Sept. 7, 1937. E. M. ROSKE 2,092,682

FASTENING ELEMENT HOLDER AND GUIDE FOR BOXES

Filed March 4, 1936

Fig. 1.

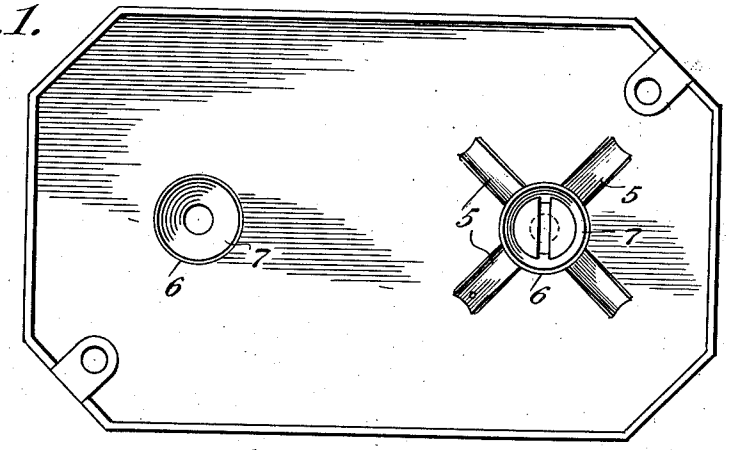


Fig. 2.

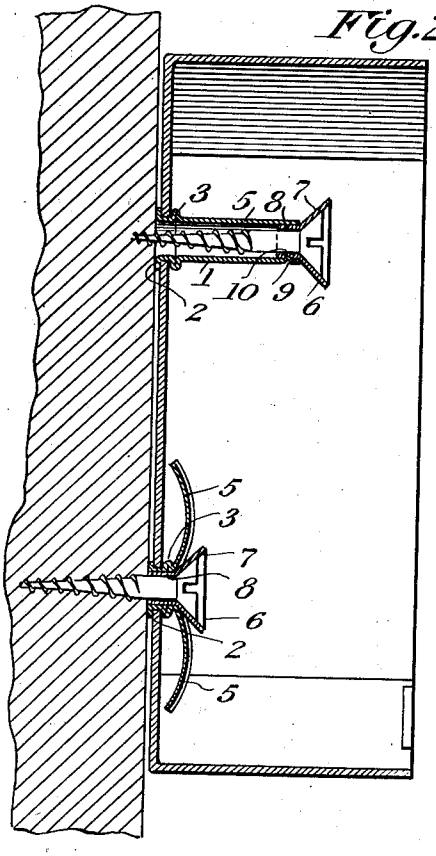


Fig. 3.

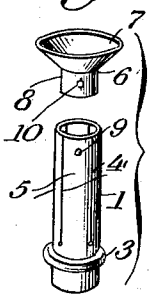


Fig. 4.

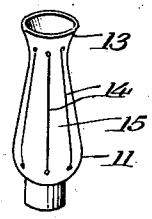
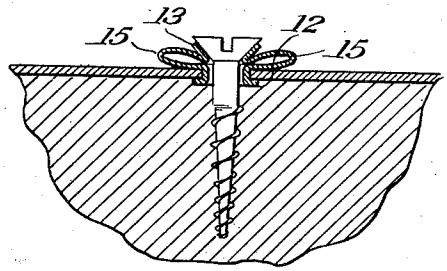


Fig. 5.



Earl M. Roske

INVENTOR

BY Victor J. Evans & Co.

ATTORNEYS

Patented Sept. 7, 1937 2,092,682

UNITED STATES PATENT OFFICE

2,092,682

FASTENING ELEMENT HOLDER AND GUIDE FOR BOXES

Earl M. Roske, Columbus, Wis.

Application March 4, 1936, Serial No. 67,168

4 Claims. (Cl. 85—50)

This invention relates to fastening element holder and guide for boxes especially adapted for aiding in mounting an electrical box or similar device to a support and has for the primary object the provision of a device of this character which may be readily adapted to a box without materially increasing the cost thereof for guiding a screw or like fastener into position for securing the latter to the support for the box and to hold said screw while it is screwed or turned home in the support, leaving the hands of the operator free and eliminating the usual practice of holding the screw while starting the same into the support.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

Figure 1 is a front elevation illustrating an electrical box equipped with my invention.

Figure 2 is a transverse sectional view illustrating the same.

Figure 3 is a perspective view showing a combined guide and holder to be adapted to the box.

Figure 4 is a perspective view illustrating a modified form of the combined guide and holder.

Figure 5 is a fragmentary sectional view showing a screw turned home in the support after being guided and held by the combined guide and supporting element.

Due to the unusual depths of electrical boxes and similar devices, it is sometimes difficult to secure such a box to its support by screws or like fasteners and to render this securing operation more practical and easier my invention may be readily adapted to a box without altering the construction thereof or materially increasing its cost of manufacture. With my invention adapted to a box and the operator holding the box in position on the support with one hand he may readily bring the screw or like fastener in proper position within the box by the other hand where it will be held and guided into the support by the rotation thereof through the employment of a screw driver in the last-named hand. While the fastener has been referred to and shown as a screw it is to be understood nails or other fasteners may be employed.

Referring in detail to the drawing, the numeral 1 indicates a tubular element which may be offset adjacent one end to define spaced flanges 2 and 3. It is preferable that the flange 3 be formed in the tubular member prior to its application to the box for insertion in the opening found in the rear wall of the box. After the insertion of the tubular member in the opening the flange 2 is formed cooperating with the flange 3 in firmly anchoring the tubular element to the box.

The tubular element 1 is provided with a plurality of spaced slots 4 opening through the free end of said tubular element to form a plurality of bendable portions or fingers 5. Insertible in the free end of the tubular element is a guide element 6 consisting of a conical-shaped portion 7 and a tubular-shaped portion 8. The tubular-shaped portion fits in the free end of the tubular element 1, one of the fingers 5 being provided with an offset 9 to fit in an indentation 10 formed in the tubular portion to retain the guide element 6 to the tubular element 1 against accidental displacement. The conical-shaped portion 7 will aid in directing a screw or like fastener into the tubular element 1. The screw or like fastener will then be positioned readily accessible to have a screw driver applied thereto for threading the screw into a support, as shown in Figure 2, or if some other fastener than a screw is employed such fastener will be supported in a position to be easily struck a blow by a hammer or similar tool. The threading or driving of the fastener into the support causes the guide element 6 to move in the direction of the inner wall of the box bringing about a spreading of the fingers 5 and which spreading action continues until the screw or fastener is driven home. The fingers then assume arcuately curved positions lying in close proximity to the inner wall of the box so that they will not interfere with any fixtures arranged in the box.

Referring to my modified form of invention, as shown in Figures 4 and 5, the combined guide and holder may be shaped, as shown in Figure 4, having a bulged portion 11 cooperating with a flanged end 12 for securing the device in the opening of the box. The device tapers from the bulged portion 11 and then flares, as shown at 13. The device is provided with a plurality of slots 14 to form bendable portions 15. With this device adapted to the box a screw or like fastener may be readily inserted therein and supported in proper position for turning or driving into the support. As the fastener is driven home the bendable portions 15 bow or bend upon themselves, assuming the position as shown in Figure 5, so as to lie in close proximity to the inner wall of the box.

Having described the invention, I claim:

1. A device of the character set forth comprising a tubular element, means for securing said element in an opening of a member, means for guiding a threaded fastener into the tubular element whereby the fastener may be properly supported for threading into a support, said tubular element having a series of slots to form bendable portions adapted to flex during the movement of the fastener into the support.

2. A device of the character described comprising a tubular element, a flange formed on said element for securing the latter in an opening of a member, said tubular element being slotted to define flexible fingers, a guide element received in the tubular element and including a conical-shaped portion and a tubular portion fitting in the tubular element.

3. A device of the character set forth comprising a tubular element, an attaching flange formed on said element, said tubular element being slotted to define flexible fingers, a guide element received in the tubular element and including a conical-shaped portion and a tubular portion fitting in the tubular element, means for securing the guide element to the tubular element against accidental displacement.

4. A device of the character set forth comprising a hollow member, means for mounting one end of the member in a fixed position, said member having its other end flared for guiding a threaded fastener therein, said member having slots to form bendable portions adapted to collapse on the movement of the fastener being threaded into a support.

EARL M. ROSKE.