Nov. 20, 1956 L. C. BIGELOW 2,770,964

ADAPTER HOUSING FOR DOOR LOCKS

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Fig. 1.

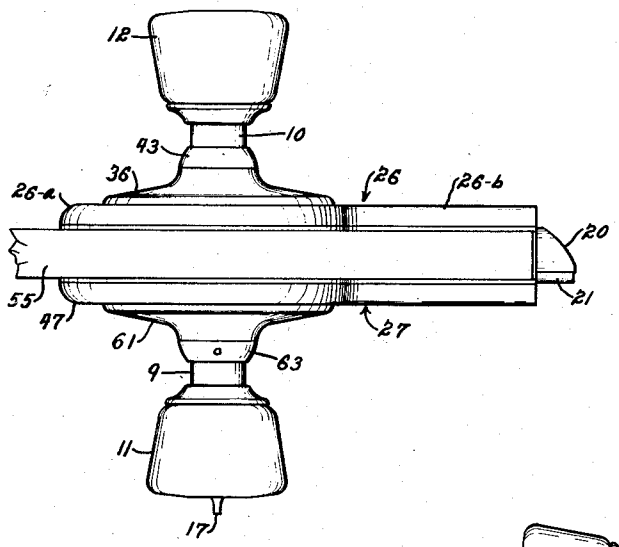


Fig. 2.

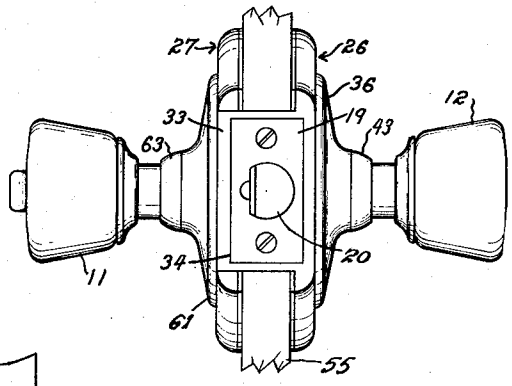
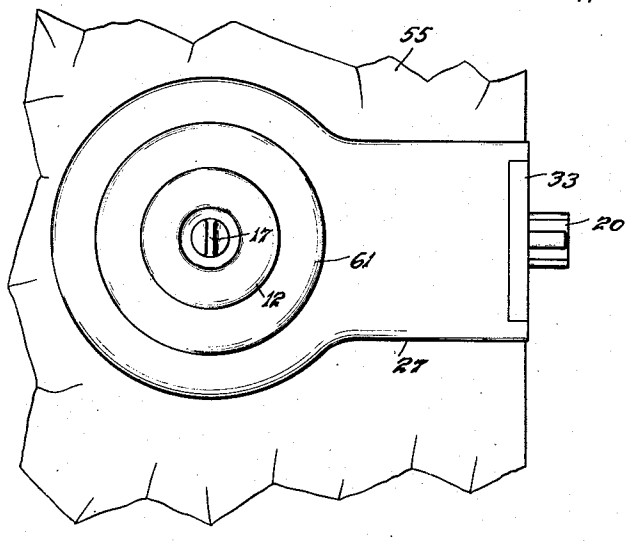


Fig. 3.



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Fig. 4.

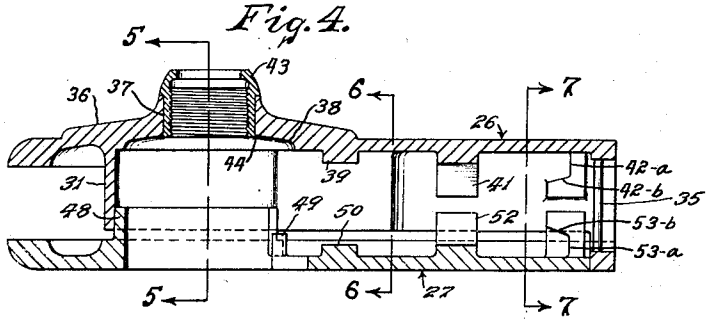


Fig. 5.

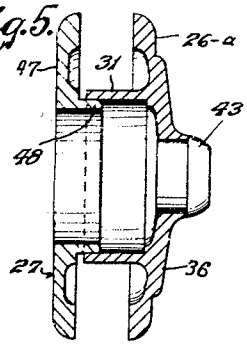


Fig. 6.

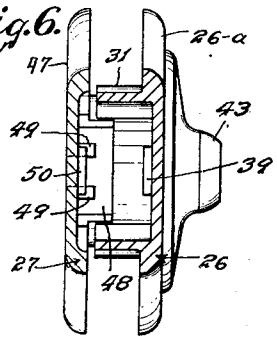


Fig. 7.

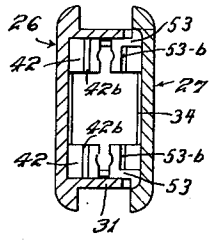


Fig. 8.

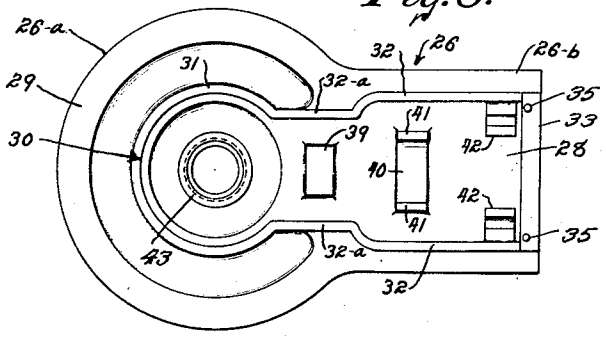


Fig. 9.

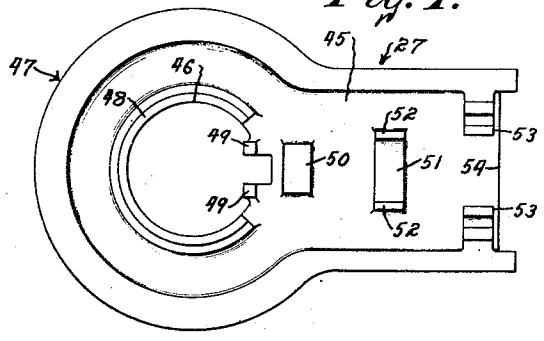
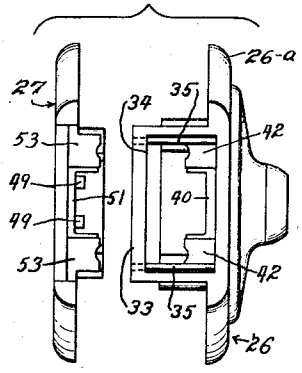


Fig. 10.



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Fig. 11.

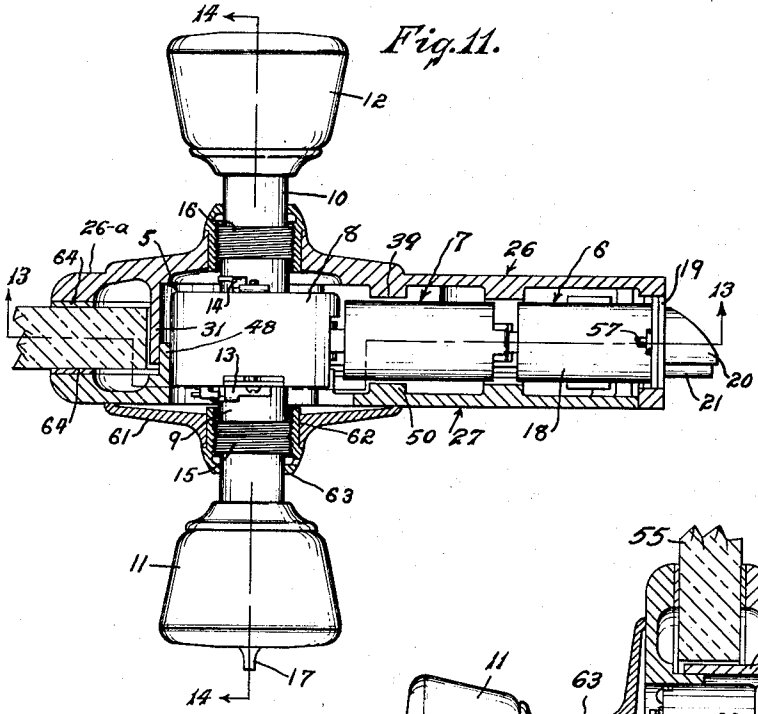


Fig. 12.

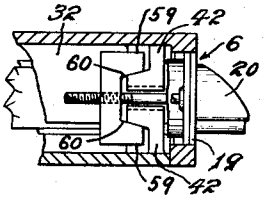


Fig. 14.

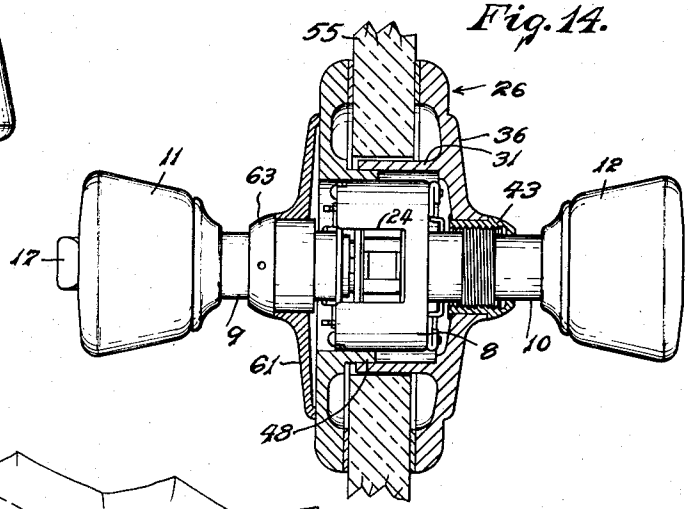
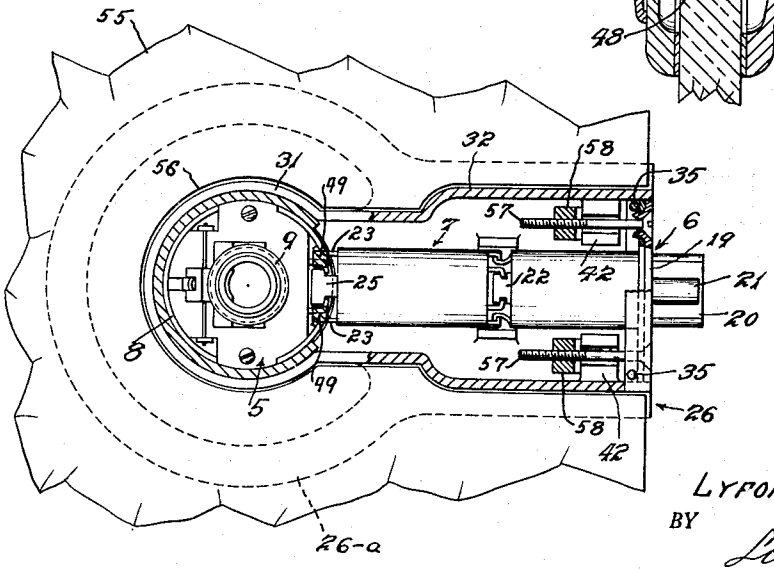


Fig. 13.



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ADAPTER HOUSING FOR DOOR LOCKS

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Application October 19, 1953, Serial No. 386,956

20 Claims. (Cl. 70—451)

This invention relates to an adapter housing for door locks and more particularly to a housing for supporting a cylindrical door lock on a thin door to which the lock could not be normally applied by conventional means.

As is well known to those skilled in the art, door locks of the cylindrical type generally include a latch operating unit and a separate latch unit. The operating unit usually includes a cylindrical case which is normally received in a hole extending through the face of the door and is provided at its inner and outer sides with co-axial sleeves which carry the rotatable knob shanks that operate the retractor mechanism contained in said case. Said sleeves also receive the escutcheon plates which are normally employed to secure and support the operating unit on the door. The latch unit is received in a hole extending through the edge of the door and is secured to the operating unit by suitable means; the latch bolt in said latch unit being operated by the retractor mechanism in the case of the operating unit.

It will be understood that the width of the case of the operating unit determines the minimum distance obtainable between the inner and the outer escutcheon plates, when moved to their innermost positions relatively to the case, and thereby limits the minimum thickness of a door to which the lock may be applied; such minimum thickness usually being in the neighborhood of 1⅜ inches.

Modern buildings being erected at the present time are often provided with doors considerably thinner than those upon which cylindrical door locks may generally be applied and this is particularly true with the exterior doors thereof which are often constructed of glass. Such doors generally range in thickness from ¾ to 1 inch, thereby rendering it impossible to mount a conventional cylindrical door lock thereon with the escutcheon plates that are commonly provided.

The primary object of this invention, therefore, is to provide an adapter housing which will permit the use of conventional cylindrical door locks on relatively thin doors.

A further object of this invention is to provide an adapter housing which contains and supports a cylindrical latch operating unit and a latch unit and is applicable to thin doors; particularly those made of glass, and which is provided with means for concealing the parts of the cylindrical door lock.

A still further object of the present invention is to provide such a housing incorporating novel fastening means for securing it to the door.

Another object of the present invention is to provide a housing for supporting a cylindrical latch operating unit, a backset extension, and a latch unit in a glass door.

Another object is to provide such a housing having novel means for securing the latch unit of the door lock therein; said means also acting to secure the housing to the door. Further objects and advantages of this invention will be more clearly understood from the following description and the accompanying drawings in which:

Fig. 1 is a plan view illustrating the housing embodying the present invention and the cylindrical door lock carried thereby in position on a thin glass door.

Fig. 2 is an end view thereof as it would appear when viewed from the edge of the door.

Fig. 3 is a view illustrating the appearance of the housing and the cylindrical door lock when viewed from the inner side of the door.

Fig. 4 is an enlarged plan view of the housing, in central horizontal section, illustrating the relative positions of the main parts of the housing when applied to a door.

Fig. 5 is a sectional end view of the housing, on a reduced scale, taken on line 5—5 of Fig. 4.

Fig. 6 is a similar view taken on line 6—6 of Fig. 4.

Fig. 7 is a similar view, taken on line 7—7 of Fig. 4.

Fig. 8 is a side view illustrating the face of the outer plate of the housing.

Fig. 9 is a similar view illustrating the face of the inner plate of the housing.

Fig. 10 is an end view of the inner and the outer plates of the housing in disassembled position.

Fig. 11 is an enlarged plan view of the housing, partially in central horizontal section, illustrating a cylindrical door lock therein and the manner in which said lock is secured to a door by said housing.

Fig. 12 is a view similar to Fig. 11, but illustrating only the outer end of the housing and having portions of the latch unit broken away to illustrate the means which both secure the latch unit to the housing and clamp the inner and outer plates of the housing to the door.

Fig. 13 is a side view, taken in section substantially on line 13—13 of Fig. 11, further illustrating the housing as applied to a door.

Fig. 14 is an end view thereof, taken in section on line 14—14 of Fig. 11, to further illustrate the manner in which the cylindrical latch operating unit is secured in the housing.

The adapter housing disclosed herein is particularly intended for use with the cylindrical door lock incorporating the operating unit whose basic construction is illustrated in United States Patent No. 2,701,160, dated February 1, 1955, and for the purpose of illustration, the said unit will be briefly described.

The cylindrical door lock includes a latch operating unit, generally indicated at 5, and a latch unit, generally indicated by the numeral 6. In the instant disclosure, a conventional backset extension 7 is also provided to connect the latch operating unit to the latch unit. Said latch operating unit includes a cylindrical case 8 which contains a retractor mechanism, such as that illustrated in United States Patent No. 2,721,095, dated October 18, 1955, and is provided with an inner sleeve 9 and an outer sleeve 10 which are co-axially disposed and rotatably support the knob shanks which are secured to the inner and outer door knobs 11 and 12, respectively, in the manner illustrated in United States Patent No. 2,675,692, dated April 20, 1954. The inner knob shank is retained in the sleeve 9 by a retaining member 13 and the outer knob shank is retained in the sleeve 10 by a retaining member 14 which is secured in retaining position by screws extending through the case in the manner clearly illustrated in the above mentioned Patent No. 2,701,160. Each of said sleeves 9 and 10 is provided with a threaded portion 15 and 16, respectively, which normally receives an escutcheon plate that is employed to clamp the latch operating unit to a door. The operating unit illustrated in the accompanying drawing is provided with a locking mechanism that is actuated by a turnpiece 17 in the inner knob 11 for dogging the outer knob against rotation; said outer knob being provided with key-operated means, not shown, to permit operation of the latch bolt when the outer knob is dogged against operation.

The latch unit 6 is also of conventional form and includes a tubular case 18 having a face plate 19 secured thereto through which extends a main latch bolt 20 and an auxiliary latch bolt 21. The face plate is provided with the conventional holes therethrough to receive the screws normally used for securing the latch unit in the hole in the edge of the door. Said main latch bolt 20 has a tail 22 extending therefrom through the bottom of the case 18 which is adapted to be secured to the retractor in the operating unit. In the instant disclosure, however, a backset extension 7 is employed between the latch unit and the latch operating unit, and, as best illustrated in Figs. 11 and 13, said backset extension is secured at one end to the latch unit and at its opposite end to the latch operating unit through the engagement of ears 23—23 thereon with the edges of the notch 24 in the case of the operating unit. Said backset extension is provided with a movable retractor link 25 which is secured at one end to the retractor of the operating unit and at its opposite end to the tail 22 of the latch bolt as clearly shown in Fig. 13. The door lock above described forms no part of the present invention, but was included in the disclosure to exemplify the use of the housing.

The adapter housing embodying the present invention includes an outer plate 26 and an inner plate 27. The outer plate 26, as best illustrated in Fig. 8, includes a circular end portion 26–*a* and a radially extending straight sided portion 26–*b*. The inner face of the plate is flat and is provided with a recess 28 defining a flange 29 along its marginal edges. Said plate also has a perpendicularly extending wall 30 thereon having a circular portion 31 disposed co-axially of the circular portion 26–*a* of the plate and spaced horizontally extending side walls 32—32; the intermediate portions 32–*a*—32–*a* of said side walls being spaced a distance less than the diameter of the circular portion 31. The outer end of the plate is formed to provide a perpendicularly extending frame 33 which projects beyond the edges of the wall 30 and has an opening 34 therethrough. A pair of pins 35—35 are disposed across the opening 34 adjacent its upper and lower ends for a purpose to be hereinafter described.

The outer surface of the plate 26 contains a circular boss 36 surrounding a hole 37 therein which is disposed co-axially of the circular portion 31 of the wall 30 and is preferably surrounded by a recess 38 in the inner surface of the plate.

Projecting from said inner surface are a pad 39, a boss 40 having perpendicularly extending guide fingers 41—41, and a pair of bosses 42—42 which are formed adjacent the opening 34 in the frame at the intersection of the side walls 32—32 with the inner surface of the plate and each of said bosses contains a recess 42–*a* with a tapered vertical side wall 42–*b* forming a cam surface.

The hole 37 in the outer plate may be internally threaded, but is preferably adapted to receive an internally threaded bushing 43 which is non-rotatably secured in said hole by being brazed, or otherwise permanently secured, to the plate as illustrated at 44.

The inner plate 27 has an exterior configuration identical to that of the outer plate and the surface thereof which faces the door is provided with a recess, as at 45, defining a flange around its marginal edge. The said plate is provided with a hole 46 therethrough which is disposed co-axially of the circular portion 47 of the plate and from the marginal edge portions of which extends a perpendicular wall 48 having an external diameter substantially equal to the internal diameter of the circular portion 31 of the wall on the outer plate 26. Said wall 48 terminates adjacent a pair of lugs 49—49 which extend perpendicularly from the inner surface of the plate 27 and are adapted to enter the notch 24 in the case of the latch operating unit for a purpose to be hereinafter described. Said plate 27 is provided with a pad 50 and a boss 51 having fingers 52—52 extending perpendicularly therefrom; said elements being disposed opposite the elements 39 and 40 of the outer plate.

A pair of bosses 53—53 extend from the inner surface of the plate 27 and are each provided with a recess 53–*a* having a tapered vertical side wall 53–*b* forming a cam surface therein in the same manner as in the recesses of the bosses 42—42 above described. The outer end of the plate 27 contains a notch 54 which is adapted to receive the frame on the outer plate 26 as clearly illustrated in Figs. 2 and 3.

In the accompanying drawings, I have illustrated my adapter housing as applied to a thin glass door and it will be noted from Fig. 13 that said door, indicated at 55, is provided with a hole 56 which extends inwardly from its free edge and conforms to the exterior shape of the wall 30 on the outer plate 26.

The procedure for installing the housing and cylindrical lock to the door 55 is as follows: The outer knob 12 and its shank are first removed from the outer sleeve of the latch operating unit 5 by releasing the outer knob shank retainer 14. The threaded portion 16 of said sleeve 10 is then threaded into the bushing 43 in the outer plate 26 by rotating the entire latch operating unit until the center of the case 8 of said unit is in a position wherein it will lie on a vertical plane extending through the center of the door. The outer knob shank is then replaced and secured in position by the retainer 14 which is accessible through the space between the side of the case 8 and the bottom of the recess 38. The latch unit 6 is then inserted through the opening 34 in the frame on the outer plate until the face plate 19 thereon is disposed within said opening and its inner surface is in engagement with the pins 35—35 extending thereacross. Suitable screws 57—57 are then inserted through the holes provided in the face plate and are threaded into horizontally disposed U-shaped clamping bars 58—58 having legs 59—59 with tapered inner cam surfaces 60—60. Said screws 57—57 are, at this point, merely started into the threaded holes in the clamping bars 58—58 so that the ends of the legs 59—59 of said bars will be disposed inwardly of their respective bosses 42 and 53. The face plate is manually urged against the pins 35—35 to retain the latch unit in proper position to receive the backset extension 7 which is then inserted into proper position between the latch unit and the operating unit and is secured thereto in the conventional manner as clearly illustrated in Figs. 11 and 13.

The inner knob 11 and its shank are then removed from the inner sleeve 9 by releasing the inner knob shank retainer 13. The outer plate, which then carries the operating unit, the backset extension and the latch unit is positioned against the outer surface of the door 55 by inserting the wall 30 into the opening 56 in said door.

The inner plate 27 is then passed over the inner sleeve 9 and the wall 48 thereon passed over the case 8 of the operating unit and inserted into the circular portion 31 of the wall 30 on the outer plate. At the same time, the notch 54 in the outer end of said plate will receive the frame 33 on the outer end of the outer plate 26 and the bosses 53—53 on said inner plate will enter between the side walls 32—32 of the wall on said outer plate to properly locate the outer end of the plate 27 relatively to the outer plate 26. The said inner plate is moved into engagement with the door and an escutcheon plate 61 is placed over the inner sleeve 9 and against the outer surface of the inner plate as illustrated in Fig. 11. Said escutcheon plate 61 has a configuration identical to the boss 36 on the outer plate and is provided with a centrally disposed opening 62 which rotatably receives a bushing 63 similar to the bushing 43. Said bushing 63 is threaded to the threaded portion 15 of the inner sleeve 9 and is adapted to clamp the escutcheon plate 61 against the inner plate 27 whereby said inner plate is clamped securely against the inner surface of the door and the outer plate is drawn securely against the outer surface

of the door through the tension applied through the latch operating unit.

In order to secure the latch unit in the housing and to securely clamp the inner and outer plates against the door at their outer ends, the screws **57—57** are rotated thereby causing the tapered surfaces **60—60** on the legs of the clamping bars **58** to move into engagement with the tapered surfaces **42–*b*** and **53–*b*** on their respective bosses **42** and **53**. It will be understood that by tightening the screws **57—57**, the face plate of the latch unit is urged securely against the pins **35—35** and, at the same time, the inner and outer plates are cammed tightly against the surfaces of the door.

After the housing has been assembled to the door as above described, the inner knob **11** and its shank are assembled to the latch operating unit to thereby complete the installation.

If desired, suitable inserts **64—64** of a plastic or other soft material may be placed between the plates **26** and **27** and the surface of the door to avoid a metal to glass contact.

It will be noted, particularly from Fig. 11, that the pads **39** and **50** on the outer plate **26** and the inner plate **27**, respectively, serve to retain the backset extension centrally of the housing and that the bosses **40** and **51** locate the latch unit and the backset extension in a similar position. The fingers **41—41** and **52—52** on said bosses **40** and **51** prevent vertical movement of the latch unit and the backset extension to thereby retain them in proper alignment. It will be further noted, particularly from Figs. 11 and 13, that the lugs **49—49** on the inner plate **27** project into and engage the sides of the notch **24** in the case of the operating unit to prevent rotation of said unit should an undue torque be applied to either of the knobs **11** or **12**.

The circular portion **31** of the wall on the outer plate **26** prevents withdrawal of the housing from the edge of the door through the engagement thereof with the sides of the opening **56** in the door **55** to thereby provide the required degree of security. The wall **30** and the wall **48** telescopically received by the portion **31** thereof also conceal the parts of the door lock from view when the unit is used on a glass door thereby enhancing the appearance of the installation.

It will thus be seen that the present invention provides a housing for supporting a cylindrical door lock upon a thin glass door which is attractive in appearance, durable in construction and simple to install.

I claim:

1. For a cylindrical door lock including a latch operating unit and a latch unit, said operating unit including a case having sleeves extending co-axially from the opposite sides thereof; an adapter housing for mounting said door lock on a door that is thinner than the said case, the said adapter housing including an inner and an outer plate which are adapted to be disposed at the opposite sides of the door and each of which contains a recess in its face to provide a space between the plates which is greater than the thickness of the door to accommodate the casing of the operating unit, means on said plates for positioning the latch unit therebetween in operative relation with the mechanism contained within said case, means on the outer plate cooperating with said outer sleeve for securing the plate thereto, and means cooperating with the inner sleeve for urging the inner plate against the door to thereby draw the outer plate into clamping position through tension applied to the operating unit.

2. For a cylindrical door lock including a latch operating unit and a latch unit having a face plate, said operating unit including a case having an inner and an outer sleeve extending co-axially therefrom; an adapter housing for mounting said door lock on a door that is thinner than said case, the said adapter housing including an inner and an outer plate which are adapted to be disposed at opposite sides of the door and each of which contains a recess in its face providing a space between the plates which is greater than the thickness of the door to accommodate the case of the operating unit, means cooperating with said sleeves for supporting said operating unit with the case thereof between said plates and for urging the inner ends of said plates against the door, means on said plates for positioning the latch unit therebetween in operative relation with the mechanism contained within the case of the operating unit, and separate means for drawing the outer ends of said plates towards each other into clamping engagement with the opposite sides of the door.

3. The subject matter set forth in claim 2 wherein said separate means for drawing the outer ends of the plates towards each other include cam means on each plate, a clamping bar having cam means thereon engageable with the cam means on said plates, and means for urging said cam means on the clamping bar into engagement with the cam means on said plates for drawing the plates against the opposite sides of the door.

4. The subject matter set forth in claim 2 wherein said separate means includes cam means on each of said plates, a clamping bar having cam means thereon engageable with the cam means on said plates, abutment means on at least one of said plates engageable by a portion of the latch unit, and a screw member projecting through a hole in the face plate of the latch unit and threaded to said clamping bar for drawing the cam means thereon into engagement with the cam means on said plate.

5. For a cylindrical door lock including an operating unit and a latch unit, said operating unit having a case within an inner and an outer sleeve extending co-axially therefrom; an adapter housing for mounting said door lock on a door that is thinner than said case, the said adapter housing including an inner and an outer plate each of which contains a recess in its face defining a flange therearound adapted to abut the surface of the door, a wall extending perpendicularly from the bottom of the recess in the outer plate, a wall extending perpendicularly from the bottom of the recess in the inner plate and fitting telescopically a portion of the wall on the outer plate to provide a closed chamber for containing the case of the operating unit, means on said outer plate for securing it to the said outer sleeve, means connected to the inner sleeve for urging the inner plate against the door whereby the outer plate is urged against the door through the tension applied through the operating unit, and means on said plates for securing the latch unit therebetween in operative position relatively to the mechanism in the case of the operating unit.

6. The subject matter set forth in claim 5 including separate means between said plates, accessible only when the door with the said adapter housing thereon is in open position, for drawing the said plates together into clamping position against the portions of the opposite faces of the door near the edge thereof.

7. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a case; an adapter housing for mounting said door lock on a door that is thinner than the case, said adapter housing including an inner and an outer plate each of which contains a recess in its face to provide a space between said plates which is greater than the thickness of the door and is adapted to accommodate the case of the operating unit, means cooperating with said operating unit for securing it to said housing with the case thereof between said plates and for urging the inner ends of said plates against the opposite sides of the door, and separate means securing the latch unit to the said housing and drawing the outer portions of said plates toward each other to clamp them to the door.

8. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a case having an inner and an outer sleeve extending co-axially from opposite sides thereof; an adapter housing for mounting said door lock on a door that is thinner

than the case, said housing including an inner and an outer plate each of which contains a recess in its face to provide a space between said plates that is adapted to accommodate the case of the operating unit, the said plates having co-axial openings extending therethrough adjacent their inner ends to receive said sleeves, means cooperating with said sleeves for securing said operating unit in position within said housing and for clamping the inner ends of the plates to the door, and separate means securing the latch unit to said housing and clamping the outer ends of the plates to the door.

9. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a case having an inner and an outer sleeve extending co-axially therefrom; an adapter housing for mounting said door lock on a door that is thinner than the case, said adapter housing including an inner and an outer plate having co-axial openings therein to receive said sleeves and each plate containing a recess in its face providing a space between said plates which is greater than the thickness of the door and is adapted to accommodate the case of the operating unit, means between said outer plate and the outer sleeve securing the operating unit to the outer plate, means on each of said plates co-axial with said openings for aligning the plates and containing the case of the operating unit, means for securing the latch unit between said plates and in operative position relatively to the operating mechanism in said case, and means cooperating with a threaded portion on the inner sleeve for urging the inner plate against the door to thereby force both of said plates securely against the opposite sides of the door through tension applied to the operating unit.

10. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a case; an adapter housing for mounting said door lock on a door that is thinner than the case and is provided with an opening therein to receive said case, said adapter housing including an inner and an outer plate each of which contains a recess in its face providing a space between said plates which is greater than the thickness of the door and is adapted to accommodate the case, means for securing the case to said housing and clamping the plates against the opposite sides of the door, separate means for securing the latch unit to the housing and clamping said plates to the opposite sides of the door, and a wall extending perpendicularly from at least one of said plates and conforming with the shape of the opening in said door for preventing displacement of the housing relatively thereto.

11. The subject matter set forth in claim 10 wherein the wall has an enlarged portion fitting within a correspondingly formed portion of the opening in the door to prevent movement of the housing relatively thereto.

12. The subject matter set forth in claim 10 wherein said wall overlies the marginal edge portions of the opening in the door.

13. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a case; an adapter housing for mounting said door lock on a door that is thinner than the case, said adapter housing including an inner and an outer plate each of which contains a recess in its face to provide a space between said plates which is greater than the thickness of the door and is adapted to accommodate the case of the operating unit, one of said plates having a wall extending perpendicularly therefrom and adapted to extend into an opening in said door to prevent movement of the housing relatively thereto, the other of said plates having a wall portion telescoping with a portion of the wall on the first-mentioned plate, the said telescoping wall portions enclosing the lock case, means for securing said lock case within said housing and clamping the plates to the opposite sides of the door, and separate means for securing the latch unit within said housing and clamping the outer ends of said plates to the opposite sides of the door.

14. For a cylindrical door lock including an operating unit and a latch unit, said operating unit including a case having an inner and an outer sleeve extending co-axially from opposite ends thereof; an adapter housing for mounting said door lock on a door, the said housing including an inner and an outer plate, the outer plate having an opening therein for receiving the outer sleeve, means securing said outer sleeve to the outer plate, a wall extending perpendicularly from the inner face of the outer plate, the said inner plate having an opening extending therethrough and a wall to receive the said case surrounding said opening and telescoping with the wall of the outer plate, an escutcheon plate covering the opening in the inner plate and having an opening therein co-axial with the opening in the outer plate, means threaded to the inner sleeve for securing the said escutcheon plate against the inner plate and drawing said inner and outer plates together into clamping position against the opposite faces of the door, and separate means for securing the latch unit within said housing in operative position relatively to an operating mechanism within the lock case.

15. The subject matter set forth in claim 14 including projections extending from the face of the inner plate adjacent the opening therein and engaging the case for preventing rotation thereof within the housing.

16. For a cylindrical door lock including an operating unit and a latch unit, the said operating unit including a cylindrical case having an inner and an outer sleeve extending co-axially from opposite ends thereof; an adapter housing for mounting said door lock on a door that is thinner than the case, said adapter housing including an inner and an outer plate each of which contains a recess in its face providing a space between said plates which is greater than the thickness of the door and is adapted to accommodate the said case, means cooperating with said sleeves for clamping the plates to the opposite sides of the door and thereby securing the housing to the door and the said case within the housing, and a projection on at least one of said plates in engagement with said case for preventing rotation thereof within the housing.

17. For a cylindrical door lock including an operating unit and a latch unit having a face plate, said operating unit having a case with an inner and an outer sleeve extending co-axially from the opposite sides thereof; an adapter housing for mounting said door lock on a door, said adapter housing including an inner and an outer plate having co-axial openings therein to receive said sleeves, means cooperating with said sleeves for clamping said plates against opposite sides of the door with the lock case contained therebetween, one of said plates having a perpendicular frame extending therefrom toward the other plate and slidably fitting within a notch in said other plate to permit adjustment between said plates for accommodating variations in the thickness of doors between the plates, the said frame having an opening therein to receive the face plate of said latch unit, and means for securing said face plate in said frame and clamping the inner and outer plates to the opposite sides of the door.

18. The subject matter set forth in claim 17 wherein the securing means for the face plate include bosses projecting from the opposed faces of the inner and outer plates and having cam surfaces thereon, a clamping bar having cam surfaces cooperating with the cam surfaces on said bosses for drawing the inner and outer plates toward each other for clamping them against the opposite sides of the door, and screws extending through the face plate and threaded to said clamping bar for drawing it into clamping position and securing the face plate to the perpendicular extension.

19. The subject matter set forth in claim 17 wherein the second mentioned clamping means includes two pairs of bosses extending toward each other from the inner and outer plates and located at opposite sides of the latch unit, each of said bosses having a cam surface thereon, a clamping bar between each pair of said bosses having

surfaces cooperating with the cam surfaces on the bosses for drawing the plates into clamped position, and screw members extending through the face plate at opposite sides of the latch unit and each threaded to one of said bars for drawing them into clamping position.

20. The subject matter set forth in claim 17 including pin members extending across the opening in said frame and providing an abutment for the face plate of the latch unit.

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