

Dec. 11, 1962

J. T. KUBIK ET AL

3,068,442

SAFETY GUARD FOR WALL SOCKETS

Filed Jan. 16, 1961

FIG. 1.

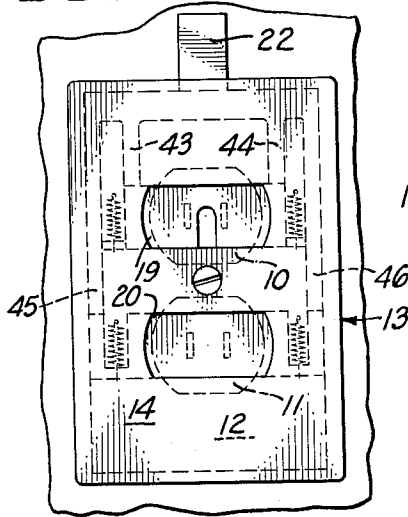


FIG. 2.

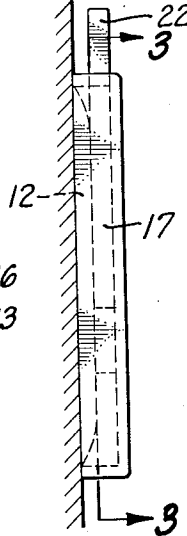


FIG. 3.

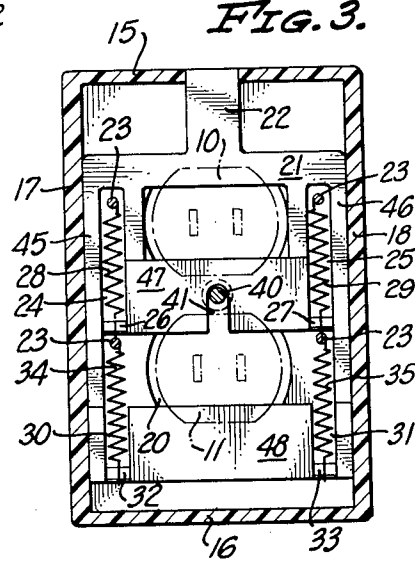


FIG. 4.

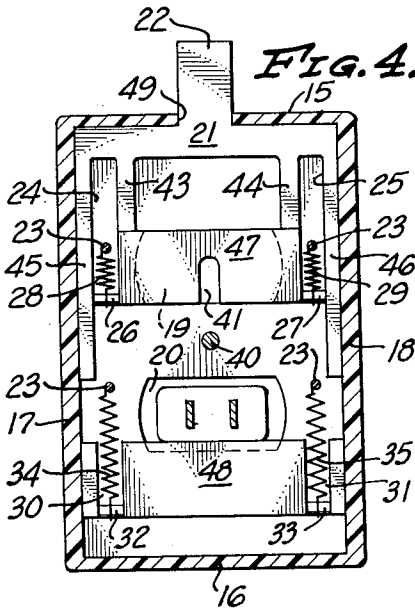
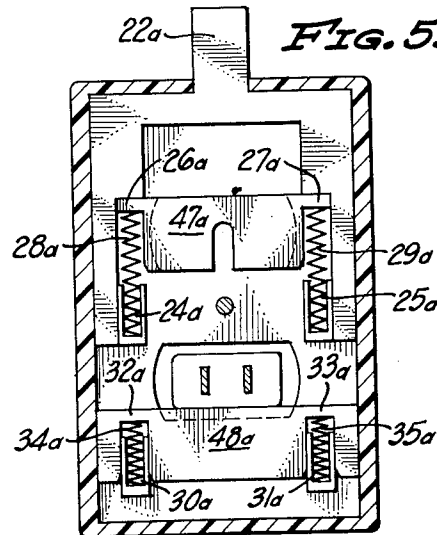


FIG. 5.



INVENTORS
JOHN T. KUBIK,
STANLEY KUBIK
BY *Robert C. Condon*
ATTORNEY

1

3,068,442
SAFETY GUARD FOR WALL SOCKETS
 John T. Kubik and Stanley Kubik, both of
 2502 W. 74th St., Los Angeles 43, Calif.
 Filed Jan. 16, 1961, Ser. No. 82,918
 6 Claims. (Cl. 339—36)

This invention relates to a safety guard which is particularly adapted for use on electrical wall sockets.

It is an object of our invention to provide such a safety guard which normally covers all of the socket openings. Through a single control, all of the socket openings may be exposed simultaneously for use. If only one set of openings is used, the guard automatically covers the openings which are not in use. If a plug is removed from a socket, the safety guard automatically closes the socket openings upon removal of the plug.

Another object of our invention is to provide a safety guard of the type described which eliminates the possibility of electrical shock, fire or injury from partially exposed plugs or electrical contacts.

It is also among the objects of our invention to provide a safety guard which holds loose plugs in the socket and which protects them from accidentally slipping out.

A further object of our invention is to provide a safety guard which is adapted to fit over existing wall sockets and which is simple and rapid to install.

Still another object of our invention is to provide such a safety guard which is simple and economical to manufacture and which is capable of being sold at a reasonable price for quantity manufacture and use.

Our invention also comprises such other objects, advantages and capabilities as will later more fully appear and which are inherently possessed by our invention.

While we have shown in the accompanying drawings preferred embodiments of our invention, it should be understood that the same are susceptible of modification and change without departing from the spirit of our invention.

Referring to the drawings,

FIG. 1 is a front elevational view of a preferred embodiment of our invention in use, with concealed portions shown in dotted lines;

FIG. 2 is a side elevational view of the same;

FIG. 3 is a sectional view of the same, taken on line 3—3 of FIG. 2, with the guard shown in open position as opposed to the closed position shown in FIGS. 1 and 2;

FIG. 4 is a similar sectional view of the same, showing the bottom portion open and in use and the top portion closed;

FIG. 5 is a sectional view similar to FIG. 4 of another embodiment of our invention.

A preferred embodiment which has been selected to illustrate our invention is shown in FIGS. 1—4 of the drawings. It is adapted to be used with a conventional wall socket structure which includes a pair of sockets 10 and 11 and a face plate 12. At the option of the manufacturer, our safety guard may be formed to fit over a conventional face plate 12 or the face plate may be formed as the back wall of our safety guard.

Our safety guard comprises a rectangular box-like enclosure 13 having a front wall 14, top wall 15, bottom wall 16 and side walls 17 and 18. The front wall 14 is provided with a pair of elongated openings 19 and 20, which are aligned with the sockets 10 and 11 when our safety guard is mounted over the wall socket. The openings 19 and 20 are dimensioned to receive conventionally formed male electrical plugs.

A slide member 21 is mounted for vertical sliding movement within the enclosure 13 between the face plate 12 of the wall socket and the front wall 14 of the safety guard.

2

The slide member 21 is provided with an operating control 22 which extends through a slot 49 in the top wall 15 of the enclosure 13. The control 22 normally protrudes a substantial distance above the top wall 15.

5 The enclosure 13 is provided with studs 23, which extend horizontally rearwardly from the inner surface of the front wall 14. One pair of studs 23 is disposed on opposite sides of each of the openings 19 and 20, being substantially aligned with the upper edges of the openings.

10 The slide member 21 is provided at its upper side edges with a pair of vertically directed upper slots 24 and 25, which extend around the upper studs 23. The inner sides of the slots 24 and 25 are defined by a pair of downwardly directed arms 43 and 44. The outer sides of the slots 24 and 25 are defined by a pair of longer downwardly directed arms 45 and 46, the outer sides of which are disposed adjacent to the side walls 17 and 18 of the enclosure 13.

20 An upper bar 47 is disposed directly beneath the lower ends of the arms 43 and 44 of the slide member 21. The upper bar 47 is provided with a pair of horizontally directed bosses 26 and 27, which extend across the lower ends of the upper slots 24 and 25.

25 A pair of upper coil springs 28 and 29 are mounted within the upper slots 24 and 25, with their upper ends secured to the upper studs 23 and their lower ends secured to the bosses 26 and 27. The upper springs 28 and 29 are normally contracted and act to urge the upper bar 47 upwardly within the enclosure 13. The upper edge of the upper bar 47 in turn engages the lower ends of the arms 43 and 44 and thus urges the slide member 21 upwardly.

30 A horizontally directed lower bar 48 is disposed beneath the lower ends of the longer arms 45 and 46. The lower bar 48 is provided with a pair of lower slots 30 and 31, which are disposed beneath the lower studs 23. The bottom ends of the lower slots 30 and 31 are closed off by horizontally directed portions 32 and 33 respectively of the lower bar 48. A pair of lower springs 34 and 35 respectively are mounted within the lower slots 30 and 31. The upper ends of the lower springs 34 and 35 are secured to the lower studs 23. The bottom ends of the lower springs 34 and 35 are secured to the horizontally directed portions 32 and 33 of the lower bar 48. The lower springs 34 and 35 are normally contracted and act to urge the lower bar 48 upwardly within the enclosure 13. The upper edge of the lower bar 48 in turn engages the lower ends of the arms 45 and 46 and thus urges the slide member 21 upwardly.

40 The upper part of the slide member 21 is provided with a centrally disposed cut away portion which combines with the upper edge of the upper bar 47 to form a rectangular upper opening which upon downward movement of the slide member 21 and upper bar 47 is adapted to be brought into alignment with the upper opening 19 of the enclosure 13 to expose the upper socket 10.

45 The area between the lower edge of the upper bar 47 and the upper edge of the lower bar 48 is open and this open area is adapted upon downward movement of the slide member 21 and lower bar 48 to be brought into alignment with the lower opening 20 of the enclosure 13 to expose the lower socket 11.

50 The safety guard is removably attached to the wall socket by a screw 40, which extends through a central opening in the front wall 14 of the enclosure 13. The screw 40 has an elongated shank which extends through the conventional opening in the center of the face plate 12 into the conventional screw threaded opening in the wall socket by means of which the face plate 12 is ordinarily mounted on the wall socket.

55 The upper bar 47 is provided with a vertically directed downwardly open slot 41, which is disposed directly above

3

the screw 40. When the upper bar 47 moves downwardly, the shank of the screw 40 engages the upper end of the slot 41 to limit the downward movement of the upper bar 47 and thus limit the downward movement of the slide member 21 and lower bar 48 as well. Engagement between the upper part of the slide member 21 and the inside of the top wall 15 of the enclosure 13 limits the upward movement of the slide member 21 within the enclosure 13 and correspondingly limits the upward movement of the upper bar 47 and lower bar 48.

When the control 22 is manually depressed, the slide member 21, upper bar 47 and lower bar 48 are moved downwardly simultaneously within the enclosure 13 against the urging of the upper springs 23 and 29 and lower springs 34 and 35. This movement is continued until the shank of the screw 40 engages the upper end of the slot 41. The sockets 10 and 11 are then exposed and plugs can be inserted into either or both of the sockets 10 and 11 through the openings 19 and 20.

When the control 22 is released, the slide member 21, upper bar 47 and lower bar 48 will return to their normal positions if there is no plug in either of the sockets 10 and 11. If there is a plug in only the lower socket 11, the plug will prevent the lower bar 48 from returning to its normal position, but the slide member 21 and upper bar 47 will be moved upwardly by the upper springs 23 and 29 and will return to their normal positions, in which the upper bar 47 extends across and closes off the upper opening 19 to prevent insertion of a plug or other object into the upper socket 10.

If there is a plug in only the upper socket 10, the plug will prevent the upper bar 47 from returning to its normal position, but the lower bar 48 and slide member 21 will be moved upwardly by the lower springs 34 and 35 and will return to their normal positions, in which the lower bar 48 extends across and closes off the lower opening 20 to prevent insertion of a plug or other object into the lower socket 11.

If there are plugs in both of the sockets 10 and 11, the upper bar 47 and lower bar 48 will be held in open position and the slide member 21 will likewise remain in its downward position.

An alternative embodiment of our invention is shown in FIG. 5 of the drawings. This embodiment is substantially the same as the one previously described except that the springs tend to expand rather than to contract. Instead of studs, the enclosure 13 is provided with pockets which form slots 24a and 23a which enclose the lower ends of the upper springs 23a and 29a. The upper ends of the springs 23a and 29a bear against bosses 26a and 27a at the upper end of the upper bar 47a. A pair of lower slots 30a and 31a enclose the lower ends of the lower springs 34a and 35a, the upper ends of which bear against extensions 32a and 33a at the upper edge of the lower bar 48a. The device is operated by a control member 22a and functions in the same manner as the embodiment previously described above.

Instead of operating the opening and closing of the windows through a single control, we may provide two controls, one for operating each of the windows in any of the embodiments described above.

We claim:

1. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets, said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, a slide member mounted for sliding vertical movement within said enclosure, said slide member having a pair of elongated arms extending vertically adjacent to the sides of said enclosure, said slide member having a pair of shorter arms spaced inwardly from said elongated arms, the space between said arms forming a pair of elongated vertically directed slots, an

4

upper bar normally disposed in overlying relationship to the upper of said socket openings, the upper edge of said upper bar engaging the lower ends of said shorter arms, said upper bar having a pair of horizontally directed bosses extending outwardly along its lower edge, a pair of studs extending from the front wall of said enclosure toward said face plate within said slots, a pair of normally contracted coil springs mounted within said slots, said springs extending between said studs and bosses, a lower bar normally disposed in overlying relationship to the lower of said socket openings, the upper edge of said lower bar engaging the lower ends of said elongated arms, a second pair of studs extending from said front wall toward said face plate, said lower bar having a pair of slots adjacent its ends, a pair of normally contracted coil springs mounted within said slots, said springs extending between said second pair of studs and said lower bar, there being free areas above each of said bars, said slide member being movable downwardly to move said bars away from said socket openings and bring said free areas into alignment with said socket openings, each of said bars upon the release of said slide member being held in downward position if a plug is inserted in its socket opening and being free for independent return movement to its normal position by the urging of said springs if no plug is inserted in its opening.

2. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets, said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, a slide member mounted for sliding vertical movement within said enclosure, said slide member having a pair of elongated arms extending vertically adjacent to the sides of said enclosure, said slide member having a pair of shorter arms spaced inwardly from said elongated arms, the space between said arms forming a pair of elongated vertically directed slots, an upper bar normally disposed in overlying relationship to the upper of said socket openings, said upper bar engaging said shorter arms, a pair of normally contracted coil springs mounted within said slots, a lower bar normally disposed in overlying relationship to the lower of said socket openings, said lower bar engaging said elongated arms, said lower bar having a pair of slots adjacent its ends, a pair of normally contracted coil springs mounted within said slots, there being free areas above each of said bars, said slide member being movable downwardly to move said bars away from said socket openings and bring said free areas into alignment with said socket openings, each of said bars upon the release of said slide member being held in downward position if a plug is inserted in its socket opening and being free for independent return movement to its normal position by the urging of said springs if no plug is inserted in its opening.

3. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, an upper bar mounted for sliding vertical movement within said enclosure, spring means normally maintaining said upper bar in overlying relationship to the upper of said socket openings, a lower bar mounted for sliding vertical movement within said enclosure, spring means normally maintaining said lower bar in overlying relationship to the lower of said socket openings, and a single means for moving said upper bar and lower bar simultaneously to expose said socket openings, each of said bars being free for independent return movement to its normal position if no plug is inserted in its opening, said single means for moving said bars comprising an upwardly extending control member disposed adjacent

5

the top of said enclosure, said control member adapted to be downwardly depressed to move said bars and expose said socket openings simultaneously.

4. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets, said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, a pair of closure members movably mounted within said enclosure, spring means normally maintaining said closure members in overlying relationship to said socket openings, and means for moving said closure members against the urging of said spring means to expose said socket openings, said means for moving said closure members comprising a single means moving both of said closure members simultaneously to expose both of said socket openings, each of said closure members being free for independent return movement to overlying relationship to one of said socket openings if no plug is inserted in said socket opening.

5. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets, said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, a slide member mounted for sliding vertical movement within said enclosure, an upper bar normally disposed in a closed position overlying the upper of said socket openings, a first pair of coil springs connected to said upper bar and normally urging said upper bar toward said closed position, a lower bar normally disposed in a closed position overlying the lower of said socket openings, a second pair of coil springs normally urging said lower bar toward said closed position, there being a free area above each of said bars, said slide member being moveable downwardly to move said bars simultaneously downwardly beneath said socket openings to

6

open positions in which said bars are disposed beneath said socket openings and said free areas are brought into alignment with said socket openings, each of said bars upon the release of said slide member being held in open position if a plug is inserted in its socket opening and being free for independent return movement to its normal closed position by the urging of said springs if no plug is inserted in its socket opening.

6. A safety guard for electrical wall sockets comprising a box-like enclosure dimensioned to fit over the face plate of a wall socket of the type having a pair of vertically aligned sockets, said enclosure having a front wall extending parallel to and spaced outwardly from said face plate, said front wall having a pair of socket openings aligned with said sockets, an upper bar mounted within said enclosure and normally disposed in a closed position overlying the upper of said socket openings, a first pair of coil springs disposed within said enclosure and normally urging said upper bar toward said closed position, a lower bar mounted within said enclosure and normally disposed in a closed position overlying the lower of said socket openings, a second pair of coil springs disposed within said enclosure and normally urging said lower bar toward said closed position, and a single means for moving both of said bars simultaneously to expose both of said socket openings, each of said bars being held in open position if a plug is inserted in its socket opening and being free for independent return movement to its normal closed position by the urging of said springs if no plug is inserted in its socket opening.

References Cited in the file of this patent

UNITED STATES PATENTS

35	2,820,842	Meistrell	Jan. 21, 1958
	2,988,242	Kneip	June 13, 1961

FOREIGN PATENTS

469,005	Canada	Oct. 31, 1950
---------	--------	---------------