

Nov. 6, 1945.

C. A. SCHAEFER

2,388,342

ELECTRIC SWITCH

Filed May 6, 1943

2 Sheets-Sheet 1

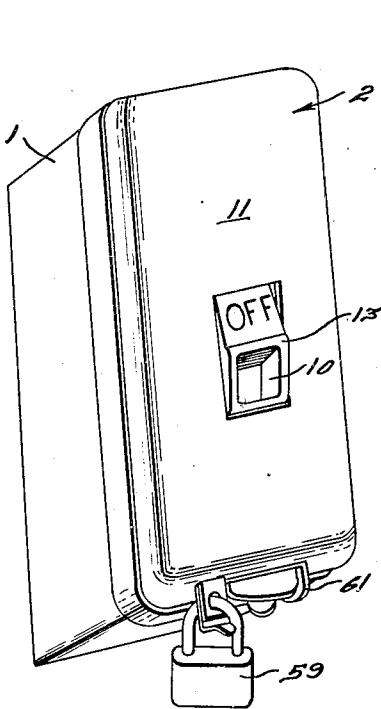


FIG. 1.

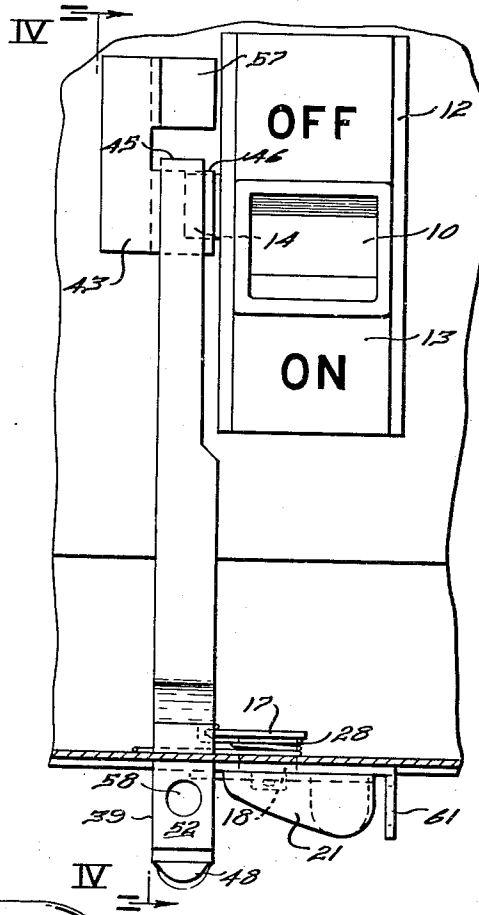


FIG. 3.

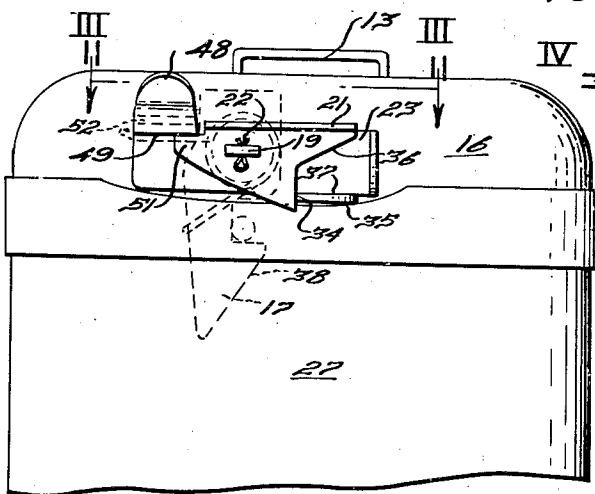


FIG. 2.

BY

INVENTOR
Carl A. Schaefer
Myron J. Seibold
ATTORNEY

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C. A. SCHAEFER

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2 Sheets-Sheet 2

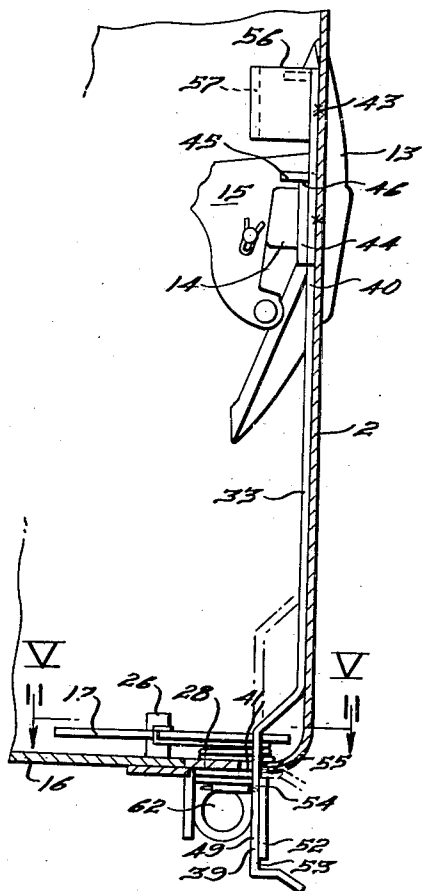


FIG. 4.

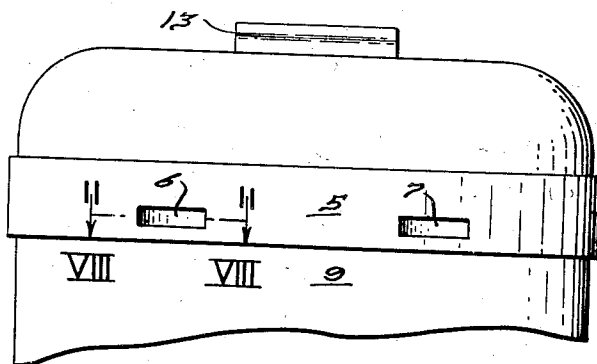


FIG. 7.

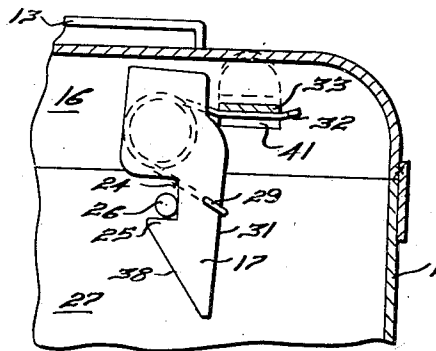


FIG. 5.

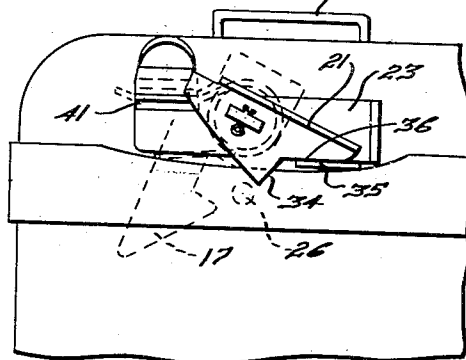


FIG. 6.



FIG. 3.

BY

INVENTOR
Carl H. Schaefer
Raymond J. Seibold
ATTORNEY

UNITED STATES PATENT OFFICE

2,388,342

ELECTRIC SWITCH

Carl A. Schaefer, Whitefish Bay, Wis., assignor
to Square D Company, Detroit, Mich., a corpo-
ration of Michigan

Application May 6, 1943, Serial No. 485,795

13 Claims. (Cl. 200—50)

This invention relates to electric switches and more particularly to electric switches enclosed within a housing having a movable cover.

One object of the present invention is to provide an enclosed switch having means for normally releasably holding the cover closed.

Another object of the present invention is to provide an enclosed switch wherein the cover cannot be opened while the switch is closed.

Another object of the present invention is to provide an enclosed electrical switch having an improved form of interlocking mechanism.

Another object of the present invention is to provide an enclosed switch wherein the interlocking mechanism includes means operative to move the switch handle to "off" position.

Another object of the present invention is to provide in an enclosed switch, latching means for releasably holding the cover to the enclosure and means operative on the latching means to prevent movement thereof, the latter means at the same time being operative to lock the operating handle in its "off" position.

Another object of the present invention is to provide an enclosed switch having means thereon adapted to support a padlock at a plurality of positions, the padlock when occupying a first position being effective to maintain the cover closed while permitting normal operation of the manual handle, and when mounted at a second position being adapted to lock the cover closed and the manual handle in "off" position.

Other objects and features of the invention will be readily apparent to those skilled in the art from the specification and appended drawings illustrating certain preferred embodiments in which:

Figure 1 is a perspective view of a switch cabinet embodying the improvements of the present invention.

Figure 2 is an elevational view of the lower end of the switch cabinet of Figure 1 and showing the latching means in cover locking position.

Figure 3 is a fragmentary sectional view taken on the line III—III of Figure 2.

Figure 4 is a fragmentary sectional view taken on the line IV—IV of Figure 3.

Figure 5 is a fragmentary sectional view taken along the line V—V of Figure 4 and showing the latching means which normally releasably maintain the cover closed.

Figure 6 is a view similar to Figure 2, but showing the latching means moved to unlocking posi-

tion wherein the cover may be moved to open position.

Figure 7 is an end elevational view of the switch cabinet but showing the end opposite to that illustrated in Figure 2.

Figure 8 is a fragmentary sectional view taken on the line VIII—VIII of Figure 7.

With reference to the drawings, the invention comprises a rectangular box-like sheet metal casing or cabinet 1 having a cover 2 cooperating therewith. The cover 2 is of a generally pan shape and is adapted to embrace the edges of the casing 1 and effect a close fit therewith. One end 5 of the cover 2 is pressed inwardly as at 6 and 7 to project into the cabinet 1, as seen in Figures 7 and 8, and the projections 6 and 7 are adapted to be fitted into corresponding depressions 8 provided near the top of upper wall 9 of the casing 1. Projections 6 and 7 fitting into depressions 8 prevent the cover 2 from being removed from the casing 1 with a rectilinear forward movement but rather the cover 2 must be rotated first about the pivots afforded by the projections 6 and 7 and their corresponding depressions 8 before the cover 2 can be completely removed from the casing 1. The top surface 11 of the cover 2 is provided with a rectangular opening 12, through which is adapted to extend an oscillating operating handle 13 of an electric switch which is not shown since it forms no part of this invention, but which may be of any type provided it utilizes an oscillating operating handle to effect the operation thereof. The operating handle 13 is formed of molded insulating material and is movable into two predetermined positions of rest to effect the operation of the electric switch, and has the outer surface thereof marked with the indicia "On" and "Off" to indicate whether the contacts of the electric switch to be controlled are in engaged or disengaged positions. The top surface of the operating handle 13 is provided with a recess 10 to provide for ease of manual movement of the handle between "on" and "off" positions. The handle 13 is so formed that but one of the indicia will be exposed to view at a time. Movement of the handle 13 counter-clockwise from the position of Figure 1 will carry the word "Off" out of sight and will bring the word "On" into view and thus the condition of the switch is readily apparent. The operating handle 13 has a projection 14 formed integral therewith and extending from a surface 15 disposed below the top surface of the cover 2, and which serves a purpose to be hereinafter fully described.

To normally releasably secure the cover 2 to casing 1, there is provided within the cover 2 and upon the lower end wall 16 thereof, a latching element 17. The latch 17 includes a cylindrical-shaped projection 18 which extends into an opening in the cover 2 to provide a pivotal mounting for the latch 17. A rectangular-shaped portion 19 extends from the face of the cylindrical projection 18. A releasing member 21 which serves as an actuator for the latch 17 is disposed at the exterior of the cover 2 and upon the lower end wall 16 thereof. The releasing member 21 is provided with a rectangular-shaped opening there-through which is adapted to receive the rectangular-shaped projection 19, which projection 19 effects a support for the actuating member 21. With this assembly, the actuating member 21 and the latch 17 will move as a unit so that application of force to the actuating member 21 to move it will effect movement of the latch 17. A cotter pin 22 is forced through an opening provided in the rectangular projection 19 and maintains the actuating member 21 and the latch 17 in assembled relationship and prevents their accidentally coming loose. A flanged member 23 is welded to the outside of the lower end wall 16 of cover 2 and spaces the actuating member 21 from the end wall 16 for a purpose to be hereinafter described. The latch 17 is formed in a generally hooked shape, being slotted as at 24 and having an ear 25. A pin or keeper 26 is fixed to wall 27 of casing 1 near the top edge thereof and is adapted to be received within the slot 24 of latch 17 and engages with ear 25 to secure the lower end of the cover 2 to wall 27. The upper end of the cover 2 is at the same time secured against movement and to wall 9 of the casing 1 by the reception of the projections 6 and 7 within depressions 8. Moving the actuating member 21 clockwise to effect rotation of the latch 17 to disengage the ear 25 from the pin 26 will permit the cover 2 to be readily detached from casing 1 for the cover 2 may then be rotated about the projections 6 and 7 and removed from the casing 1. A spring 28 is coiled about the cylindrical portion 18 of latch 17 and has one end 29 thereof bent about an edge 31 of the latch 17. The opposite end 32 of the spring 28 bears against a slidable member 33 whose use will be explained hereinafter. Spring 28 exerts its force to continually bias the latch 17 and the actuating member 21 carried thereby in a counterclockwise direction, as viewed in Figures 2 and 6, and movement of the latch 17 clockwise to disengage the ear 25 from the pin 26 will be made against the bias of spring 28, so that release of the actuating member 21 after actuation allows the spring force to come into effect to pivot both the actuating member 21 and latch 17 in a counter-clockwise direction. The actuating member 21 is provided with an edge 34 which is engageable with an edge of a flange 35 extending from the member 23 to limit the extent of counterclockwise movement of the actuating member 21 and the latch 17 when the cover 2 has been removed from the casing 1, engagement of latch 17 with pin 26 limits the extent of counter-clockwise movement of latch 17 and member 21 when the cover 2 is in position upon the casing 1. A second edge 36 provided on the actuating member 21 is engageable with a surface 37 of flange 35 when the actuating member 21 is moved in a clockwise direction and thus determines the extent of movement of the actuating member 21 and the latch

17 in that direction. Ear 25 is beveled as at 38 to provide an inclined surface along which the pin 26 slides when the cover 2 is being placed upon the casing 1. Thus, movement of the cover 2 relative to casing 1 effects a cam action, with the pin 26 rotating the latch 17 clockwise and against the bias of spring 28 until the slot 24 is provided adjacent the pin 26 whereupon the spring 28 exerts its force to pivot the latch 17 counterclockwise and to dispose ear 25 beneath pin 26 and thus automatically detachably lock the cover 2 closed.

An interlocking means is provided for the cabinet which locks the cover closed and maintains the operating handle in its "off" position for the interlocking means is adapted to engage and hold the operating handle and to act upon the cover releasing means comprising the actuating member 21 and the latch 17 to render it inoperative, and thus effect a situation where the cover 2 cannot be removed from the casing 1 without first disabling the interlocking means. The interlocking means comprises a slidable member 33 which is carried by the cover 2. An end 39 of the slidable member 33 extends through an opening 41 in the end 16 of cover 2 to the exterior thereof; the opposite end 40 is supported within the cover and lies alongside the edge 42 of opening 12 in cover 2. A member 43 is welded to the interior top surface of cover 2 and has a portion 44 bent therefrom and formed to present a surface spaced from and parallel to the top of the cover, the interior end 40 of the slidable member 33 is receivable within this space and lies upon member 44 which thus affords a support for the slidable member 33 within the cover 2. End 40 is downwardly bent as at 45 and is adapted to engage with an edge 46 on support 44 to limit the extent of movement of slidable member 33 outwardly from the cover 2. The opposite end 39 of the slidable member 33, which is disposed at the exterior of the cover 2, is bent upwardly as at 48 to provide a portion which can be easily grasped for effecting manual movement of the slidable member 33 inwardly and outwardly. Portion 48 is adapted to engage the outer surface of end wall 16 to limit the extent of inward movement of slidable member 33. The opening 41 and the support 44 which support the ends 39 and 40 of the slidable member 33 are so located relative to each other that the movements of the slidable member 33 into and out of the cover 2 will be substantially rectilinear. To render the actuating member 21 inoperative, the slidable member 33 is pulled outwardly so that a surface 49 thereon is presented above a projecting portion 51 extending from the actuating member 21. Surface 49 lying in the path of movement of actuating member 21 prevents its being rotated in a clockwise direction and thus prevents the rotation of the latching member 17, and the ear 25 of the latch 17 will remain in engagement with pin 26 to thereby retain the cover closed. When the slidable member 33 is actuated inwardly to occupy its innermost position, actuating member 21 will then be freely actuable for the slidable member will no longer be in an obstructing position. Member 23 spaces the actuating member a sufficient distance from the end wall 16 of cover 2 that the actuating member 21 can clear the outer surface of portion 48 of the slidable member 33 and thus can freely rotate. A rectangular piece 52 is secured by welding to the exterior end 39 of the slidable member 33 and upon the upper surface 53 thereof, and with the slidable member 33 in its innermost position the

piece 52 engages the inner surface of end wall 16 to prevent this member 33 accidentally moving out of the cover. The end 39 is formed as shown in Figure 4, to provide a portion 54 which is spaced from and parallel to the interior top surface of the cover 2. The portion 54 is adapted to pass through opening 41 in end wall 16 and the surface 53 thereof normally lies in engagement with the top edge 55 of this opening 41 due to the manner in which slidable member 33 is formed and assembled and due to the bias of spring 28. The opening 41 is of sufficient width to allow the ready passage of the slidable member 33 and of the rectangular piece 52 carried thereon. If the slidable member 33 were occupying its innermost position within the cover 2 and if it were desired to pull it out therefrom, it would be necessary first to press down on the end 39 to slightly bend or flex the slidable member 33 downwardly toward the bottom of the casing 1 to enable the piece 52 to clear the upper edge 55 of opening 41. After the slidable member 33 has been pulled out sufficiently to allow the piece 52 to pass completely through opening 41, the slidable member 33 will move bodily upwardly toward the plane of the top surface of cover 2, under its inherent resiliency and under the force exerted by the spring 28. This movement of the slidable member 33 upwardly will move the rectangular piece 52 above the upper edge 55 of opening 41 and then the slidable member 33 cannot be pushed into the cover 2 again until end 39 is again bent downwardly sufficiently to allow the top surface of piece 52 to clear edge 55 of opening 41. The piece 52 provides a desirable feature in that it lessens the possibility of accidentally moving the slidable member 33 into the cover 2 and thus prevents movement of the actuating member 21 at a time when it should be locked against movement. The slidable member 33 cannot occupy its outer position unless the operating handle 13 is in its "off" position, for if the handle 13 were in its "on" position and force were applied to the slidable member 33 to effect movement thereof, the downwardly extending piece 45 provided at the interior end 40 of the slidable member 33 would engage the projection 14 formed on the handle 13 and thus the projection 14 provides an obstruction in the path of movement of the slidable member 33, and this obstruction remains until the handle 13 is moved to "off" position whereby the projection 14 moves a sufficient distance that it no longer blocks extension 45 and the slidable member 33 will freely move to its outer position. With the slidable member 33 in its outermost position, the rectangular piece 52 will be disposed above the opening 41 and adjacent the outer surface of end wall 16, as described above, so that if it were desired to move the handle 13 back to "on" position it could not be accomplished because projection 14 of handle 13 will engage extension 45 and its movement will be halted thereby. Extension 45 will not be moved by the application of force on the handle 13 because of the engagement of piece 52 with end wall 16 which locks the slidable member 33 in its outermost position and thereby holds the extension 45 in an obstructing position. To effect return movement of the handle 13 back to "on" position, the slidable member 33 must be flexed sufficiently to carry piece 52 below edge 55 of opening 41, whereupon it can be pushed inwardly to carry extension 45 to a non-interfering position. Thus, when the slidable member 33 has been moved into its outermost position, the actuating member 21 cannot be op-

erated to move latch 17 to unlatching position and the cover 2 will be locked closed, but before the slidable member 33 can be moved to its outermost position the operating handle 13 must occupy its "off" position and when the slidable member 33 is in its outermost position the operating handle 13 cannot be moved to "on" position and will be locked "off."

It is evident from the arrangement of parts as described above that the operating handle 13 can be moved from "on" position to "off" position without applying manual force directly to the handle. This can be accomplished through the slidable member 33. If the handle 13 were in "on" position and the slidable member 33 were pulled outwardly, extension 45 thereon would engage projection 14 on handle 13 and would thereby move the handle 13 to perform a switching operation.

Means are provided in this invention to prevent the cover 2 being removed from the casing 1 while the operating handle is in "on" position. This means comprises an L-shaped flange 56 extending from member 43 welded to the top of cover 2. Leg 57 of the flange 56 is spaced from the top of the cover 2 and lies generally parallel thereto. With the handle 13 in the "on" position, projection 14 on the handle 13 will lie in the space between leg 57 and the top of cover 2 and removal of the cover 2 cannot be had for the projection 14 will engage leg 57 and thereby obstruct movement of the cover 2 to open position. If the handle 13 were moved to "off" position, projection 14 would then be moved from between leg 57 and the top of cover 2 and the cover could then be removed. This is a desirable safety feature in that the circuit must be broken before the cover 2 can be removed from the casing 1. Thus, the cover 2 can be held fast to the casing 1 even though the slidable member 33 is in its innermost position and the actuating member 21 is freely actuable.

As shown in Figures 1 and 3, the slidable member 33, is provided with an opening 58 which, when the slidable member 33 is in its outer position, is adapted to receive the shackle of a standard padlock 59, as shown in Figure 1. With the slidable member 33 in its outer position, the operating handle 13 will occupy its "off" position and the actuating member 21 and latch 17 are held inoperative. Insertion of the padlock shackle into opening 58 will prevent actuation of the slidable member 33 into the cover 2 and thus the switch will be positively locked in its "off" position because of the extension 45 engaging projection 14 and the cover 2 will be positively locked against opening movement relative to casing 1 because actuating member 21 cannot be moved until the padlock 59 is removed.

A flange 61 extending from the member 23 is provided with an opening 62 therethrough which is also adapted to receive the shackle of a padlock. If a padlock were inserted through opening 62, the actuating member 21 could not be actuated for the shackle of the padlock would obstruct its movement and since the actuating member 21 could not be moved, the latch 17 could not be disengaged from pin 26 and the cover 2 would be locked to casing 1. With this arrangement, however, the operating handle 13 is not locked "off" as when a padlock is received by opening 58 in slidable member 33 but rather the operating handle 13 may be freely operated between its "on" and "off" positions as long as slidable member 33 remains in its innermost position.

While certain preferred embodiments of the invention have been specifically disclosed, it is understood that the invention is not limited thereto, as many variations will be readily apparent to those skilled in the art and the invention is to be given its broadest possible interpretation within the terms of the following claims:

What is claimed is:

1. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means carried by said cover at the exterior thereof and manually operable to disengage said elements to permit opening of the cover, means fixedly supported upon an interior surface of said cover, and a portion of said manually movable handle being engageable with said fixed means when said manually movable handle is in the "on" position to prevent the cover being opened even though the releasing means is operated to cover disengaging position.

2. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting the operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means manually operable at the exterior of the cabinet to disengage said elements to permit opening of the cover, a padlock, and means provided on said cabinet whereby said padlock may be supported at a plurality of predetermined positions, said padlock when mounted at a first position being effective to maintain the cover closed while permitting normal operation of said manually movable handle, and when supported at a second position being adapted to maintain the cover closed and the manual handle in "off" position.

3. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually operable handle for said switch and operable from the exterior of said cover, a plurality of separately mounted means for holding said cover on said casing, one of said means comprising a member carried by said cover cooperating with said switch handle when in the "on" position to hold the cover closed, and the other comprising interengageable members on the interior of the cover and casing to releasably hold the cover to the casing, and a releasing means manually operable from the exterior of the cabinet for disengaging said interengageable members to permit the cover to be opened.

4. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means carried by said cabinet at the exterior thereof and manually operable to disengage said elements to permit opening of the cover, means fixedly supported upon an interior surface of said cover, a portion of said manually movable handle being engageable with said fixed means when said manually movable handle is in

the "on" position to prevent the cover being opened even though the releasing means is operated to cover disengaging position, and a movable member supported by said cover and adapted when said manually movable handle is in "off" position to prevent movement of said releasing means to thereby retain the cover closed.

5. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means mounted at the exterior of the cabinet and manually operable to disengage said elements to permit opening of the cover, means fixedly supported upon an interior surface of said cover, a portion of said manually movable handle being engageable with said fixed means when said manually movable handle is in the "on" position to prevent the cover being opened even though the releasing means is operable to cover disengaging position, and a slidable member supported by said cover and positionable to engage said releasing means whereby said releasing means is inoperative to disengage said latching elements, said slidable member at the same time adapted to engage with said manually movable handle to retain it in the "off" position.

6. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable operating member for said electric switch and operable from the exterior of the cover, a plurality of elements on the interior of the cover and casing interengageable when the cover is moved to closed position to latch the cover in closed position, releasing means supported on the cabinet and manually operable to unlatch said elements to permit opening of the cover, and a member movably mounted on said cover and operative to a position to block the operation of the releasing means to prevent disengagement of said latching elements, a portion of said manually movable operating member being engageable with said movably mounted member, and means provided on said movably mounted member and cooperating with a wall of said casing to maintain the manually movable operating member in the position it occupies when said movably mounted member blocks the operation of said releasing means.

7. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means carried by said cabinet at the exterior thereof and manually operable to disengage said elements to permit opening of the cover, means fixedly mounted on said cover and engageable with said manually movable handle when in "on" position to prevent the cover being opened even though the releasing means is operated to cover disengaging position, and a member movably mounted on said cover and positionable when said manually movable handle is in "off" position to obstruct the operation of the releasing means to prevent disengagement of said latching elements, and means provided on said movably mounted member adapted to become effective

when said movably mounted member is moved to obstructing position to retain said manually movable handle in "off" position.

8. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for the switch and operable from the exterior of the cover, a latch carried by said cover and on the interior thereof, a fixed member on said casing automatically engageable with said latch when the cover is moved into closed position to hold it on the casing, a releasing member mounted at the exterior of the cover and actuable to effect disengagement of said latch from said fixed member to permit opening of the cover, a member fixedly mounted to said cover and adjacent said switch handle, said member having a portion thereof spaced from the top of the cover and disposed substantially parallel thereto, a projection on said switch handle which is receivable within said space when said switch handle is in "on" position to prevent the cover being moved open even though the releasing means is operable to cover disengaging position, a slidable member supported within the cabinet and movable, after said manually movable handle is in "off" position, to a position wherein it blocks the releasing means to prevent it effecting disengagement of said latch from said fixed member, and means provided by said slidable member adapted to become effective when said slidable member is moved to blocking position to retain said manually movable handle in "off" position.

9. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for the switch and operable from the exterior of the cover, a latch carried by said cover and on the interior thereof, a fixed member on said casing automatically engageable with said latch when the cover is moved into closed position to hold it on the casing, a releasing member mounted at the exterior of the cabinet and actuable to effect disengagement of said latch from said fixed member to permit opening of the cover, a slidable member supported within the cabinet and positionable, after said handle has been moved to "off" position, to obstruct the movement of said releasable means to prevent it from effecting disengagement of said latch from said fixed member, and means carried on said slidable member operative when said slidable member occupies its obstructing position to lock said slidable member against movement, said slidable member at the same time being engageable with said manually movable handle and thereby being effective to prevent said manually movable handle being moved out of "off" position.

10. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for the switch and operable from the exterior of the cover, a latch carried by said cover and on the interior thereof, a fixed member on said casing automatically engageable with said latch when the cover is moved into closed position to hold it on the casing, a releasing member mounted at the exterior of the cover and actuable to effect disengagement of said latch from said fixed member to permit opening of the cover, a member fixedly mounted to said cover and adjacent said switch handle, said member having a portion thereof spaced from the top of the cover and disposed substantially parallel thereto, a projection on said switch handle which

is receivable within said space when said switch handle is in "on" position to prevent the cover being moved open even though the releasing means is operated to cover disengaged position, a slidable member supported by said cover and positionable, after said handle has been moved to off position, to block the movement of said releasable means to prevent it from effecting disengagement of said latch from said fixed member, and a member carried by said slidable member and being disposed exteriorly of said casing when said slidable member is in said blocking position, and being engageable with a wall of said casing to lock said slidable member against movement, said slidable member at the same time having engagement with said manually movable handle and thereby being effective to prevent said manually movable handle being moved out of off position.

11. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means provided on the cabinet and manually operable to disengage said elements to permit opening of the cover, and movable means separate from said manually movable handle and carried by said cabinet and operative on said manually movable handle to effect movement thereof from one position of rest to a second position of rest.

12. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, an interlock for said cover comprising a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means for said cover interlock and manually operable to disengage said elements to permit opening of the cover, and movable means carried by said cabinet and being positionable to block the movement of said releasing means to prevent movement thereof to effect disengagement of said elements, said movable means having an operative engagement with said manually movable handle to effect movement thereof from one position of rest to a second position of rest.

13. In an enclosing cabinet for an electric switch, a casing, a cover for said casing, a manually movable handle for effecting operation of said electric switch and operable from the exterior of the cover, an interlock for said cover comprising a plurality of elements provided on the interior of the cover and the casing and interengageable when the cover is moved to closed position to latch the cover closed, releasing means for said cover interlock and normally operable to disengage said elements to permit opening of the cover, and a slidable member supported by said cabinet, and being actuable to a position wherein it blocks the movement of said releasing means to prevent movement thereof to effect disengagement of said elements, said slidable member being engageable with said manually movable handle to effect movement thereof to off position when it is actuated to blocking position.

CARL A. SCHAEFER.