Oct. 30, 1962 R. F. PIASECKI 3,061,254

CONDUIT STUB-UP CLAMP

Filed Dec. 8, 1960

Fig. 1

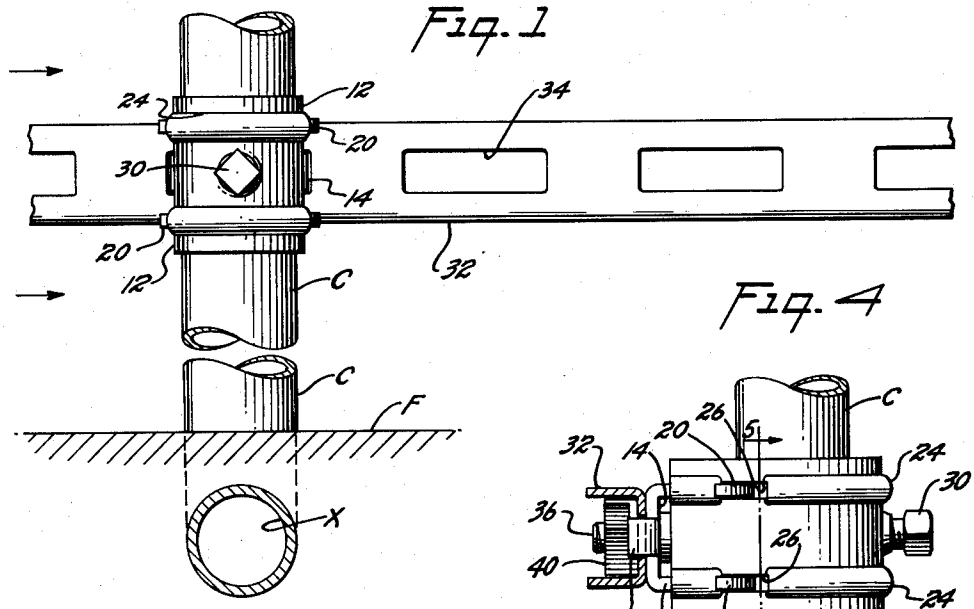


Fig. 2

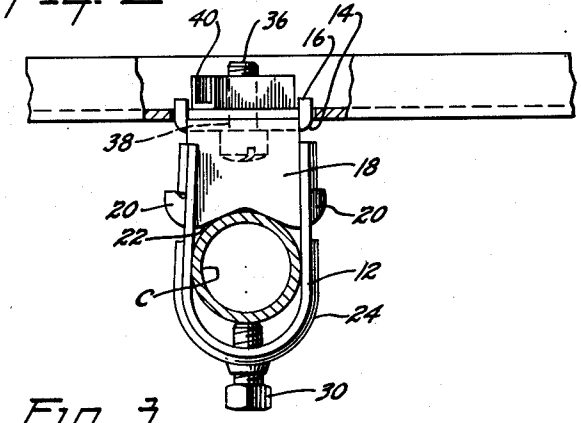


Fig. 3

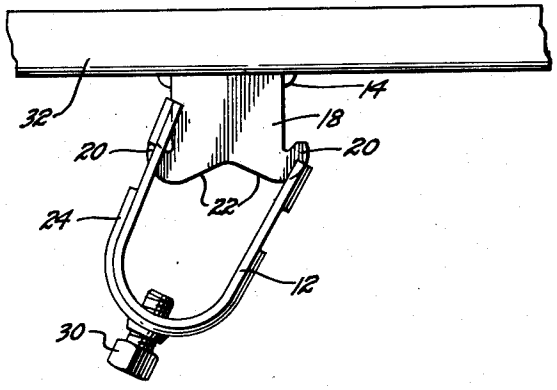


Fig. 4

Fig. 5

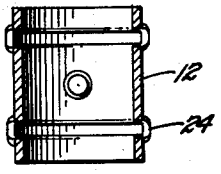
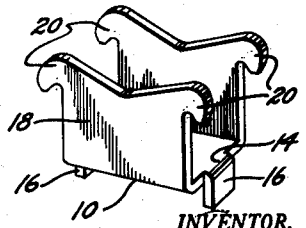


Fig. 6



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United States Patent Office 3,061,254 Patented Oct. 30, 1962

3,061,254

CONDUIT STUB-UP CLAMP

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Filed Dec. 8, 1960, Ser. No. 74,501
2 Claims. (Cl. 248—74)

The invention relates to adjustable clamps for securing electrical raceway conduits or "stub-ups" in aligned, spaced relation relative to a predetermined final position prior to the pouring of a concrete floor, in a building operation, over a major portion of such conduits.

More particularly, the invention relates to adjustable saddle clamps of the character described wherein means are provided for readily securing one or more of such clamps to an apertured channel bar whereby a series of such clamps may be located selectively in a predetermined position for subsequently securing the free end portion of a like member of raceway conduits thereto to maintain the same in a fixed predetermined position prior to the pouring of a concrete floor over a major portion of the conduits as in a building operation for example.

Prior art devices utilizable for the same general purpose possessed certain disadvantages in that they did not provide for the selective adjustment thereof nor for maintaining the same in a positively fixed, predetermined position relative to wall terminal boards, switch boxes, outlet boxes and the like.

Accordingly, it is an object of the invention to provide a conduit clamp of the character described which obviates the above noted disadvantages.

A further object of the invention is to provide a conduit positioning and supporting clamp which provides for the convenient and rapid placement of a series of "stub-up" conduit end portions in a predetermined position in selectively spaced alignment preparatory to pouring a concrete floor over a major portion of such conduits.

Another object of the invention is to provide a conduit positioning and supporting clamp whereby the selective spacing and alignment of a series of "stub-up" conduit end portions and the securing of the same in relative predetermined position is facilitated in a rapid and efficient manner.

A further object of the invention is to provide conduit positioning and supporting clamps as specified, which are adapted to be adjustably secured to an apertured channel bar for selectively spacing and aligning each of a series of "stub-up" conduit end portions, of differing height or length, and for securing the same in such positions of adjustment in a rapid and efficient manner.

Various other objects, advantages and features of the invention will become apparent from the following detailed description when read in connection with the accompanying drawing, in which:

FIGURE 1 is a view in elevation showing a slotted channel bar mounting one of two or more conduit positioning clamps as utilized for temporarily securing a like number of conduit "stub-up" end portions in predetermined spaced alignment preparatory to pouring a concrete floor over a major portion of conduits;

FIGURE 2 is a top plan view of the same partly in section;

FIGURE 3 is a similar view of the clamp per se, as secured to a slotted channel bar, showing the manner in which its conduit retaining cap is snapped over the free end of its saddle portion;

FIGURE 4 is a side elevational view looking in the direction of the arrows in FIGURE 1;

FIGURE 5 is a transverse sectional view taken on the line 5—5 of FIGURE 4, and

FIGURE 6 is a perspective view of the saddle member per se, of the clamp.

Referring to the drawing, the conduit "stub-up" clamp comprises a saddle member 10 and a coactable spring clip or yoke 12, adapted to form an annular closure therebetween for receiving a suitable size conduit therethrough in clamped relation.

The saddle member 10, comprises a stamping of suitable sheet metal presenting a flat base 14, having its opposite ends bent normal thereto to provide a pair of short projections or ears 16, thereon for a purpose hereinafter described. The side margins of the saddle member 10, are also bent normal thereto but in an opposite direction and plane to provide flanges 18, thereon having hooked ends 20, with an arcuate edge face 22, therebetween also for a purpose hereinafter described.

The spring clip or yoke 12, comprises a strip of suitable metal having a linear corrugation 24 throughout its length adjacent each marginal edge thereof to impart rigidity thereto.

A pair of rectangular slots 26 are provided lengthwise of the clip or yoke 12, adjacent each of its opposite ends in spaced parallelism and a screw-threaded aperture formed therein centrally of its free ends for the reception of a suitable set-screw 30.

As clearly shown in FIGURES 2, 3 and 6, the clip or yoke 12, has a U-shape configuration whereby it is adapted to have its free ends snapped over the hooked ends 20, of the saddle member 10, to cause the said hooked ends 20, to enter the slots 26, provided therefor in the clip or yoke 12, whereby it is detachably secured to the saddle member 10, to provide an annular passage for receiving an upstanding portion of a conduit C therethrough to be adjustably secured by means of the set-screw 30.

In the use of the herein described clamp, two or more saddle members 10, are secured to a suitable channel bar 32, having a plurality of equally spaced rectangular slots 34, formed therein for receiving the ears 16, of the saddle members 10 therein, a suitable machine screw 36 extending through an aperture 38, formed in the base 14, of each saddle member 10, and through the slotted channel bar 32 for the reception of an elongated, rectangular nut 40, on the free, threaded end of each screw 36, whereby the saddle members 10 are secured to the channel bar 32, and held against relative movement by the ears 16, and the nut 40, against relative movement by the channel bar.

With the channel bar 32, thus provided, the "stub-up" or upstanding end portion of a like number of conduits C, are brought into seating engagement with the arcuate edge faces 22, of the flanges 18 formed on the saddle members 10, and a clip or yoke 12 passed about each conduit C, and snapped into locked engagement with the hooked ends 20, of each saddle member 10. When so assembled, the set-screw 30, in each clip or yoke 12, is secured against its correlated conduit C, whereby the snap-on engagement between the hooked ends 20 of each saddle member 10, and the slotted ends of the clips or yokes 12, is maintained in non-detachable position and all of the upstanding conduit end portions C, clamped in predetermined alignment and so held during the pouring of a concrete floor F, over the horizontally disposed major conduit portions indicated at X.

From the foregoing, it will be readily apparent that the herein described conduit "stub-up" clamp provides for the quick and efficient alignment and temporary fixed adjustment of a series of upstanding conduit end portions preparatory to the pouring of a concrete floor in a building operation or the like.

While the invention has been illustrated and described with respect to a preferred embodiment thereof, it is to be expressly understood that various changes and modifications may be made therein without departing from the inventive concept underlying the same. Therefore, the invention is not to be limited except as is necessitated by the prior art and the scope of the appended claims.

What is claimed is:

1. A stub-up clamp including a screw-bolt and nut adapted to be secured to a slotted channel bar comprising a U-shaped saddle member having a clearance opening centrally through the base thereof for receiving said screw-bolt therethrough, an ear-like projection formed on each side margin of the base portion of said saddle member normal thereto adapted to extend through a slot in said channel bar to prevent relative rotation thereof, the legs of said saddle member each having a V-notched free end face terminating at its opposite corners in hook-like projections with their inner edges adjacent the side margins thereof, a U-shaped spring clip having a pair of rectangular elongated openings therethrough in spaced parallelism lengthwise thereof adjacent each of its free ends for receiving said hook-like projections in snap-on relation, said spring clip being provided with a pair of spaced parallel corrugations extending lengthwise thereof throughout its length in alignment with said elongated openings adapted to guide said hook-like projections into said elongated openings, and a set-screw adjustably threaded through the bottom of said spring clip adapted for securing a conduit on the V-notched end faces of said saddle member while maintaining the snap-on connection between said spring clip and said saddle member.

2. A stub-up clamp including a screw-bolt and nut adapted to be secured to a slotted channel bar comprising a U-shaped saddle member having a clearance opening centrally through the base thereof for receiving said screw-bolt therethrough, a rectangular projection formed on each side margin of the base portion of said saddle member normal thereto adapted to extend through a slot in said channel bar to prevent relative rotation thereof, the legs of said saddle member each having a V-notched free end face terminating at its opposite corners in rounded hook-like projections extending in the plane thereof with their inner edge faces inclined toward the side margins thereof, a U-shaped spring clip having a pair of rectangular elongated openings therethrough in spaced parallelism lengthwise thereof adjacent each of its free ends for receiving said hook-like projections in snap-on relation, said spring clip being provided with a pair of spaced parallel corrugations extending lengthwise thereof throughout its length in alignment with said elongated openings adapted to guide said hook-like projections into said elongated openings, and a set-screw adjustably threaded through the bottom of said spring clip adapted for securing a conduit on the V-notched end faces of said saddle member while maintaining the snap-on connection between said spring clip and said saddle member, the inclined edge face of said hook-like projections forming a V-notch with the adjacent side margins of said saddle member for biasing the apertured ends of said spring clip against said side margins while preventing lateral displacement thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

1,361,262	Jacob	Dec. 7, 1920
1,766,254	Kearney	June 24, 1930
2,550,001	Button	Apr. 24, 1951
2,912,197	Hudson	Nov. 10, 1959
2,937,833	Sachs	May 24, 1960