rails when the door is opened or closed, the back strap of the ladder tape is tacked at the back to the uprights 1 at vertically spaced points, as at 22, except for the upper end portion of said ladder tape, which must remain free from the uprights 1 in order to permit of tilting of the slats 13 from the position of Fig. 1, to the position of Fig. 2, in which latter position said upper portions of the ladder tapes draw outwardly somewhat from the uprights. Tilting of the window shutter assembly is accomplished by operation of the mechanism 10.

From the foregoing description it will be readily seen that there has been produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claim.

Having thus described the invention, the following is claimed as new and useful, and upon which Letters Patent are desired:

In combination with a shutter structure which

includes top and bottom tilt rails, suspension cords connecting the rails, ladder tapes extending between the rails and including front and back straps and cross tapes at intervals, the front straps being connected to the rails at their front edge, shutter slats supported on the cross tapes, a head rail, means pivoting the top tilt rail from the head rail back of the point of connection of the suspension cords therewith and means mounted on the head rail and operatively connected to the top tilt rail to tilt the same; a means to mount said structure on a windowed door comprising a pair of rigid uprights adapted to be secured on the door to the sides of the windowed area thereof, means rigidly connecting the head rail to the uprights, means hingedly connecting the bottom tilt rail at the back on the

uprights, the latter being spaced apart the same as the spacing of the back straps of the ladder straps, and means securing said back straps only adjacent the top and bottom thereof on the uprights.

ARIE DEN DULK, SR.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
Re. 22,989	Ganter	Mar. 23, 1948
374,800	McDonald	Dec. 13, 1887
2,003,174	Cooper	May 28, 1935
2,119,856	Edmonds	June 7, 1938