R. J. PRETTIE.

LID PROP.

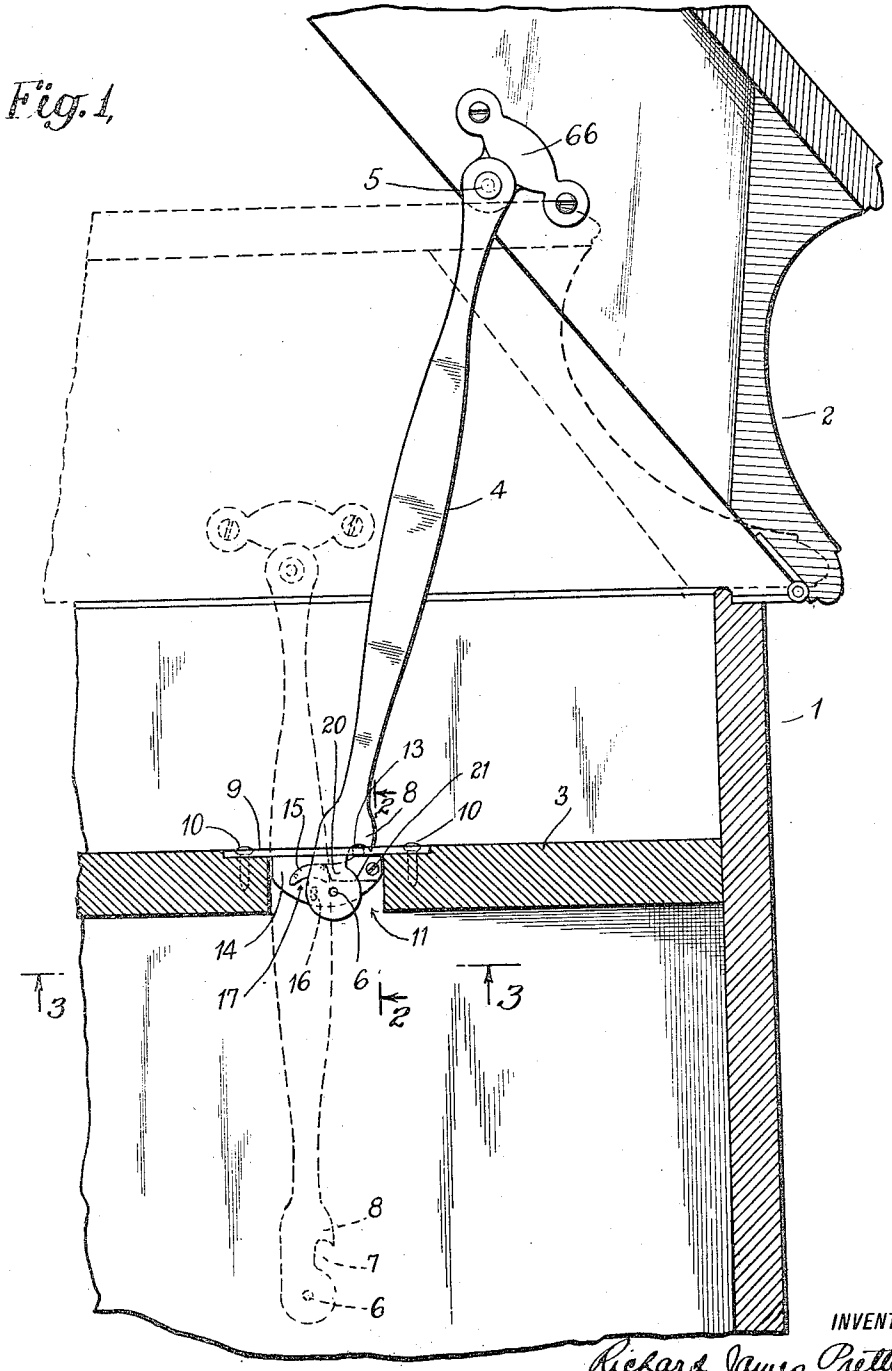
APPLICATION FILED MAR. 24, 1915.

1,267,451.

Patented May 28, 1918.

2 SHEETS—SHEET 1.

Fig. 1.



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2 SHEETS—SHEET 2.

Fig. 2,

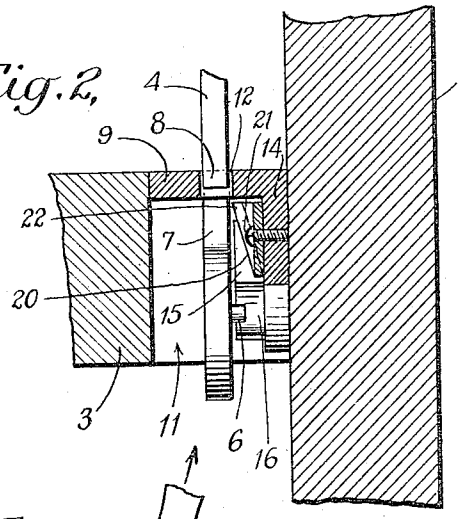


Fig. 3

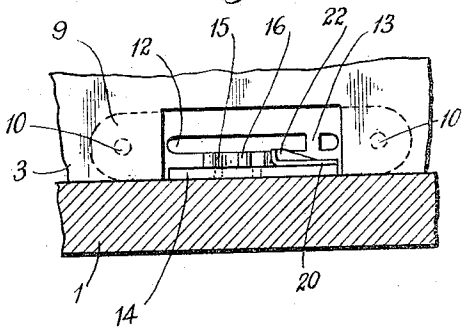


Fig. 4,

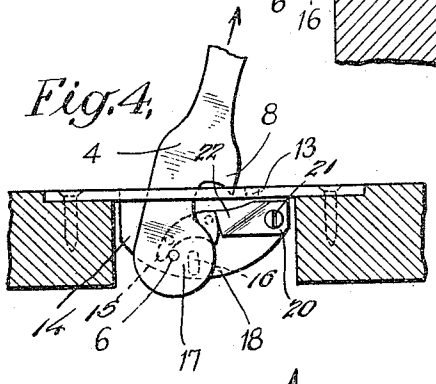


Fig. 5,

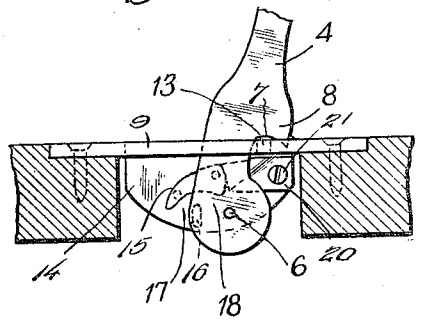


Fig. 6,

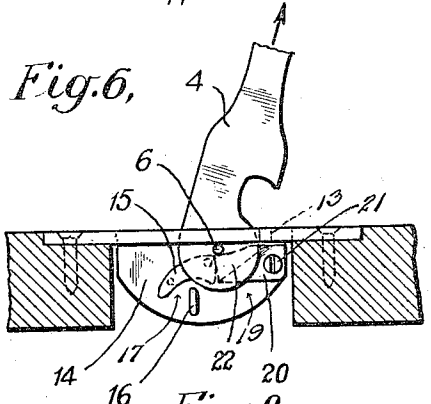


Fig. 7,

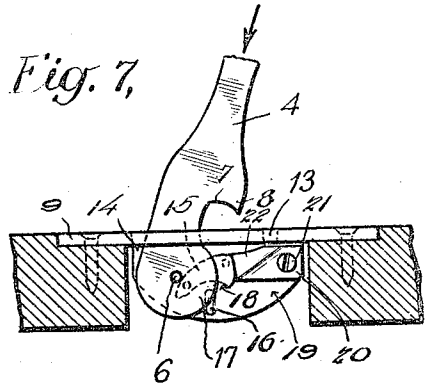
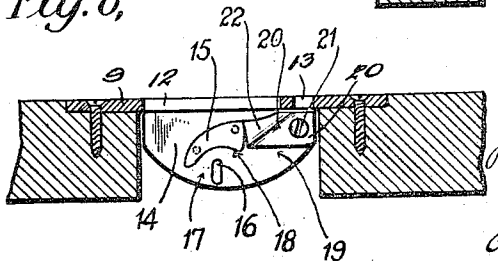


Fig. 8,



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UNITED STATES PATENT OFFICE.

RICHARD JAMES PRETTIE, OF JAMAICA, NEW YORK, ASSIGNOR TO THE AEOLIAN COMPANY, A CORPORATION OF CONNECTICUT.

LID-PROP.

1,267,451. Specification of Letters Patent. Patented May 28, 1918.

Application filed March 24, 1915. Serial No. 16,671.

To all whom it may concern:

Be it known that I, RICHARD JAMES PRETTIE, a citizen of the United States, residing at Jamaica, in the county of Queens and State of New York, have invented certain new and useful Improvements in Lid-Props, of which the following is a specification.

My present invention is an improved lid-prop for cabinets and the like, the advantages of which will be apparent to those skilled in the art from the following description in connection with the drawings. In the latter, Figure 1 is a partial vertical section of a cabinet embodying my lid-prop shown in elevation in two positions, with the lid raised and lowered respectively. The remaining figures are detail views on an enlarged scale,—Fig. 2 being a sectional view on the line 2—2 in Fig. 1 looking in the direction of the arrows, Fig. 3 being an underneath plan partly in section on the line 3—3 in Fig. 1, Fig. 4 being an enlarged view of a part of Fig. 1 except that the lid is supposed to be in the act of being raised into the position shown in Fig. 5 (same as in Fig. 1) wherein the prop is supporting the lid. Next Fig. 6 shows the position of the parts due to the slight preliminary additional lifting of the lid preparatory to lowering it from its raised or prop-supported position. Finally Fig. 7 shows the initial stage of the actual lowering of the lid. Fig. 8 the last figure in the drawings, is a longitudinal mid-section partly in elevation, through the escutcheon plate of the device and the supporting shelf part of the cabinet.

I will now describe the specific devices of the drawings. 1 is a cabinet having hinged lid 2 and inside shelf 3. The prop 4 is fashioned from a piece of flat metal and is pivoted by its upper end at 5 to a piece 66 secured by screws to the interior side-wall of the hollow lid 2. 6 is a short pin or stud projecting from the free end of the prop and from the side near the adjacent wall of the cabinet, and is shown in side elevation in Fig. 2. 7 is a recess in the lower side of the prop above this stud to form the toe 8. The prop shown is wide in the middle tapering to the ends but in a direction transverse to the plane of the drawings in Fig. 1 is of even thickness.

9 is an escutcheon plate secured by screws 10 over an opening 11 through the cabinet-shelf. This plate has a longitudinal slot 12 through which the prop can slide endwise, said slot being bridged near its rear end by a bridge-piece 13. When the prop supports the lid in raised position, it does so by its toe 8 bearing on this bridge-piece 13.

The escutcheon plate 9 has a side-piece or flange 14 underneath it and at one side thereof. See Fig. 2. 15 and 16 are two guide-parts (compare Figs. 1, 2 and 8) on the face of this side-piece 14. They form between them an upwardly extending front passage 17 for the prop-pin 6 to travel up into and which, by the relative position of the parts, it is arranged to do as the lid is raised and has nearly reached its final open position. This is the condition shown in Fig. 4. At its top, the passage 17 recurves downwardly to form a shorter descending rear passage 18 which delivers the prop-pin 6 into the open space 19 (see Fig. 8) at the rear of the guide-part 16. Further this carries the whole prop rearwardly so that its toe 8 as shown in Fig. 5 is brought over the bridge-piece 13 as the pin 6 leaves the aforesaid downwardly extending passage 18. In this relation of the parts, the prop is supporting the open lid. Compare Figs. 1, 2 and 5.

20 is a thin spring metal plate (see Fig. 8) secured by screw 21 to the face of the side-piece 14 under the escutcheon plate in back of the guide-part 15. Its upper corner adjacent the guide part 15 is bent outwardly away from the side-piece 14 to form an inclined spring lip 22. Compare Figs. 2, 3 and 8. This comes into play when the lid is lowered. To do this the lid is first raised a trifle higher than its prop-supported position of Fig. 5. This pulls the prop upwardly as in Fig. 6, causing the prop-pin 6 to ride upwardly on the spring lip 22 as on an inclined plane. In doing so, said pin presses the lip toward the side-piece 14 (see Fig. 2) until it snaps over the top edge of the lip, which thereupon springs outwardly so that it now underlies the pin, preventing its return whence it came.

The upper edge of this spring-lip 22 inclines downwardly to be continuous with the downwardly inclined upper side of the guide-part 15. The result is that the weight of the lid, acting through the prop, causes its pin 6 to slide down said combined inclined surfaces. These furthermore are located far enough to the front so that as the prop descends endwise through the escutch-

eon slot 12, its toe 8 is carried forward far enough to pass freely therethrough without abutting against the bridge-piece 13, thus permitting the lid to descend into fully closed position.

Thus the lid can be raised into propped-up position and lowered by the use of only one hand. On lifting the lid, the prop pin follows up into the front passage 17 and delivers the toe 8 into its lid-supporting position over the bridge-piece 13 as the downwardly extending passage 18 delivers the pin into the free space to which said passage leads. The lowering of the lid is equally simple, consisting merely in raising it slightly until the pin 6 has ridden past the upper edge of the inclined spring lip 22 whence the weight of the lid naturally causes it to ride down the incline formed by the parts 22 and 15, thereby simultaneously carrying the prop forward so that it descends freely through the slot in the escutcheon plate until the lid is in fully closed position.

Of course some changes and modifications might be made in the above that are nevertheless within the spirit of this inventive disclosure and these I mean to cover by the annexed claims under the doctrine of equivalents. Further certain of the means might be used without the remainder or in connection with equivalent means.

What I claim is:—

1. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, a support for said toe, stationary guide-members forming an upwardly extending passage for said pin when raising the lid and a downwardly extending passage which delivers the prop into a position wherein its toe supports the lid.

2. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, a support for said toe, stationary guide-members forming an upwardly extending passage for said pin when raising the lid and a downwardly extending passage which delivers the prop into a position wherein its toe supports the lid and a movable part permitting the pin to pass it in upward direction but not to return, said part being arranged to deliver the pin downwardly over the top of the guide-members and to carry the prop into a position wherein its toe is carried out of its lid-supporting position.

3. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, stationary guide-members forming an upwardly extending passage for said pin when raising the lid and a downwardly extending passage which delivers the prop into a position wherein its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but whose upper edge is normally positioned to prevent the return of the pin, said edge being arranged to deliver the pin downwardly over the top of the guide-members and to carry the prop into a position wherein its toe is carried out of its lid-supporting position.

4. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, a support for said toe, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid.

5. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, a support for said toe, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid and a movable part permitting the pin to pass it in upward direction but not to return, said part being arranged to deliver the pin downwardly over the top of the guide-members and to carry the prop into a position wherein its toe is carried out of its lid-supporting position.

6. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but whose upper edge is normally positioned to prevent the return of the pin, said edge being arranged to deliver the pin downwardly over the top of the guide-members and to carry the prop into a position wherein its toe is carried out of its lid-supporting position.

7. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wheren its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but which prevents its return thereby and delivers the pin and prop into a position wherein the toe of the latter is carried out of its supporting position and the prop is permitted to descend.

8. In combination, a lid-prop guided for endwise movement, having a toe for sup-

porting the lid in raised position and a guide-pin, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but which has a projecting upper edge which when passed by the pin prevents its downward return past the spring, said edge having a downward inclination delivering the pin and prop downwardly over the top of the aforesaid guide means which itself is downwardly inclined to carry the toe of the prop out of its lid-supporting position to permit the prop to descend and the lid to be closed.

9. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but which prevents its return thereby and delivers the pin and prop into a position wherein the toe of the latter is carried out of its supporting position and the prop is permitted to descend, a slotted plate forming the guide for the endwise movement of the prop, and a cross-piece across said slot to coact with and support the toe of the prop.

In testimony whereof, I have signed my name to this specification, this 23 day of March, 1915.

RICHARD JAMES PRETTIE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."