This invention relates to a cover for an outlet box which serves to keep the box free from plaster during plastering operations, and which can later be removed to leave the box opening accessible and clean. Outlet box covers which can be plastered over and then removed are known in the art. However, most of the conventional devices suffer from some disadvantage which lessens their convenience or reliability in use. It is the purpose of this invention to provide an outlet box cover which is simple and quick to install and remove, and which keeps the outlet box free from plaster.

The invention is carried out in combination with an outlet box which has a surface facing in the opposite direction from a box opening. The cover includes a base sheet that is adapted to overlay said opening so as to close it, and engagement means integral with the base sheet for engaging the said surface to hold the cover to the box. A flexible rod-like locator member is formed integral with the base sheet, which extends outwardly therefrom. The locator member is flexible in all lateral directions and sufficiently springy to return to an upright position without wet plaster.

According to an optional feature of the invention, the engagement means comprises an opening in the base sheet at least partially bounded by flexible fingers able to snap past the head of a screw threaded into the outlet box and engage the undersurface of the head. Still another optional feature of the invention resides in forming the engagement means as a keyhole-shaped opening therethrough with a wide and a narrow portion, the wide portion being adapted to pass the head and shank of the screw, and the narrow portion being adapted to retain the head of the screw, engaging its undersurface, and embracing the shank of the screw. Still another optional feature of the invention resides in providing the engagement means in the form of rigid hook-like members having shoulders adapted to engage said box surface.

The above and other features of this invention will be fully understood from the following detailed description and the accompanying drawings, in which:

FIG. 1 is a plan view of the presently-preferred embodiment of the invention;

FIG. 2 is a cross-section showing a portion of FIG. 1 installed on an outlet box;

FIG. 3 is a fragmentary cross-section taken at line 3--3 of FIG. 1;

FIG. 4 is a plan view of an alternate embodiment of the invention;

FIGS. 5, 6 and 7 are fragments of the device of FIG. 4 in two different positions thereof;

FIGS. 7 and 8 are plan views of still another embodiment of the invention in two positions relative to an outlet box cover;

FIG. 9 is a side elevation, partly in cutaway cross-section, showing still another embodiment installed to cover an opening in an outlet box cover; and

FIG. 10 is a plan view of an outlet box to which the devices according to the invention can be attached.

The presently-preferred embodiment of the invention is shown in FIG. 1. The particular outlet box cover illustrated is circular. Outlet boxes are made in a variety of shapes and sizes. The purpose of the invention is to provide a cover to protect them. Thus, the configuration of the device is dictated by the box on which it is to be used, and is not a limitation on the invention. Instead of circular, the cover could as well be oblong, square, rectangular, or any other suitable shape. This particular embodiment of the invention is best suited for closing a circular box 21 (see FIG. 10) by engagement of a screw 22 threaded into an aperture in the plastering ring 23 of the outlet box. It is the purpose of this outlet box cover to engage a surface of the outlet box which faces in a direction opposite from an opening 24 in the said outlet box. The term “surface” is to be broadly construed, and includes a surface structure integral with and connected to the outlet box. For example, surface 25 (FIG. 2) is the undersurface of the head of screw 22 that faces oppositely from the opening. Surface 23c on the plaster ring is another example of a “surface” as defined herein.

Cover 20 includes a base sheet 26 which has a pair of engagement means 27, 28 integrally therewith. Each engagement means comprises a circular opening 29 from which four slots 30, 31, 32, 33 diverge radially. The slots form four flexible fingers 35, 36, 37, 38 which have rounded tips adapted to fit around the shank of the screw. As can be seen from FIG. 2, the slots extend from the center of opening 29 by a distance larger than the radius of the screw head, so that the fingers can be snapped over the head and then engage undersurface 25 thereof to hold the device. The diameter of opening 29 is somewhat larger than that of the screw shank.

A rod-like locator member 40 is integral with the base sheet and spaced at a medial portion thereof. This locator member is preferably frusto-conical and is flexible in all lateral directions while being sufficiently springy to return to the illustrated upright position through wet plaster.

The use of the device of FIG. 1 should be evident from the drawings. Before the outlet box is plastered over, the cover is attached to it by pressing the cover against it so the screw heads pass through openings 29 and the fingers snap over the heads of the screws. Then the plaster may be applied over the cover without getting it into the outlet box.

The locator member will soon rise up through the wet plaster and indicate the location of the cover and its associated box. The cover can be removed by pulling on the locator member which serves to dislodge the plaster covering it, and then pulling it even harder so as to snap the fingers past the screw heads.

FIGS. 4–6 show another embodiment of outlet box cover 45 which may also be utilized to cover a box by being attached to screws threaded into the plastering. This device has a base sheet 46 and rod-like locator member 47, identical with those of FIG. 1. The engagement means 48, 49 in this embodiment, however, consist of key slot openings having wide portions 50, 51 and narrow portions 52, 53, respectively. These key slot openings are oppositely directed and their corresponding portions are spaced apart in such a manner that when the device is to be applied over the screw heads, both screw heads 54 can simultaneously be aligned with respective ones of the wide portions and the screw heads passed through them, as shown in FIG. 5. Then the plate can be turned a few degrees to the position shown in FIG. 6 at which position both narrow portions embrace the shank of the screw and engage the undersurface of the screw head. To remove this cover, the locator is pulled so as to at least partially dislodge the plaster and the cover is then turned so as to put the screw heads and slots back in the position shown in FIG. 5, so that the cover can be removed by pulling on it.

Another embodiment of outlet box cover 60 is shown in FIGS. 7 and 8. This box cover has a base sheet 61 and rod-like locator member 62, identical to those in FIG.
1. It has one engagement means 63 comprising a keyslot opening identical with engagement means 48 in FIG. 7. However, its other engagement means 64 is differently shaped, and comprises a slot 65 of narrower width than the screw head, but wider than the screw shank. This slot opens onto the peripheral edge of the base sheet.

The use of the embodiment of FIGS. 7 and 8 is evident from these figures. To attach the device to an outlet box, it is placed with its engagement means aligned with the screws as shown in FIG. 7 so that the Shank of one of the screws 66 fits in slot 65 and the wide portion of engagement means 63 is aligned with the screw head. The screw head can then be passed through it. Then the cover is moved sideways to the position shown in FIG. 8 so that the undersurface of the head of screw 67 is engaged at the narrow portion of engagement means 63. Removal of the device is effected by pulling the locator member to dislodge the plaster, then shifting the cover back to the position in FIG. 7, and thereafter removing the same.

FIG. 9 illustrates still another embodiment of outlet box cover 70 having a base sheet 71 and a rod-like locator member 72 identical to those shown in FIG. 1. This device is intended to engage surfaces 23c on lugs 73 of the outlet box when there are no screws in tapped holes 75. For this purpose, the engagement means 76, 77 comprise rigid hook members having outwardly directed shoulders 78, 79 to form flanges which engage surfaces 23c as shown in FIG. 9. This device is installed by placing the outlet box cover over the opening with the engagement means out of alignment with the lugs, and then rotating the cover until the shoulders pass under the lugs, thereby engaging the cover. Removal is effected by tugging on the locator member to dislodge the plaster and then turning the cover so that it can be released. The engagement means are made substantially rigid in this device so as to make a strong engagement between the outlet box and the cover.

In all of the embodiments, it is preferably although not necessary to make these sheets somewhat flexible so that it can be flexed to dislodge the plaster which has been spread upon it. However, this is not a limitation on the invention and it is still useful, although not quite as convenient, for the base sheet to be so thick as to be substantially rigid. Furthermore, the step of removing the plaster from the cover before removing the cover is not a necessary one. The cover and the plaster can both be removed at the same time. However, it is often more convenient to flex the cover to dislodge the plaster first.

The cover is preferably made of a material to which plaster does not readily adhere. One example is polyethylene. Then the cover can be used and reused many times, the plaster falling off of it and leaving it clean.

This invention is not to be limited by the embodiments shown in the drawings and described in the description which are given by way of example and not of limitation, but only in accordance with the scope of the appended claim.

We claim:

15 In combination: an outlet box having an opening with an axis; a headed screw threaded into said box adjacent to said opening and having the undersurface of its head axially spaced from the opening; and a cover comprising a base sheet adapted to overlay said opening to seal it, the base sheet having an aperture therein, a flexible finger integral with the base sheet and extending into said aperture, and a flexible rod-like locator member integral with and extending outwardly from the base sheet, said locator member being flexible in all lateral directions and being sufficiently springy to return to an upright position through wet plaster, whereby the cover is attachable to the outlet box by pressing the base sheet toward the box so that the screw head passes through the aperture and the finger snaps over the head to engage its under surface and retain the cover to the outlet box, the cover being detachable from the outlet box by pulling on the locator member.

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