Nov. 7, 1939. P. T. WEBB ET AL 2,179,441

DOOR LATCH AND CATCH

Filed Feb. 17, 1937 2 Sheets-Sheet 1

Fig. 1.

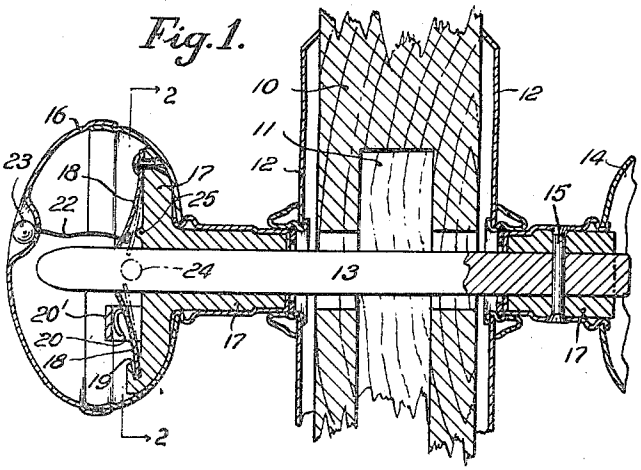
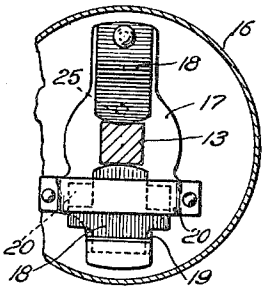


Fig. 2.



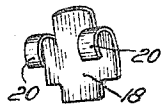


Fig. 3.

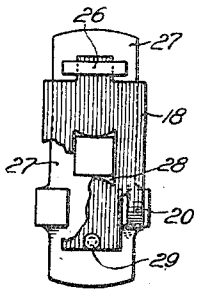


Fig. 5.

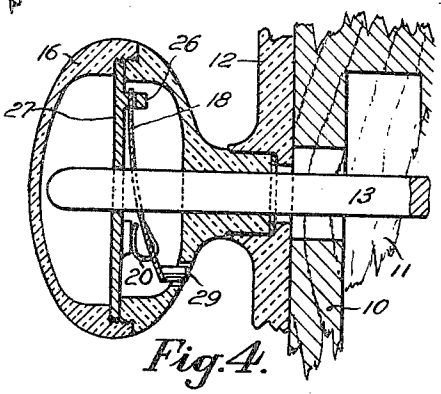


Fig. 4.

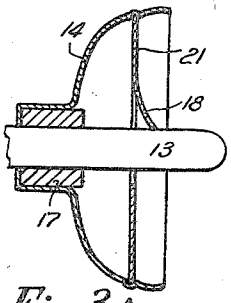


Fig. 3.A.

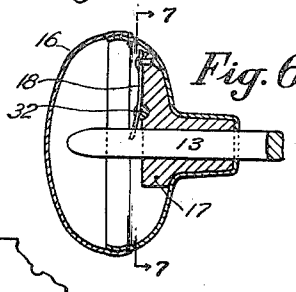


Fig. 6.

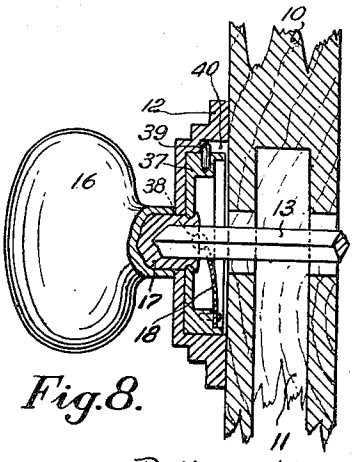


Fig. 8.

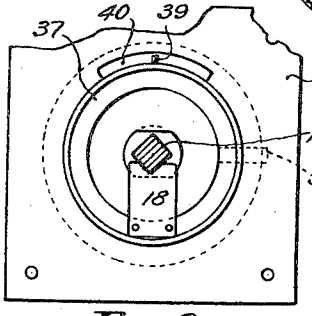


Fig. 9.

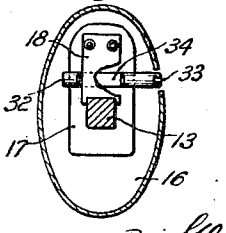


Fig. 7.

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DOOR LATCH AND CATCH

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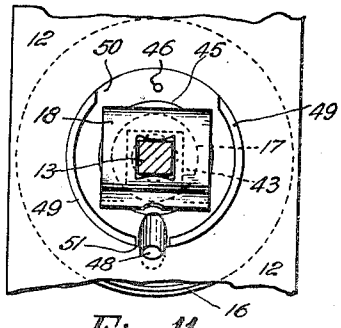


Fig. 11.

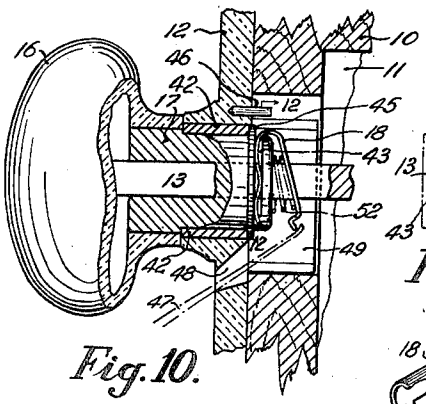


Fig. 10.

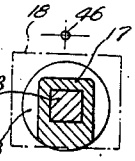


Fig. 12.

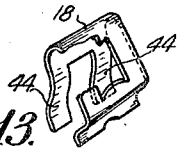


Fig. 13.

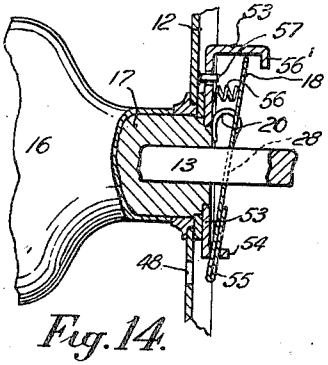


Fig. 14.

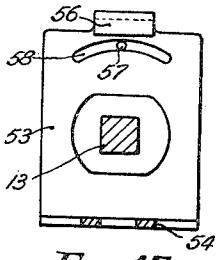


Fig. 15.

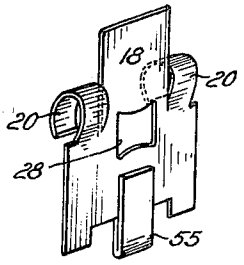


Fig. 16.

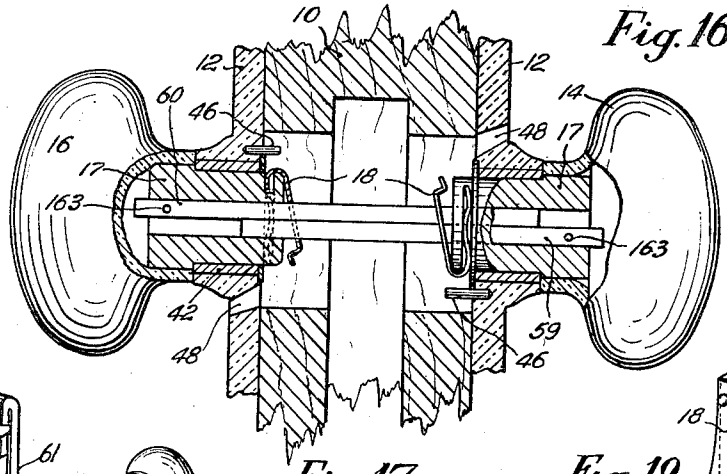


Fig. 17.

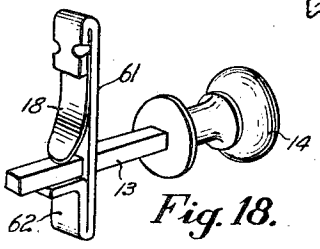


Fig. 18.

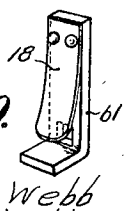


Fig. 19.

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UNITED STATES PATENT OFFICE

2,179,441

DOOR LATCH AND CATCH

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Ashburton, Australia

Application February 17, 1937, Serial No. 126,263
In Australia February 18, 1936

18 Claims. (Cl. 292—353)

This invention relates to improvements in and connected with knob attaching devices.

In door latches each knob or handle is usually fitted to the adjacent projecting end of a non-circular spindle by means of a small screw which passes transversely through the reduced inner end of the knob into a screwed hole provided in said spindle. A series of such screwed holes is usually provided in one or both ends of the spindle in order to enable the knobs or handles to be secured in such positions on the spindle as to minimize endwise movement thereof with respect to the door. As, however, the aforesaid screwed holes require to be spaced a certain minimum distance apart, it is not usually possible to eliminate undesirable endwise movement. Furthermore, even if, as initially fitted, the spindle is incapable of material endwise movement, this condition may subsequently arise as a result of wear or of shrinkage in the wooden stile of the door.

Furthermore such attachment screws sometimes become loose and fall out, and furthermore they are inconvenient to insert in position because of their small size.

Now, the prime object of the present invention is to provide improved means for attaching knobs, handles, levers or other like members to the operating spindles of door and cupboard latches of the general character above referred to.

The invention broadly resides in a latch or the like having a spindle on which an operating member, such as a knob, handle or arm, is slidably but non-rotatably mounted, a gripping member arranged at an angle to the plane of rotation of the operating member, means connecting said gripping member adjacent one of its ends with the operating member, said gripping member at a position spaced from said end thereof being engageable with the surface of the spindle whereby, when said operating member is pushed on to the spindle, the gripping member is automatically displaced to facilitate such movement, whereas, when pressure is applied in the opposite direction to said operating member, the gripping member will bear tightly against the spindle and thereby resist outward movement of the operating member. When, however, it is desired to impart a reverse movement to the operating member, this may be accomplished after the gripping member has been manually displaced to relieve the binding action.

More particularly one form of the invention comprises a knob, a spindle of non-circular shape in cross section, an axial hole in the inner end of the knob to receive the end of the said spindle, a gripping member comprising a resilient plate of double formation having its free ends opposed to each other, said gripping member having its opposed inner faces substantially spaced from each other and disposed at an acute angle and means connecting the outer portion of the gripping member to the inner end of the knob, the inner portion of the gripping member having an aperture through which the spindle extends, and a portion of the edge defining said aperture being disposed in contact with the surface of the spindle.

Alternatively the said inner and outer portions of the gripping member may be formed separately and hingedly connected together.

A cupboard catch in accordance with the invention comprises a non-circular spindle having a hand grip secured to one end thereof, an arm slidably but non-rotatively mounted on the spindle and a resilient gripping member having its outer end secured to the rear face of the arm adjacent its free end, said gripping member being arranged at an acute angle to the plane of the arm and having its free end arranged to bear against the adjacent portion of the spindle.

In the drawings in which illustrative forms of the invention are shown:

Figure 1 is a view in sectional end elevation of a door stile and knob mounting in accordance with the invention;

Figure 2 is a view in sectional elevation taken on the line 2—2 of Figure 1;

Figure 3 is a perspective view of a detail embodied in the construction shown in Figures 1 and 2.

Figure 3A is a view in sectional elevation of a knob and associated parts and shows an alternative arrangement of the gripping member.

Figure 4 is a view in sectional elevation of a knob and associated parts fitted with a modified form of gripping member.

Figure 5 is a view in end elevation of the gripping member and carrier plate shown in Figure 4.

Figure 6 is a view in sectional elevation of a knob incorporating a further modification.

Figure 7 is a view in sectional end elevation taken on the line 7—7 of Figure 6.

Figure 8 is a view in sectional elevation of a knob and associated parts and shows a still further modification.

Figure 9 is a view in end elevation of the construction shown in Figure 8.

Figure 10 is a view similar to Figure 8 and shows an alternative form of gripping member.

Figure 11 is a fragmentary view in end elevation looking from the right of Figure 10.

Figure 12 is a fragmentary view in sectional end elevation taken on the line 12—12 of Figure 10.

Figure 13 is a view in perspective of the gripping member shown in Figures 10 and 11, portion of said gripping member being broken away for convenience in illustration.

Figure 14 is a sectional view generally similar to Figure 10 and shows a modified form of gripping member and support therefor.

Figure 15 is a view in end elevation of the supporting plate, for the gripping member, shown in Figure 14.

Figure 16 is a view in perspective of the gripping member shown in Figure 14.

Figure 17 is a view in sectional end elevation of a door stile and knob mounting and shows another modification.

Figure 18 is a view in perspective of a catch for a cupboard door or the like; and

Figure 19 is a view in perspective showing a slight modification of the arm shown in Figure 18.

In the various figures of the drawings, like reference numerals are employed to designate the same or corresponding parts.

Referring now to Figures 1 and 2 of the drawings, the reference numeral 10 designates the latching stile of a door said stile being provided with the usual mortice 11 for the accommodation of the usual latch casing (not shown).

A rose plate 12 is suitably secured to each face of the stile 10 and an oscillatable spindle 13 of non-circular cross-sectional shape extends transversely therethrough and through the latch casing.

The right hand end of the spindle 13 has a knob 14 secured thereto in any convenient manner as for example by a transverse rivet 15.

A similar knob 16 fitted to the left-hand end of the spindle 13 is rigidly fitted with an insert 17 formed within an axial hole of such shape as to neatly receive said spindle the adjacent end of which is of reduced size.

The outer portion of this insert is enlarged within the knob proper and is fitted with an opposed pair of radially disposed resilient gripping members 18 which may be conveniently formed of spring steel.

Each resilient gripping member 18 inclines outwardly (i. e. towards the outer end of the knob 16) from its radially outer end to its free inner end, which latter bears resiliently against the adjacent face of the square spindle 13. Thus each of said resilient gripping members is disposed at an acute angle to the plane of rotation of the knob 16.

The resilient gripping members 18 may be mounted in various ways. For example the upper gripping members shown in Figure 1 is riveted at its outer end to the insert 17 though it may be permanently or detachably secured thereto in any approved manner.

The modified gripping member 18 shown in the lower portion of the knob 16 in Figure 1 is shown also in Figure 3. The outer end of this gripping member has a tongue which is loosely received in a slot 19 in the insert 17 while the side portions at the inner part of said gripping member are turned outwardly to form resilient loops 20 which bear against the inner face of an abutment member 20' secured to said insert.

Before the knob 16 has been fitted to the spindle 13 the gripping members 18 occupy the positions shown in broken lines in Figure 1 and the free inner ends thereof extend slightly beyond the alignment of the adjacent sides of the hole for the spindle. When, however, the knob 16 is pushed onto the spindle, 13, the gripping members 18 are flexed into the positions shown in full lines in Figure 1 and the free inner ends thereof bear firmly against the adjacent flat faces of the spindle. If, now, the knob 16 is pulled in an endeavour to remove it from the spindle, the free ends of the gripping member firmly grip said spindle and prevent the removal of the knob. It will be clear, therefore, that, while the knob 16 may be readily pushed onto the spindle, it cannot be removed by pulling outwardly thereon unless a destructive force is applied.

Furthermore, it will be clear that the gripping members are effective to engage the spindle at all positions and thus endwise movement of the knobs and spindle in relation to the door may be obviated merely by pushing the knobs towards each other so as to take up such slackness as may exist.

In order to remove the knob 16 from the spindle, any convenient means may be employed for releasing the binding action of the gripping members 18. For example, as shown in the upper portion of the knob 16 in Figure 1, a wire 22 is attached to the gripping member 18 adjacent the free inner end thereof, said wire having its outer end fitted with a member 23 normally accommodated in an indentation in the outer surface of the knob. By pulling on this member 23 and the wire 22 connected thereto, the flexure of the gripping member 18 is increased and the binding action thereof is relieved.

Alternatively a hole 24 may be provided in the periphery of the knob and an implement may be inserted therethrough to prise the gripping member out of binding contact with the spindle 13. In such manner the lower member 18 may be released.

Preferably the free inner ends of the gripping members 18 are of convex form as shown in order to concentrate the binding pressure, though if desired such free ends may be flat, serrated or of any other suitable shape. Also the operative faces of the spindle 13 may be etched, roughened or serrated to enhance the binding action.

It will be evident that any desired number of gripping members 18 may be employed and that the same may be arranged in different planes.

Ordinarily, however, one such gripping member is sufficient as shown e. g. in Figure 6 and it will be evident that the knob 14 also may be detachably secured to the spindle by means of a gripping member, as 18, instead of being permanently secured thereto as previously described.

In cases where it is desirable to provide means to limit the inward movement of the gripping member, an abutment such as that shown at 25 in Figure 1 may be provided.

In the modification shown in Figure 3A the gripping member 18 is formed integrally with a metal disc 21 the periphery of which is pressed into a circumferential groove formed in the knob.

In the construction shown in Figures 4 and 5, the resilient gripping member 18 is in the form of a plate the upper end of which has a tongue which projects through a slot in a lug 26 formed on a carrier plate 27 secured diametrically within the knob 16.

The gripping member is formed with a central aperture 28 through which the spindle extends, the upper and lower edges of the aperture being

preferably of convex form as shown. The side portions of the free lower end of the gripping member are turned outwardly and upwardly to form resilient loops 20 which bear against abutments formed on the inner face of the carrier plate.

The central portion of the free lower end of the gripping member 18 is fitted with a stud 29 which is depressible through an opening in the inner end of the knob to relieve the binding action.

In this construction the gripping member 18 is inclined oppositely to the gripping members 18 shown in the preceding figures—that is to say, in Figure 4 the gripping member inclines downwardly and inwardly towards the inner end of the knob. Thus, when the knob is pushed on to the spindle, the gripping member is displaced against the action of the resilient loops 20 so that it approaches parallelism with the carrier plate 27 and enables the spindle 13 to freely enter the aperture 28 in said gripping member. When, however, an outward pull is exerted on the knob 16, the frictional resistance between the gripping member and the spindle 13 causes the obliquity of said gripping member to increase and impart a binding action to the spindle.

Figures 6 and 7 illustrate a further method of relieving the binding action of a gripping member of the type described with reference to Figures 1 and 2 of the drawings. In this construction a pin 32 is oscillatively mounted in a recess formed transversely in the face of the insert 17 and one end provided with a kerf 33 is exposed through a hole formed in the side of the knob 16.

The portion of the pin 32 between the gripping member 18 and the insert 17 is provided with a depressed flat face 34 which is normally disposed parallel to and clear of the adjacent portion of the gripping member. When, however, the pin is partially turned, the free inner end of the gripping member is moved outwards by the cam action of the central portion of said pin to relieve the binding action on the spindle 13 and permit of the ready removal of the knob 16.

Figures 8 and 9 show a modification in which the gripping member 18, instead of being arranged within the knob, is disposed at the inner side of a rose plate 12 adjacent to said knob.

The rose plate 12 is provided on its inner face with a circular recess in which a flanged disc 37 is oscillatively mounted. The knob 16 is provided with an insert 17 which extends through a hole in the rose plate and is non-rotatively secured as by riveting to the flanged disc 37.

A radially arranged resilient gripping member 18 is secured at its outer end to the periphery of the flanged disc while its free inner end is notched to bear against and exert a binding action on two adjacent sides of the surface of the spindle 13. The binding action may be relieved by inserting a suitable implement through holes 38 formed respectively in the flanged disc 37 and rose plate 12, said holes being in register when the knob is disposed in its normal position of rest.

In order to limit the angular movement of the knob 16 on each side of its normal position, and to facilitate the correct assembly of the parts, a pin 39 projects radially from the periphery of the flanged disc 37 and is accommodated within an arcuate slot 40 in the rose plate.

It will be evident that the opposite end of the spindle 13 may be detachably fitted with a knob in the manner shown in Figures 8 and 9 or alternatively said knob at the opposite end of the spindle may be non-detachably secured thereto in any convenient way, such as that shown at the right of Figure 1.

A modification of the construction shown in Figures 8 and 9 is illustrated in Figures 10 to 13 inclusive. In the construction shown in these figures an insert 17 provided in the knob 16 extends oscillatively through a bush 42 mounted in the rose plate 12 and the projecting inner end of the insert is formed with an external circumferentially extending slot 43 which is approximately of U-shape when viewed in end elevation (Figures 10 and 12).

The gripping member 18 in this construction is approximately of V-shape when viewed in side elevation (Figures 10 and 13) and the outer portion thereof is provided with a central slot thereby forming side members 44 adapted to enter the slot 43 in the insert 17. These side members 44 are preferably corrugated as shown whereby they will be frictionally retained in the slot 43. Also the side members may converge somewhat towards their lower ends whereby they will resiliently engage the bottom of the slot 43.

It will be understood, however, that the outer portion of the gripping member may be secured to the inner end of the knob 17 in any other convenient manner.

A washer 45 rotatable with the knob 16 may be mounted between the gripping member and the inner face of the rose plate 12 as shown and a pin 46 projecting inwardly from the rose plate co-operates with the gripping member by abutting thereagainst on turning of the knob to limit the movement of the knob and facilitate the proper assembly of the parts.

The binding action of the gripping member may be relieved by inserting a tool (shown in broken lines at 47) through a hole 48 provided in the rose plate below the reduced inner end of the knob.

An interrupted circular flange 49 is formed on the inner face of the rose plate 12 to ensure freedom of turning movement for the gripping member 18. This flange 49 is provided with a wide gap 50 at its upper end to permit of the attachment of the gripping member to the insert while a gap 51 is provided at the lower end to permit of the operation of the implement 47 for relieving the binding action of the gripping member.

A helical spring 52 (shown in broken lines in Figure 10) may be arranged between the diverging portions of the V-shaped gripping member 18 to increase the binding action thereof.

In the modification shown in Figures 14, 15 and 16, a supporting plate 53 is rigidly secured to the inner end of the insert 17 adjacent to the inner face of the rose plate. The lower end of this supporting plate is formed with an inwardly turned flange 54 provided with a slot through which projects a tongue 55 at the lower end of the gripping member 18.

The side portions of the upper part of the gripping member are turned outwards and downwards to form resilient loops 20 which bear against the adjacent inner face of the supporting plate 53.

The gripping member is formed with a central aperture 28 to receive the spindle 13. One or more coiled springs 56 may also be arranged between the supporting plate 53 and the gripping member 18.

By inserting an implement through a hole 48 in the rose plate and pushing inwardly on the tongue

55 of the gripping member, the latter is caused to rock on the supporting plate 53 and thus relieve the binding action on the spindle.

A lug 56' at the upper end of the supporting plate may be bent inwardly and downwardly as shown to form a stop to limit the obliquity of the gripping member 18.

Angular movement of the knob and spindle is limited by a stop pin 57 which projects inwards from the inner face of the rose plate and extends through an arcuate slot 58 in the supporting plate 53.

By employing springs as 56 in lieu of resilient loops as 23, the necessity for making the gripping member 18 from resilient material is avoided and it will be apparent that a similar construction may be used with other forms of the invention previously described.

In the construction shown in Figure 17 the spindle is formed in two longitudinally extending sections 59 and 60 each having one of the knobs 14 and 16 non-detachably secured thereto as by means of a pin 153. The inner end of the insert 17 in each knob is fitted with a resilient gripping member 18 of the form shown in Figures 10 and 13.

Figure 18 shows one form of cupboard catch in accordance with the invention, said catch embodying a square spindle 13 having a handgrip in the form of a knob 14 permanently secured to one end thereof.

A latching arm 61 provided with a square hole near one end thereof is slidably mounted on the spindle and has one end 62 thereof bent upwards and inwards to lie against the adjacent face of the spindle.

A gripping member 18 of spring steel has its outer end clamped between the doubled end of the latching arm 61 while its free inner end is arranged to bear against and exert a binding action on the adjacent face of the spindle. It will be clear that the latching arm may be readily pushed onto the spindle but that it cannot be removed therefrom unless the binding action of the gripping member is relieved.

The latching arm 61 may be of L shape as shown in Figure 19 and the outer end of the gripping member is suitably secured thereto.

It will be clear that, in lieu of employing a gripping member 18 of the form illustrated in Figures 18 and 19, an apertured plate substantially of the form illustrated in Figure 10 or 14 may be used on a latching arm as 61.

We claim:

1. In a device of the class described, a spindle of non-circular shape in cross section, an operating member such as a knob or handle having a hole to slidably but non-rotatively receive said spindle and also having a circumferentially extending slot at the inner end thereof, a rose plate having the inner end of said operating member extending oscillatively therethrough, a gripping member arranged substantially transversely of the spindle adjacent the inner face of the rose plate, said gripping member comprising a strip of resilient material which is doubled to form an approximate V-shape, means frictionally engaging the slot for connecting the portion of the gripping member adjacent the rose plate to the operating member, the portion of said gripping member remote from said rose plate being disposed at an angle to the plane of rotation, said last mentioned portion of the gripping member having an aperture through which the spindle passes, whereby a portion of the edge defining said aperture bears resiliently against the surface of the spindle.

2. A device according to claim 1, substantially parallel spaced elements on the portion of the gripping member adjacent the rose plate, said elements being curved when viewed in side elevation and said elements being slidably received and frictionally retained in the circumferentially extending slot formed in the inner end of the operating member, the bottom of said slot being of non-circular form in cross section whereby the gripping member is constrained to move angularly with the said operating member.

3. In combination, a rose plate having an opening therein, an oscillatable operating member such as a knob having a portion thereof extending through the opening in said rose plate, a spindle non-rotatively receivable within the inner end of the operating member, a gripping member arranged at the inner side of said rose plate, said gripping member being disposed at an angle to the plane of rotation of the operating member, one portion of said gripping member being connected to the operating member, another portion of said gripping member being arranged to frictionally engage the surface of said spindle and means for normally retaining the operating member to the rose plate independently of interengagement between said gripping member and said spindle.

4. In a combination according to claim 3, a supporting member arranged at the inner side of the rose plate, means securing said supporting member to the adjacent portion of the operating member, said supporting member being larger than said opening in the rose plate, and said gripping member being connected at one end to the supporting member.

5. A combination according to claim 3 wherein the gripping member comprises a plate arranged approximately radially of the rose plate and spindle, the outer end of said plate being hingedly connected to said operating member.

6. In combination, a rose plate, an oscillatable operating member such as a knob mounted in said rose plate, a spindle of non-circular shape in cross-section receivable within the inner end of the operating member, a gripping member arranged at the inner side of said rose plate, said gripping member being disposed at an angle to the plane of rotation of the operating member, one portion of said gripping member being connected to the operating member and another portion of said gripping member being arranged to frictionally engage the surface of said spindle and means on the inner face of said rose plate for limiting the angular movement of the operating member with respect thereto.

7. In a device of the class described, a spindle, an operating member such as a knob or arm slidably but non-rotatively mounted on the spindle, a gripping member disposed at an angle to the plane of rotation of the operating member and arranged substantially radially of the operating member and the spindle, means connecting an outer portion of the gripping member with the operating member, an abutment rigidly associated with the operating member, a resilient looped element on said gripping member for engagement with the abutment and an edge on the gripping member arranged to bear resiliently against the surface of the spindle.

8. In a device of the class described, a spindle, an operating member such as a knob or arm slidably but non-rotatively mounted on the shank,

a gripping member disposed at an angle to the plane of rotation of the operating member and arranged substantially radially of the operating member and the spindle, means connecting an outer portion of the gripping member with the operating member, an edge on the gripping member arranged to bear resiliently against the surface of the spindle, a member extending transversely of the gripping member at a position spaced from said connecting means, means for angularly moving said transversely extending member about its axis and a lifting cam on said transversely extending member in alignment with the gripping member whereby, when a partial turn is imparted to said member, the gripping member will be displaced by the cam to relieve the binding action thereof.

9. In a device of the class described, a spindle of non-circular shape in cross-section, an operating member such as a knob or handle having a hole to slidably but non-rotatively receive said spindle, a rose plate having the inner end of said operating member extending oscillatively therethrough, a gripping member arranged adjacent the inner face of the rose plate, said gripping member comprising a doubled strip of resilient material disposed approximately transversely of the spindle the outer portion of said doubled strip being rigidly associated with the inner end of said operating member, the inner portion of said doubled strip being disposed at an angle to the plane of rotation, an edge of said inner portion adjacent to the free end thereof being frictionally engageable with the surface of the spindle, and guard means projecting from the inner face of said rose plate to ensure freedom of turning movement for said gripping member.

10. In combination, a spindle, an operating member such as a knob or arm slidably but non-rotatively mounted on said spindle, a gripping member disposed substantially radially of the spindle, said gripping member comprising a resilient strip of doubled formation having its opposed inner faces substantially spaced from each other, means securing one of the opposed portions of said gripping member to the said operating member and the other opposed portion thereof having an aperture through which the spindle extends, a portion of the edge defining said aperture being frictionally engageable with the surface of the spindle.

11. In combination, a rose plate, an operating member such as a knob, having its inner end extending oscillatively through the rose plate, a spindle slidably but non-rotatively receivable within the inner end of the operating member, a supporting member secured to the operating member at the inner side of said rose plate, a gripping member disposed substantially radially of the spindle, the outer end of said gripping member being hingedly mounted on said supporting member, an edge on the gripping member arranged for frictional engagement with the surface of the shank, resilient means maintaining engagement between said gripping member and said spindle, and means on said rose plate for limiting angular movement of said operating member with respect thereto.

12. Means according to claim 3 in which the gripping member comprises a strip of resilient material bent transversely to form a spindle engaging portion and a connecting portion, said spindle engaging portion having an aperture through which the said spindle extends, and means securing said connecting portion to the operating member.

13. A combination according to claim 3, wherein the gripping member is of larger size than said opening in the rose plate so that said gripping member retains the operating member to the rose plate.

14. In combination, a rose plate, an operating member having a reduced portion thereof extending oscillatively through the rose plate, a spindle slidably but non-rotatively receivable within the inner end of the operating member, a gripping member arranged approximately radially at the inner side of the rose plate, said gripping member comprising a doubled strip of resilient material disposed approximately transversely of the spindle and located adjacent to the inner face of the rose plate, the outer portion of said doubled strip having spaced elements slidably received in a slot in said operating member, the inner portion of said double strip being disposed at an angle to the plane of rotation and an edge of said inner portion adjacent the free end thereof being frictionally engageable with the surface of the spindle.

15. Attachment means comprising a rose plate, an oscillatable operating member such as a knob mounted in said rose plate, a spindle non-rotatively receivable within the inner end of the operating member, a gripping member arranged at the inner side of said rose plate, said gripping member being disposed at an angle to the plane of rotation of the operating member, one portion of said gripping member being connected to the operating member, another portion of said gripping member being arranged to frictionally engage the surface of said spindle, and guard means projecting from the inner face of the rose plate to ensure freedom of turning movement for the said gripping member.

16. In combination, a rose plate, an operating member such as a knob, the inner end of said operating member extending oscillatively through a hole in the said rose plate, a spindle slidably but non-rotatively received within the inner end of the operating member, a circumferentially extending slot in the said operating member at the inner side of the rose plate, a gripping member comprising a substantially doubled strip of resilient material, said gripping member being arranged approximately radially of the spindle, spaced side members integral with the outer portion of the gripping member, said side members being receivable within said circumferentially extending slot in the operating member, the inner portion of said gripping member being disposed at an angle to the plane of rotation of the operating member and having an aperture therein through which the spindle extends.

17. In combination, a rose plate having an opening therein, an operating member having a reduced inner end extending oscillatively through the said opening, a spindle extending non-rotatively into the reduced inner end of the operating member, a disc oscillatively accommodated within a recess formed in the inner face of the rose plate, means securing said disc to the inner end of said operating member, cooperating means on said rose plate and said disc to limit the angular movement of the latter, a substantially radially disposed strip of resilient material arranged at a small angle to the plane of rotation of the operating member, said resilient strip having its outer portion secured to the said disc

and an inner portion thereof in frictional engagement with the surface of the spindle.

18. In combination, a rose plate having an opening therein, an operating member having a reduced inner end extending oscillatively through the said opening, a spindle extending non-rotatively into the reduced inner end of the operating member, a supporting member secured to the operating member at the inner side of the rose plate, an inwardly extending element on said supporting member, a gripping member disposed approximately transversely of the spindle, one end of said gripping member being hingedly mounted on said inwardly extending element on the supporting member, said gripping member being formed with an aperture through which the said spindle extends, and resilient means tending to impart angular movement to said gripping member whereby a portion of the edge defining the aperture therein frictionally engages the surface of the spindle.

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