V. A. DE CANIO.

REFRIGERATOR FASTENING MEANS.

APPLICATION FILED NOV. 21, 1907.

903,685. Patented Nov. 10, 1908.

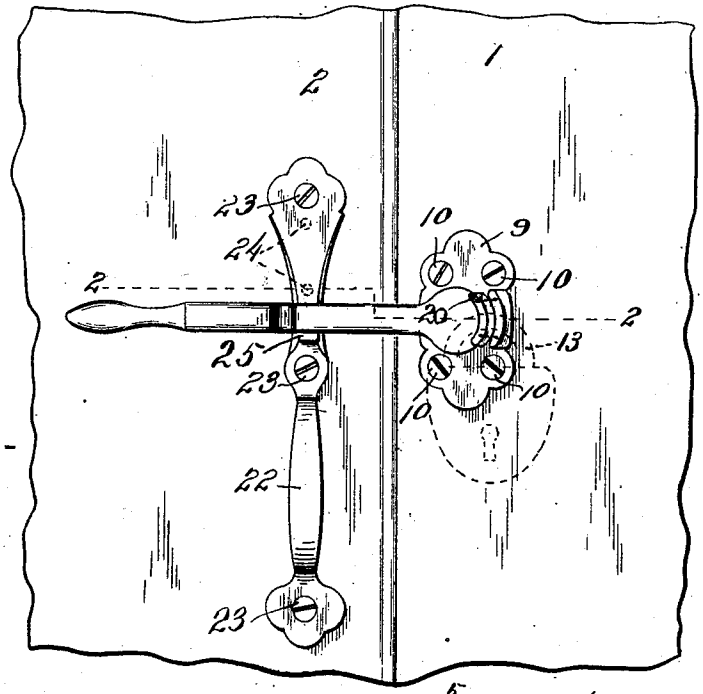


Fig. 1.

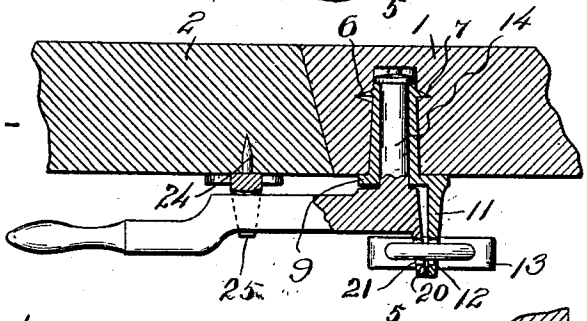


Fig. 2.

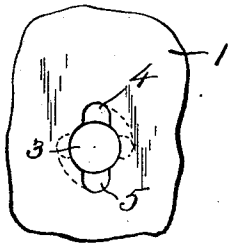


Fig. 3.

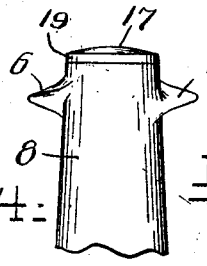


Fig. 4.

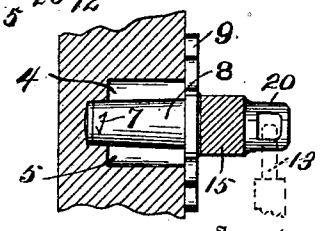


Fig. 5.

Witnesses

J. M. Fowler Jr.

A. S. Kitchin.

Inventor

Victor A. DeCanio,

By Mason Fenwick & Lawrence,

His Attorneys

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

VICTOR A. DE CANIO, OF UNION HILL, NEW JERSEY.

REFRIGERATOR-FASTENING MEANS.

No. 903,685. Specification of Letters Patent. Patented Nov. 10, 1908.

Application filed November 21, 1907. Serial No. 403,223.

To all whom it may concern:

Be it known that I, VICTOR A. DE CANIO, a citizen of the United States, residing at Union Hill, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Refrigerator-Fastening Means; and I do hereby 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.

The invention relates to improvements in fastening devices and particularly to locks that have formed in connection therewith a handle or operating lever.

The invention comprises the production of a socket in which is pivotally mounted a lever or handle designed to be locked and when so locked it cannot be moved from its locked position, unless properly unlocked.

The invention further comprises a rotating sleeve having thread-shaped lugs formed thereon designed to engage the wall or device to which the lock is attached and in addition an operating lever positioned in the sleeve and designed to be locked thereto by any desired auxiliary lock, so that when so locked the handle cannot be moved even if the fastening means are removed.

The object in view is the provision of a handle and locking bar or lever positioned in such relation to each other as to prevent any considerable movement of the lever when the same is locked, even though the securing means for both the handle and lever have been removed.

With these and other objects in view, the invention comprises certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described and claimed.

In the accompanying drawings:—Figure 1 is a fragmentary view of a refrigerator or the like, part of the door being shown in connection therewith, having secured therein a fastening device formed according to the present invention. Fig. 2 is a section of Fig. 1 on line 2—2. Fig. 3 is a detail view of part of the refrigerator showing an opening therein in which the sleeve forming part of the present invention is designed to be positioned. Fig. 4 is an enlarged, detail, fragmentary view of the sleeve forming part of the present invention. Fig. 5 is a fragmentary, sectional view of the invention taken on line 5—5 of Fig. 2.

In providing locks or fastening means for refrigerators and the like, it has been difficult to provide a strong and comparatively inexpensive lock that may be readily secured in place and yet not easily unlocked by an unauthorized person. It has been particularly difficult to provide locks that are bolted or screwed to refrigerators and the like that cannot be unlocked by simply unfastening or unscrewing the screws or fastening devices that holds the lock in place. It is among the objects of the present invention to provide a device that will attain these desirable features.

Referring more particularly to the drawings, 1 indicates a refrigerator and 2 the door thereof. In applying my improved lock an aperture 3 is provided in the refrigerator as clearly seen in Fig. 3. The aperture 3 is provided with ways or grooves 4 and 5, as seen in Figs. 3 and 5, for accommodating lug shaped threads 6 and 7 formed on a sleeve 8. It will be evident that any desired number of lugs or mutilated threads 6 and 7 may be provided, but ordinarily two is sufficient and they are designed to be placed upon opposite sides of the sleeve 8 for entering ways 4 and 5 respectively. The sleeve 8 is designed to be provided with a plate 9 which, in turn, is provided with apertures for receiving securing screws 10. In addition to plate 9 a lug or extension 11 is formed upon one side of sleeve 8 as clearly seen in Fig. 2. The extension or lug 11 is formed with an aperture 12 designed to receive a bar or member 13 of any desired kind.

Loosely mounted in sleeve 8 is a journal member 14 that is preferably formed integral with a lever or bar 15 and is held in place by having its end riveted or turned over at 17 upon a washer or anti-friction means 19 or by being provided with a nut. Bar or lever 15 is provided with an extension 20 that, in turn, is provided with an aperture 21 for registering with the aperture 12 of member 11 so that when the apertures 12 and 21 register the locking bolt hasp or bar 13 may pass through both apertures and lock lever 15 and sleeve 8 together. The apertures 12 and 21 are comparatively large so that locking member 13 may pass therethrough without said openings entirely registering. In connection with lever 15 and sleeve 8 there is provided a handle 22 secured to the door 2 by any suitable means as screws 23.

In addition to the screws 23 there is provided any desired number of what may be termed secret securing means or lugs 24. In applying the handle 22 the same is placed against the door 2 in correct position and then securing means or lugs 24 are forced into the door. The screws 23 are then applied for firmly holding the handle in position for the ordinary use for which the same is designed. In order to limit the downward movement of lever 15 a lug or raised portion 25 is provided on handle 22, as clearly seen in Fig. 1. In positioning handle 22 upon door 2, that same is so arranged that the upper edge of lug 25 will engage the lower edge of lever 15 and hold the same in such a position as to permit opening 21 to register with opening 12. The handle 22 is slightly beveled from the upper end down to lug or stop 25. When lever 15 is brought over against handle 22 it will engage the bevel portion thereof and consequently assist in closing the door.

In operation sleeve 8 is forced into aperture or opening 3 the threads or lugs 6 and 7 passing down ways 4 and 5 until the end of the sleeve is almost against the inner end of the opening 3 as clearly seen in Fig. 5. The aperture 3 is designed to be of such a depth as to permit the washer 19 to rest against the bottom thereof at the same time that the plate 9 rests against the outer surface of the refrigerator, as seen in Fig. 2, though if desirable the aperture may be deeper. However, before the portion 19 can rest against the bottom of the opening 3 it is necessary to rotate the sleeve a one-fourth turn or revolution and consequently permit threads 6 and 7 to enter the wood of the refrigerator and draw in the sleeve 8 until it is in the position shown in Figs. 2 and 5. From Fig. 5 it will be observed that the ways 4 and 5 are not the full depth of opening 3 so that threads 6 and 7 may have wood entirely around the sleeve 8 and consequently easily draw in the sleeve until the same rests against the bottom of the opening 3. If desired, as will be evident, the ways 4 and 5 may be full depth of opening 3, but the same is not necessary and usually are not so provided. After the sleeve 8 has thus been positioned and plate 9 brought in contact with the refrigerator 1, it is secured in place by screws 10 as seen in Fig. 1, the lever 15 and its journal member 14 having been placed in position before sleeve 8 was inserted in opening 3. Handle 22 is then placed in position as seen in Fig. 1 and the device is in position for use. When it is desired to use the refrigerator lever 15 is moved to a vertical position and the door 20 opened by handle 22 in the usual manner and after it is closed lever 15 is brought over to the position shown in Fig. 1, for holding the door closed. When it is desired to lock the lever 15 in the position shown in Fig. 1 for holding the door 2 closed a lock of any desired description is placed with its bolt 13 through apertures 12 and 21 in members 20 and 21 respectively. This will effectually prevent lever 15 from being moved off handle 22 so that door 2 cannot be opened. In case an unauthorized person should attempt to open the door 2 and in his attempt should remove all of the fastenings means as 10 and 23, still the lever 15 could not be moved to any large extent from the position shown in Fig. 1. This is brought about by the fact that the lever 15 and sleeve 8 are locked together and if it were attempted to rotate lever 15 away from lug 25 threads 6 and 7 would attempt to force the end of sleeve 8 farther into the aperture 3 and also would attempt to force the plate 9 into the refrigerator 1. As will be evident this could not be done and consequently lever 15 could not be moved to any appreciable extent from lug 25. After screws 23 have been removed lugs 24 will prevent the removal of the handle 22 and the lever 25 will prevent any movement of the handle in a lateral movement. By this means neither the handle 22 nor lever 15 can be moved from that position without moving the bolt 13 of the lug either by unlocking the lock or breaking the same. In this way, simple means are provided that will act both as a handle and a catch for holding the door of the refrigerator closed and at the same time form a lock for locking the door against any ordinary person, not authorized, to enter the refrigerator.

What I claim is:—

1. In a lock, a handle, a stop formed on said handle, a lever for engaging said stop for preventing rotation thereof in one direction, means for locking said lever against movement in the other direction, and a sleeve formed with lugs that resist rotation thereof, said sleeve assisting said first mentioned means in preventing the rotation of said lever.

2. In a lock, a lever, an apertured member secured to said lever, a journal member secured to said lever, a sleeve, an apertured extension secured to said sleeve and adapted to register with said apertured member, means for securing said apertured members together, and lugs for preventing the rotation of said sleeve when the securing members for holding the same in position have been removed.

3. In a lock, a lever, an apertured member secured to said lever, a journal member secured opposite said apertured member, a sleeve surrounding said journal member, an aperture extension secured to said sleeve adapted to register with said apertured member, means for securing the same together, and means for preventing the rotation of

said lever when the securing means for holding said sleeve in position has been removed.

4. In a lock, a sleeve, means for securing the sleeve in place, a lever, journal member secured to said lever positioned in said sleeve, a handle for limiting the movement of said lever, means for locking said sleeve, and said lever together, and lugs secured to said sleeve for preventing rotation of the sleeve when the securing means that are designed to hold the same in place have been removed.

5. In a lock, a lever formed with a securing member, a sleeve formed with a securing member adapted to register with said first mentioned securing member, means for locking the said securing members together, a handle formed with a raised portion for engaging said lever, and means extending from the rear of said handle for preventing the removal of the handle when said sleeve is in engagement therewith.

6. In a lock, a lever, a sleeve, means for journaling said lever in said sleeve, means for locking said sleeve and said lever together, cam shaped lugs projecting from said sleeve for forming auxiliary means for preventing the rotation of said lever, and a handle for limiting the movement of said lever.

7. In a lock, a lever, means for pivotally mounting said lever in position, a handle for engaging said lever, a stop for limiting the movement of said lever, means for locking said lever against said stop, and lugs projecting from the inner face of said handle for preventing the removal of the handle while said lever is in engagement therewith.

8. In a lock, a lever, a journaled member secured thereto, a sleeve surrounding said journal, means for securing said sleeve in position, means for locking said lever and said sleeve together, and means for preventing the rotation of said lever when the securing means holding said sleeve in position has been removed.

In testimony whereof I affix my signature in presence of two witnesses.

VICTOR A. DE CANIO.

Witnesses:
H. C. JOHNSON,
N. LOVE.