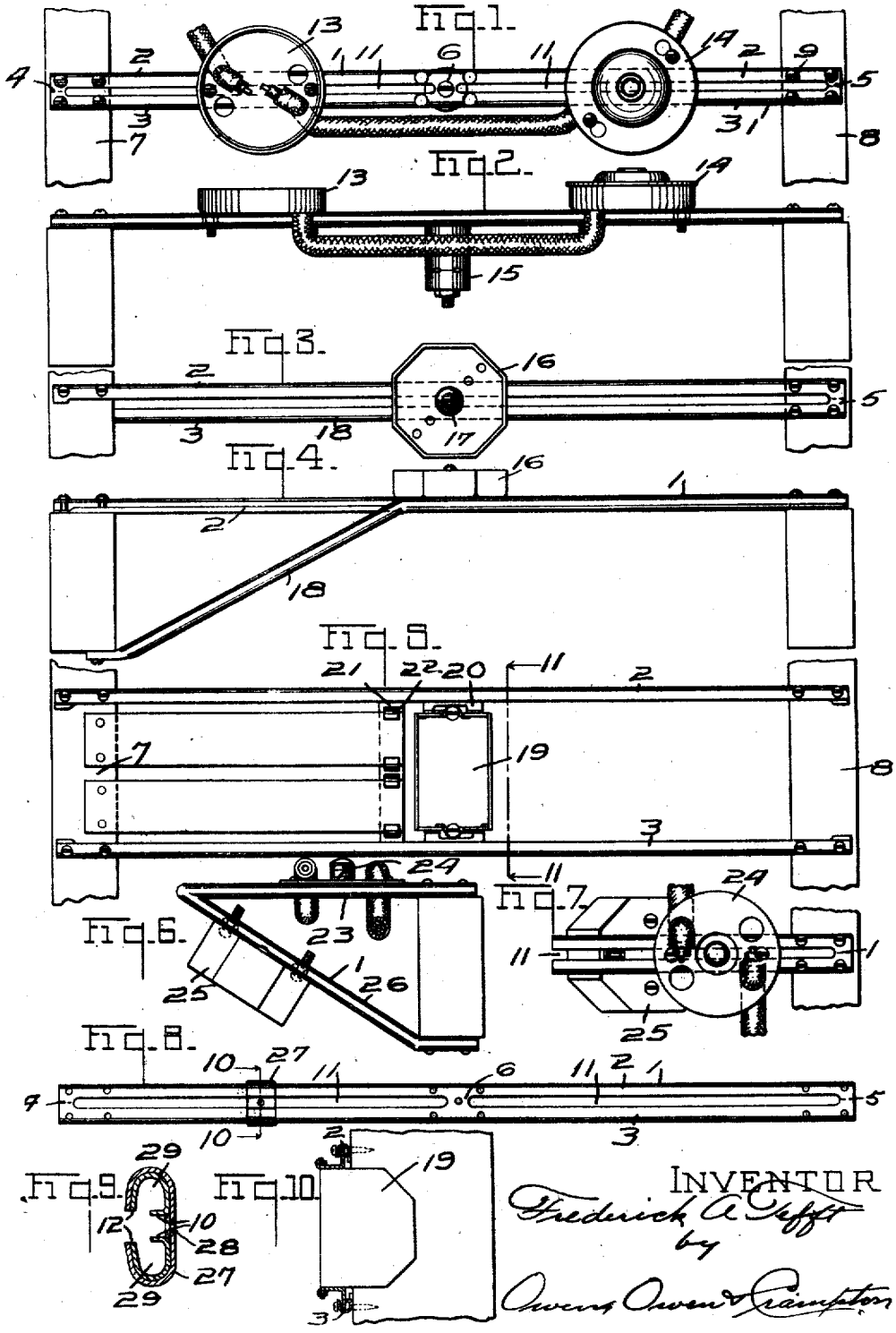
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SUPPORTING BAR FOR TERMINAL BOXES

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SUPPORTING BAR FOR TERMINAL BOXES.

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To all whom it may concern:

Be it known that I, FREDERICK A. TEFFT, a citizen of the United States, and a resident of Toledo, in the county of Lucas and State of Ohio, have made an Invention Appertaining to Supporting Bar for Terminal Boxes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the characters of reference marked thereon which form a part of this specification.

My invention has for its object to provide a supporting bar for terminal, connector or switch boxes that may be readily secured in position to studding or joists of of a building while the building is in the course of construction, and that moreover may be readily shaped or formed to meet the great variety of conditions that are ordinarily met with in order to properly locate the boxes and to properly brace the support to securely hold the boxes in position.

The invention may be contained in structures of different forms. To illustrate a practical application of the invention I have selected one of such structures as an example of structures containing the invention and shall describe it hereinafter. The structure selected is shown in the accompanying drawings.

Figure 1 of the drawings illustrates a front view of the bar with a pair of boxes secured thereto. Fig. 2 illustrates an edge view of the bar shown in Fig. 1. Fig. 3 illustrates the bar in a braced position. Fig. 4 illustrates an edge view of the bar arranged as shown in Fig. 3. Fig. 5 illustrates the bar used in supporting a switch box which is provided with engaging flanges. Fig. 6 illustrates a view of the bar when secured in position to provide a support for the boxes used in connection with either vertical or inclined window lights commonly used in stores for lighting show windows. Fig. 7 illustrates a top view of the structure illustrated in Fig. 6. Fig. 8 illustrates an adjustable clip that may be readily secured to the bar for supporting boxes that are secured by studs at any point along the bar. Fig. 9 illustrates a sectional view taken on the line 10—10 indicated in Fig. 8. Fig. 10 illustrates a sectional view taken on the line 11—11 indicated in Fig. 5.

In the figures, 1 is the bar, which is formed of two parallel arranged parts 2 and 3 that are connected together by parts 4, 5 and 6. The parts 4, 5 and 6 may be formed integral with the parallel portions 2 and 3. The portions 4, 5 and 6 may be scored or made small so that with a pair of nippers or tin shears they may be easily cut or clipped or bent back and forth to break the connections between the parallel parts 2 and 3 if desired. The ends of the parts 2 and 3 are provided with holes through which nails or screws may be driven to secure the bar to the scantling or studding 7 and 8, the length of the bar 1 being sufficient to cover studding that is usually placed sixteen inches apart on their centers. The holes for the screws 9 may be placed as far apart as possible so as to allow variations in the distances that sometimes occur between the studdings 7 and 8.

The bar 1 is bent so as to form inwardly extending lips 10 that may be turned inward in the formation of the slot 11 located between the parallel parts 2 and 3. The edges of the bar 1 are also turned towards each other, as shown in Fig. 9, and to a point opposite the edges of the flanges or lips 10. The distance between the edges 12 of the bar 1 is slightly greater than the distance between the edges of the flanges or lips 10 and so that a nut may be readily inserted between the edges 12 but will not pass between the flanges 10 because of their closer proximity. Fixture boxes and switch boxes are commonly secured by screws or nails that are driven into wooden cross-pieces that are fitted to the scantling, the ends of which are sometimes backed by strips that form brackets to which the cross-pieces of wood may be nailed. In connecting the switch boxes or terminal boxes to the bars 1 a nut is inserted between the edges 12 and a bolt is passed through the wall of the box and

is screwed into the nut, drawing the nut up against the edges of the flanges 10. Thus the boxes may be adjustably located at any point along the bars 1. This provides a means that may be readily nailed to the surface of the scantling and which will form a support for the terminal boxes and also a means whereby the terminal boxes may be readily connected to the support at any point along the support.

In Fig. 1 is shown a fixture box 13 for an electric light fixture and, in proper position relative thereto, a pendant switch terminal box 14 may be readily located when the bar is secured to the supporting parts of a ceiling. The part 6 may be provided with an opening through which a bolt may be passed to secure an insulator 15 to which the main wires may be connected if desired, or a bolt may be passed through the opening in the part 6 to secure a fixture box having a central stud for connecting the fixture directly to the box, as shown in Fig. 3 wherein the box 16 is secured by the bolt 17 to the bar. In order to brace such a box as that shown in Fig. 3 and to which the fixture is directly connected one or both of the portions 4 and 5 may be clipped and one or both of the parallel portions of the bar may be bent so as to extend to the scantling such as a studding at a point remote from the point at which the other portions of the bar are secured. In Figs. 3 and 4 the portion 4 is cut or readily broken and that portion of the part 3 between the portion 6 and the portion 4 is bent down as shown in Fig. 4 and is nailed or screwed to the side of the scantling opposite to that at which the part 2 and a part of the part 3 are secured. The portion 18 of the part 3 will thus form a brace to hold the supporting bar 1 in position notwithstanding the fact that a considerable weight or load may be placed upon the box 16 which may be attached by a bolt passing through the portion 6 or by a bolt located along the slot 11 where the parts 2 and 3 are located in parallel relation.

If desired the portions 4, 5 and 6 may be readily cut or broken and the parts 2 and 3 nailed at a more remote position than they are held by the parts 4, 5 and 6. The strips then form channels in which a switch box of the type illustrated in Figs. 5 and 10 may be secured. The box 19 is provided with flanges 20 that extend laterally from the ends of the box and so as to bring the edge of the box flush with the outside surface of the plaster when the plaster has been placed on the wall. The box 19 thus may be shifted to any desired position between the channeled parts that are formed by severing the portions 4, 5 and 6. In the construction of the building the lath is nailed onto the studding and the ends located in proximity to the box 19 may be supported on bars, such as the bar 21, which may be provided with lugs 22 into which the said ends of the laths may be inserted. Thus the lath may be brought into close proximity to the box for supporting the plaster.

Also the bar 1 may be bent and secured to a single joist. A portion may be secured to the edge of the studding or joist and held in a horizontal position if desired, such as the portion 23 in the arrangement shown in Fig. 6. This part 23 may be located at the base or flooring of a show window and a switch box 24 or a part thereof may be secured to the portion 23 in the same manner that the boxes 13 and 14 are secured, or the bar 1 may be located in the upper part of the show window, such as near the ceiling of the show window, and the box 25 may be secured to the portion 26 which is inclined to the portion 23. The portion 26 may be located so as to be inclined away from the window, thus positioning the fixture box 25 such that the light will be thrown outward, away from or towards the window from the top of the window or from a point back from the window.

If it is desired to increase the rigidity of the connection of a box secured by a stud, such as the box 16 shown in Fig. 3 to the bar 1 it may be done by means of a clip 27 which extends around and fits the bar 1 and is provided with an opening 28 through which the bolt 17 may be inserted. This will coact with the nut of the bolt that is pressed against the edges of the flanges 10 to rigidly hold the box in position.

It will thus be seen that the bar 1 by reason of its form and configuration meets with a great variety of conditions that constantly occur in connection with wiring a building. The party doing the wiring may thus be provided with a number of bars and they may be readily formed into the particular shape to hold the terminal boxes in any desired position.

I claim:

1. A supporting bar for terminal boxes and the like having a pair of parallel portions connected together by portions that may be readily severed and formed of sheet metal, the parallel portions having channels that open towards each other.

2. A supporting bar for terminal boxes and the like formed of sheet metal and having side edges turned towards each other to form channels opening towards each other and having flanges bent from the center of

the bar and extending towards the turned edges of the bar.

3. A supporting bar for terminal boxes and the like formed of sheet metal and having side edges turned towards each other to form channels opening towards each other and having flanges bent from the center of the bar and extending towards the turned edges of the bar, the first named edges located farther apart than the edges of the flanges.

In testimony whereof, I have hereunto signed my name to this specification.

FREDERICK A. TEFFT.