Dec. 5, 1961 H. MAGEE 3,011,747

OUTLET BOX HANGER

Filed March 28, 1960

Fig. 3.

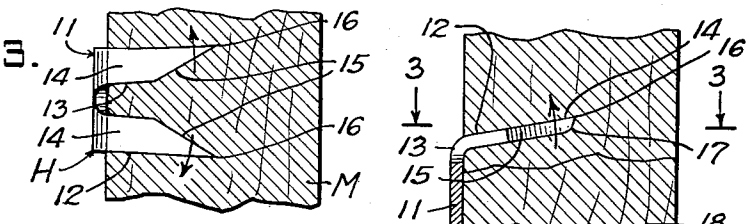


Fig. 2.

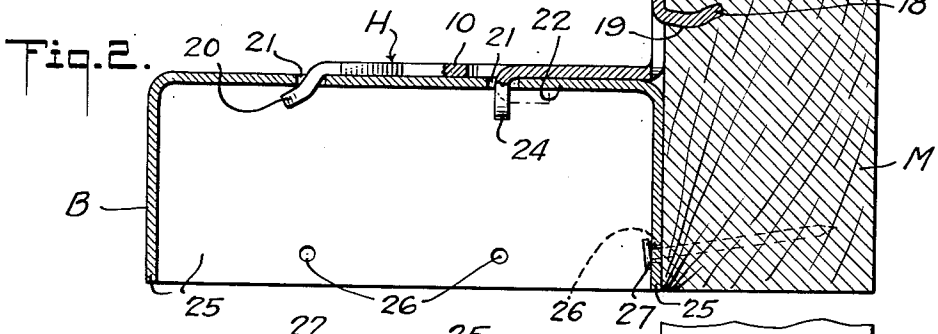


Fig. 1.

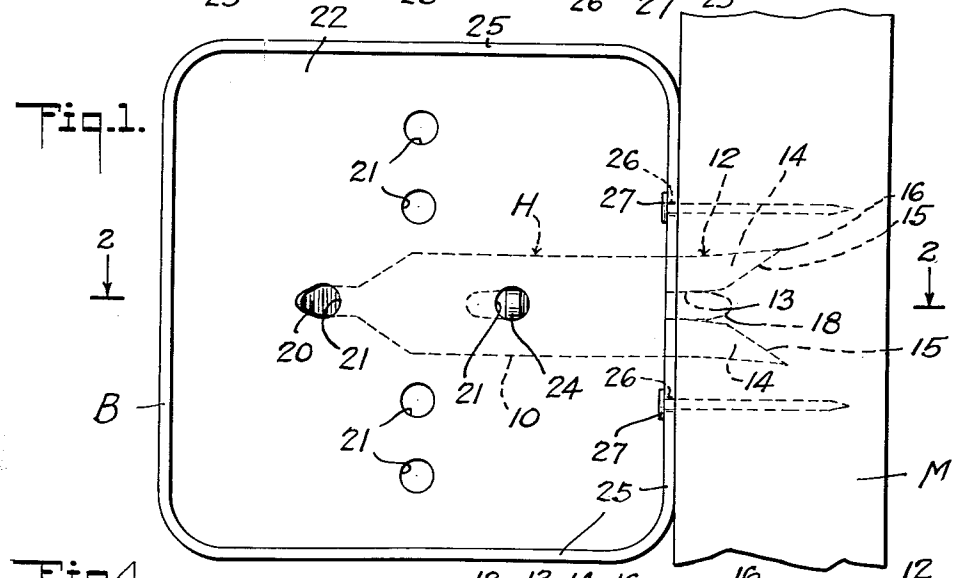


Fig. 4.

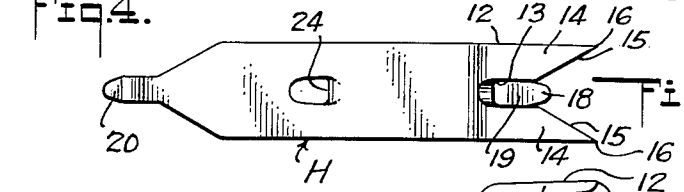


Fig. 6.

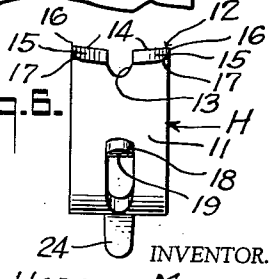
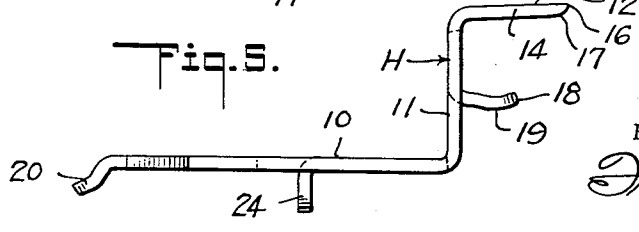


Fig. 5.



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OUTLET BOX HANGER

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2 Claims. (Cl. 248—216)

My invention relates generally to electrical fixtures and more particularly to devices for supporting outlet boxes as used in electric wiring installations.

An object of my invention is to provide a device in the nature of a bracket or hanger which is structurally characterized by means enabling the hanger to be rigidly secured to a member of a building frame such as a ceiling rafter, joist or stud with the utmost ease and dispatch by a hammer or other driving tool without the need for any extraneous fastening means, all in such manner as to enable an outlet box to be instantly applied to the hanger and locked thereto to rigidly support any fixture or other service load from the hanger with absolute security and safety.

Another object of my invention is to provide a hanger of the above described character which is of simple, compact, one-piece construction capable of being inexpensively produced in quantity to enable the hanger to be economically used universally in any location requiring an outlet box of any type.

With these and other objects in view, my invention resides in the combinations, arrangements and functional relationships of elements as set forth in the following specification and particularly pointed out in the appended claims.

In the accompanying drawings,

FIGURE 1 is a view showing in plan, one form of outlet box hanger embodying my invention and illustrating the hanger supporting an outlet box from a building frame member;

FIGURE 2 is a transverse sectional view taken on the line 2—2 of FIGURE 1;

FIGURE 3 is a fragmentary sectional view taken on the line 3—3 of FIGURE 2;

FIGURE 4 is a detail plan view of the hanger;

FIGURE 5 is a view of the hanger in side elevation; and

FIGURE 6 is a view of the hanger in end elevation.

Referring specifically to the drawings, the hanger H embodying my invention is preferably constructed from sheet metal strip stock of the requisite gage bent into generally L shape to provide angularly related portions respectively forming a relatively long arm **10** and a relatively short arm **11**. From the free end of the arm **11** angularly projects a fastening portion **12** extending approximately parallel and in a direction opposite to that of the arm **10**.

The portion **12** is bifurcated at **13** to provide spaced holding elements in the form of prongs **14** the confronting edges **15** of which diverge relatively to the pointed ends **16** of the prongs as shown in FIGURE 4 and define cam surfaces which co-act with a building frame member such as a rafter, joist or stud M in a manner to be later described. The pointed ends **16** of the prongs are also beveled laterally at **17** to provide other cam surfaces co-acting with the camming edges **15**.

Punched from the arm **11** at its junction with the arm **10** so as to extend in the general direction of the prongs **14** and in spaced relation thereto is a third holding element in the form of a prong **18** which is longitudinally curved at **19** and is co-actable with the prongs **14** as will be later fully described. The free end of the arm **10** is reduced in width and bent laterally to terminate in a locking element in the form of a hook **20** adapted to be closely received in one of a number of openings **21** provided in the bottom wall **22** of a conventional outlet box B.

Punched from the arm **10** to project perpendicularly from the same side of the arm as the hook **20** at a distance from the latter to be closely received in another one of the openings **21** of the outlet box is a pilot or alining element in the form of a flat pin or finger **24**. The outlet box is further provided in each of its side walls **25** with two openings **26** through which fastening members such as nails **27** are driven in the operation of the invention which is as follows:

The hanger H is first secured to a building frame member M by utilizing the arm **11** to drive the prongs **14** and **18** into the side of the member with blows of a hammer delivered against the outer surface of the arm directly opposite the prongs until the arm seats solidly against the frame member with the hanger located a predetermined distance inwardly from the outer face of the frame member as shown in FIGURE 2. As the prongs **14** and **18** are driven into the member M, the cam surfaces **15** of the prongs **14** spread the latter as shown by the arrows in FIGURE 3, whereas the cam surfaces **17** of the prongs **14** deflect or bend the prongs laterally as shown by the arrow in FIGURE 2. Also, the curved shape of the prong **18** anchors the latter firmly in the frame member, all to the end of solidly and rigidly fastening the hanger to the frame member.

The outlet box is now applied to the hanger H by first manipulating the box in a manner for the hook **20** to enter the respective opening **21** in the bottom wall **22** of the box, after which the box is pivoted about the hook until the pin **24** projects through the opening **21** and the bottom wall **22** seats tightly against the arm **10** with a side wall **25** of the box contiguous to the frame member M, all as shown in FIGURE 2. With the box held in this position, the nails **27** are driven through the openings **26** in said side wall of the box for co-action with the hanger in rigidly supporting the box from the member.

It will be noted that in lieu of the nails **27**, the pin **24** can be utilized to also function as a locking element by being bent over tightly against the bottom wall **22** of the outlet box as shown in broken lines in FIGURE 2, so as co-act with the hook **20** in rigidly securing the box to the hanger, all to the end of facilitating and expediting installation of the box.

I claim:

1. A bracket hanger for stabilizing and supporting an electrical outlet box from a building frame member, composed of a length of sheet metal strip stock bent intermediate its ends to provide two right angularly disposed and relatively long and short arms, respectively; said short arm being bifurcated at its end to provide two spaced prongs projecting substantially right angularly from said short arm in a direction opposite to that of said long arm and diverging from each other along their confronting edges to terminate in pointed extremities and provide cam surfaces adapted to co-act with a building frame member in spreading the prongs therein when driven into the member; said short arm having a third prong projecting in the same general direction as and in spaced relation to said two prongs so as to also be driven into the frame member to rigidly secure the bracket thereto; said long arm being reduced in width at its free end and being bent laterally to terminate in a hook adapted to be closely received in one of a number of openings in the bottom wall of an electrical outlet box; said long arm having an alining finger projecting from the same side as said hook and adapted to be closely received in another of said outlet box openings for co-action with said hook and with one or more nails driven through other openings in a side wall of the

outlet box into the frame member to rigidly support the outlet box from the frame member.

2. A bracket hanger as embodied in claim 1 wherein said pointed ends of said two prongs are beveled laterally to provide other cam surfaces adapted to effect curling of said pointed ends when said two prongs are driven into the frame member, so as to increase the holding power of such prongs; said finger being of sufficient length to render it capable of being bent tightly against the bottom wall of the outlet box to rigidly secure the latter to the bracket in lieu of using a nail or nails.

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