Aug. 4, 1936. P. W. OLSON 2,049,860

SLIDING PANEL LOCK

Filed Sept. 10, 1934

Fig. 1.

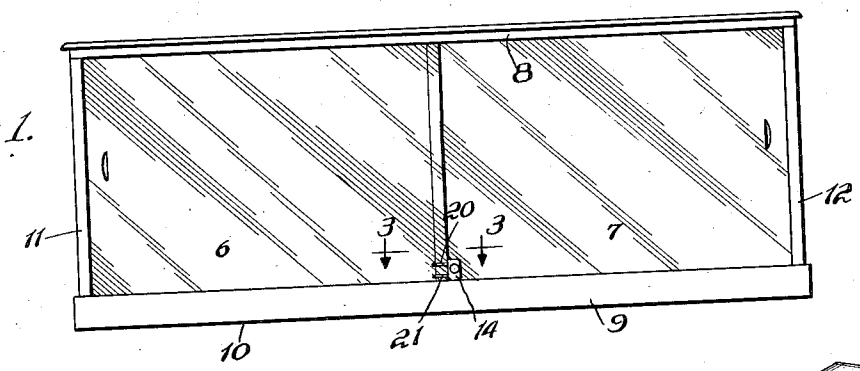


Fig. 2.

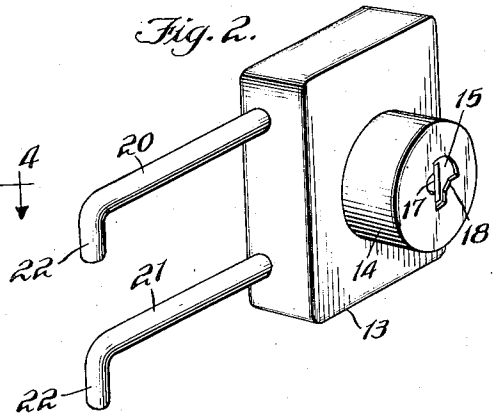


Fig. 3.

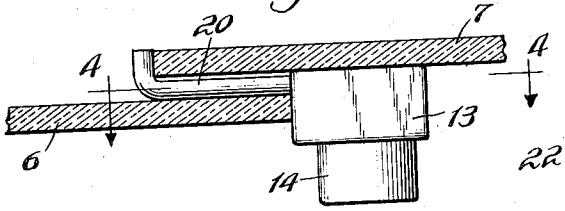


Fig. 4.

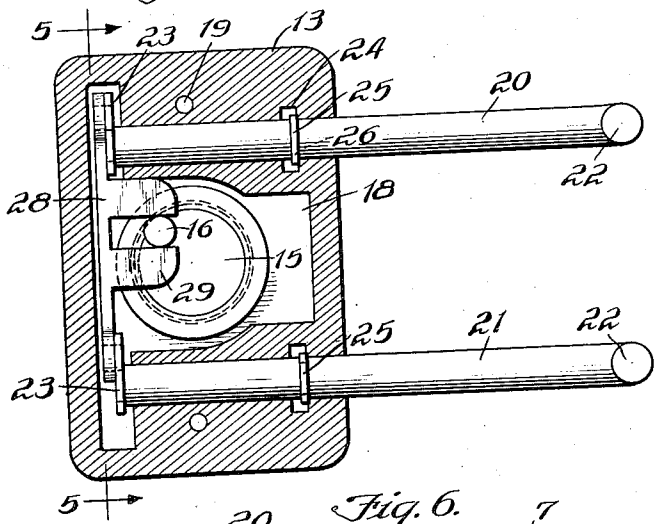


Fig. 5.

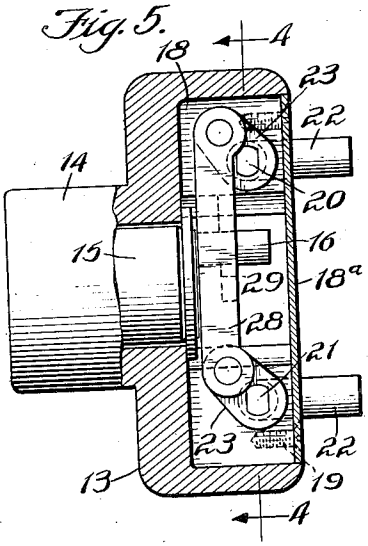
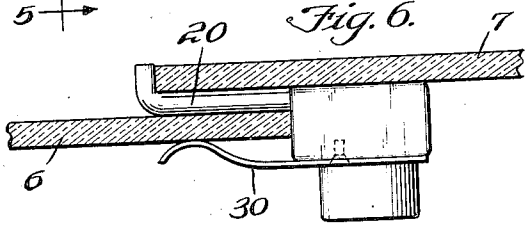


Fig. 6.



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SLIDING PANEL LOCK

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Application September 10, 1934, Serial No. 743,363

7 Claims. (Cl. 70—31)

This invention relates to improvements in a form of padlock particularly adapted for locking sliding panels, such as the glass panels of a show-case.

Among the objects of the invention are to provide a simple and convenient unitary lock which may be easily applied without changing or making special provisions in the construction of the show-cases.

Other objects and advantages will become apparent in the following description, taken with reference to the accompanying drawing, in which:

Fig. 1 represents a rear elevation of a common form of show-case, with a lock embodying my invention applied thereto;

Fig. 2 is a perspective view of the lock;

Fig. 3 is a section taken on the line 3—3 of Fig. 1, looking down at the lock;

Fig. 4 is a section of the lock taken on the axis of the bolts, looking from the back of the lock substantially on the line 4—4 of Fig. 3;

Fig. 5 is a section taken on the line 5—5 of Fig. 4; and

Fig. 6 is a plan view of the lock in position, showing a retainer clip for holding the lock on the edge of the outer panel.

The glass panels 6 and 7 are slidably mounted in suitable guideways provided in the upper and lower frame members 8 and 9 of the show-case 10. The outer ends of the panels abut against the end frame members 11 and 12 of the show-case; and when the show-case is closed the inner adjacent edges of the panels overlap about one inch or more, as shown.

The panels are necessarily mounted in offset relation, usually with a spacing of about three-sixteenths of an inch, and to open the show-case, one or the other panel is slid back alongside the stationary panel.

I provide a loose lock, somewhat resembling a common type of padlock, comprising a flat squared housing 13 having a boss 14 formed on the front face thereof for receiving a lock tumbler 15. The cylinder has an eccentrically disposed roll-back pin 16 incorporated on the inner end thereof, and has a central keyway 17 for the insertion of a key, through a suitable aperture 18 provided in the end of the boss 14.

The rear face of the housing is recessed to provide an irregular space 18 for receiving the bolt operating mechanism secured in position by screw 19.

The bolting means comprises preferably a pair of hooked bolts 20 and 21 which project from one side of the housing. Conceivably one bolt might serve, but the two bolts provide a somewhat more stable fastening.

The outer ends of the bolts are bent at ninety degrees to provide hooks which lie in the plane of the bolts in unlocked condition to prevent inserting the bolts between the overlapping margins of the panels. When the lock is in position, the key is turned to rotate the bolts so that the hooks engage behind the edge of the inner panel. The side of the lock housing then forms an abutment for the edge of the outer panel so that the panels are locked in position until the bolts are rotated by the key to turn the hooks back into the parallel plane.

As best shown in Fig. 4 the stems of the bolts project rotatably through the side of the housing into the space 18 provided by the recessing where a crank arm 23 is fixedly secured to the inner end of each bolt. For preventing withdrawal of the bolts, recess portions 24 are provided for receiving snap collars 25 which engage in suitable grooves 26 cut in the stems of the bolts.

The outer ends of the arms 23 are pivotally connected by a swinging bar 28 on which is formed a laterally projecting fork 29 for embracing the roll-back pin 16. Thus as the tumbler cylinder is turned about ninety degrees counterclockwise from the locking position, as shown in Fig. 4, the bolts are turned to bring the hooks into co-planer, or unlocking position.

When the lock is unlocked it may be left lying in the show-case, or a clip 30 may be provided for holding the lock on the edge of the panel, the clip being securing to the face of the lock housing, as indicated in Fig. 6.

Having thus described my invention, I claim as my invention:

1. A lock for overlapping sliding panels comprising a housing, a pair of rotary bolts projecting from one side of the housing near one edge thereof for insertion between the panels, and key operated means for turning the bolts ninety degrees, the ends of the bolts being hooked to engage behind the edge of the inner panel, the side of the housing forming an abutment for the edge of the outer panel so that the panels cannot be slid one over the other.

2. A padlock for overlapping slidable panels comprising a housing, a movable lock cylinder mounted in the housing, a pair of hook bolts rotatably mounted in the housing and projecting at right angles to the axis of the cylinder

to engage the edge of the inner panel, each bolt having a crank arm, and a bar connecting the crank arms, the bar being also connected to the cylinder so that the bolts may be rotated to bring the hooks into the plane of the bolts for unlocking, and to turn the bolts so that the hooks project laterally for locking, and the housing side from which the hooks extend forming an abutment for the edge of the outer panel.

3. A padlock for overlapping slidable panels comprising a housing, a pair of bolts having hooks on their outer ends rotatably mounted in the housing and projecting from one side of the same to engage the edge of the inner panel, a lock cylinder rotatably mounted in the housing at right angles to the bolts, the cylinder having an eccentric roll-back pin on its inner end, crank arms fixed to the inner ends of the bolts and a bar connecting the crank arms, the bar having a fork embracing the roll-back pin, and the housing abutting the overlapping edge of the outer panel in locking position.

4. A lock for sliding panels comprising a body portion having key operated hook means projecting therefrom for insertion between the panels and rotatable for engaging the hook means behind the edge of the inner panel, and the side of the body portion engaging the edge of the outer panel.

5. A sliding panel lock comprising a body portion having key operated hook means projecting therefrom for insertion between the panels and engaging behind the edge of the inner panel, the body portion engaging the edge of the outer panel and a clip for holding the lock in position on the outer panel when unlocked.

6. A lock for overlapped sliding panels comprising a housing to abut one end of one panel, a bolt rotatably mounted in and projecting from one side of the housing of a size to extend between adjacent panels, the outer end of the bolt having a projection to engage the end of the other panel, and key operated mans in the housing connected to rotate the bolt.

7. A padlock for overlapping sliding panels comprising a flat housing to abut the outer panel end, a pair of bolts rotatably mounted in and projecting from one side of the housing adapted to extend between overlapping panels, the outer ends of the bolts having projections to engage the overlapped end of the inner panel, and a lock cylinder mounted in the housing and connected to rotate the bolts ninety degrees to engage the end of the under panel.

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