Aug. 11, 1925. 1,549,713

S. B. CHAFFEY

CLOSURE OPERATOR AND LOCK

Filed May 1, 1923

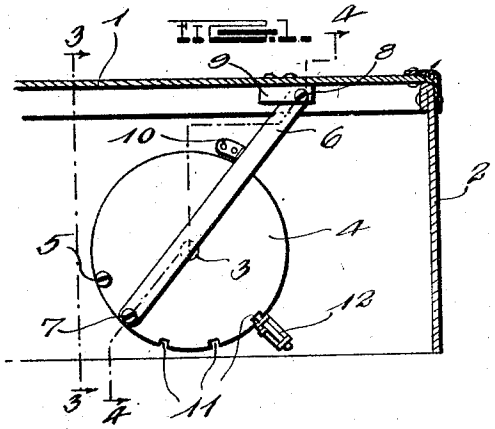


FIG. 1.

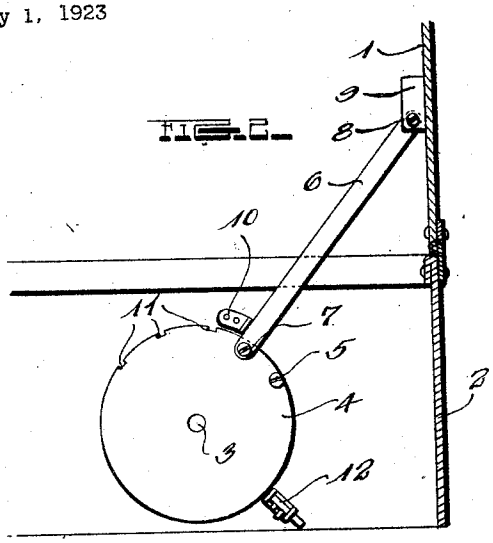


FIG. 2.

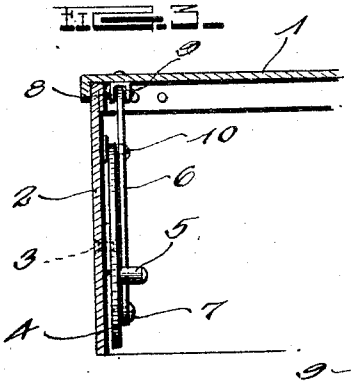


FIG. 3.

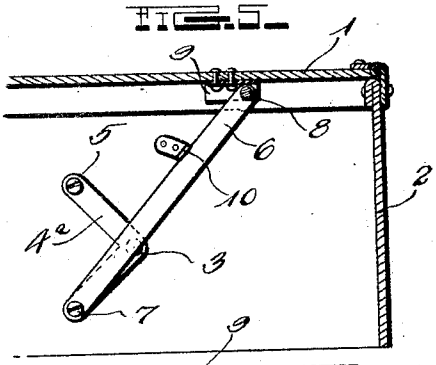


FIG. 5.

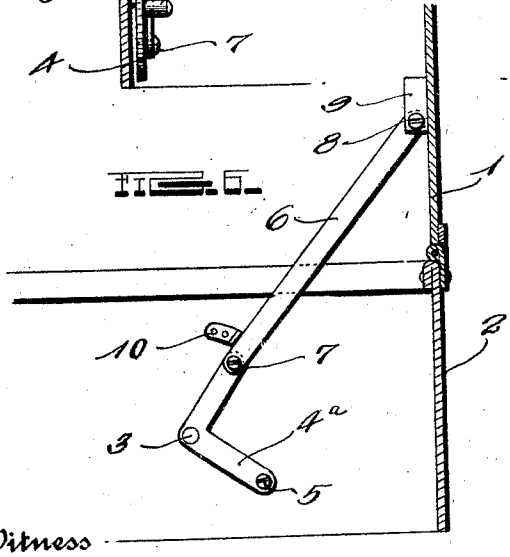


FIG. 6.

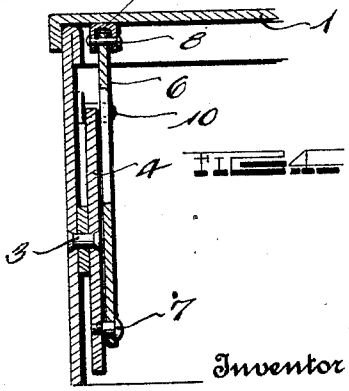


FIG. 4.

Witness

Inventor

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By

Attorneys

Patented Aug. 11, 1925. 1,549,713

UNITED STATES PATENT OFFICE.

SAMUEL B. CHAFFEY, OF SUPERIOR, WISCONSIN.

CLOSURE OPERATOR AND LOCK.

Application filed May 1, 1923. Serial No. 635,954.

To all whom it may concern:

Be it known that I, SAMUEL B. CHAFFEY, a citizen of the United States, residing at Superior, in the county of Douglas and State of Wisconsin, have invented certain new and useful Improvements in Closure Operators and Locks; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide an extremely simple and inexpensive, yet an easily operable and effective device for operating scuttle doors, transoms or other closures and locking them, the construction of the present form of my invention, being such as to lock the closure either in an open position or in a closed position.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, the description being supplemented by the accompanying drawing.

Figure 1 is a sectional view of a closure and its frame, showing the application of one form of my invention positioned to hold the closure shut.

Figure 2 is a duplicate of Fig. 1 with the exception that it illustrates the closure held in open position.

Figure 3 is a sectional view on line 3—3 of Fig. 1.

Figure 4 is a similar view on line 4—4 of Fig. 1.

Figures 5 and 6 are views similar to Figs. 1 and 2 but showing a different form of construction.

In the drawing above briefly described, the numeral 1 designates a pivoted closure carried by a suitable frame 2. Pivoted at 3 to this frame or to any other desired stationary part, is an operating member which may have any desired configuration, such as the disk 4 shown in Figs. 1 to 4 or the bell crank 4^a disclosed in the other figures. This operating member may either have a handle 5 carried directly thereby or suitable operating means may be connected to said member and extend to a remote point.

A link 6 has its inner end pivoted at 7 to an off-center part of the operating member 4 or 4^a and the outer end of this link may be connected with the closure 1 in any desired manner, for instance by pivoting said link at 8 to a bracket 9 which is secured to the closure 1.

It will be seen from the above that turning the operating member in one direction will open the closure 1, while turning said member in the other direction will close said member and I make provision for limiting the movement of the operating member to such an extent as to permit the link to snap slightly past dead center to lock the closure. In the present showing, a stop 10 is mounted on the frame 2 or on some other adequate stationary part, in the lateral path of the link 6 and this link contacts with the stop both when the closure 1 is shut and when it is open, the pivot 7 being slightly beyond dead center in either of these positions, so that the closure is positively locked against movement unless the operating member 4 or 4^a is turned.

If desired, I may provide supplemental means to hold the operating member in an intermediate position or a number of such positions. For instance, the disk 4 may be provided with spaced peripheral notches 11, to be engaged by a suitable latch bolt or the like 12.

By employing the construction shown or a substantial equivalent thereof, a device is provided which will be simple and inexpensive, yet will be very easy to operate and exceptionally well adapted to the purposes for which it is designed.

As excellent results may be obtained from the structure disclosed, this structure is preferably followed, but within the scope of the invention as claimed, numerous minor changes may be made.

I claim:

1. A closure operator comprising an operating member and means for pivoting it to a closure frame or other stationary part, a link pivoted at its inner end to an off-center part of said operating member, means for connecting the outer end of said link with a closure, and a stop adapted to be mounted stationarily in the lateral path of said link to limit the movement of said link to a point slightly beyond dead center when the closure is moved to an extreme position.

2. A closure operator comprising an operating member pivoted to a closure frame or other stationary part, said operating

member having a series of notches, a link pivoted at its inner end to an off-center part of said operating member, means for connecting the outer end of said link with a closure, and a bolt disposed for engagement with the notches in said operating member whereby it is held in an intermediate position and against turning in either direction.

3. A closure operator comprising an operating member pivoted to a closure frame or other stationary part, said operating member having a series of notches, a link pivoted at its inner end to an off-center part of said operating member, means for connecting the outer end of said link with a closure, a stop mounted stationarily in the lateral path of said link to limit the movement thereof to a point slightly beyond dead center when the closure is moved to extreme positions and a bolt disposed for engagement with the notches in said operating member whereby it is held in intermediate positions.

4. A closure operator comprising an operating disc pivoted to a closure frame or other stationary part, said disc having a series of peripheral notches, a link pivoted at its inner end to an off-center part of said operating disc, and at its outer end to a closure, a stop mounted stationarily in the lateral path of said link to limit the movement thereof to a point slightly beyond dead center when the closure is moved to extreme positions, and a bolt disposed for engagement with the notches in said operating disc whereby it is held in intermediate positions and against turning in either direction.

In testimony whereof I have hereunto affixed my signature.

SAMUEL B. CHAFFEY.