

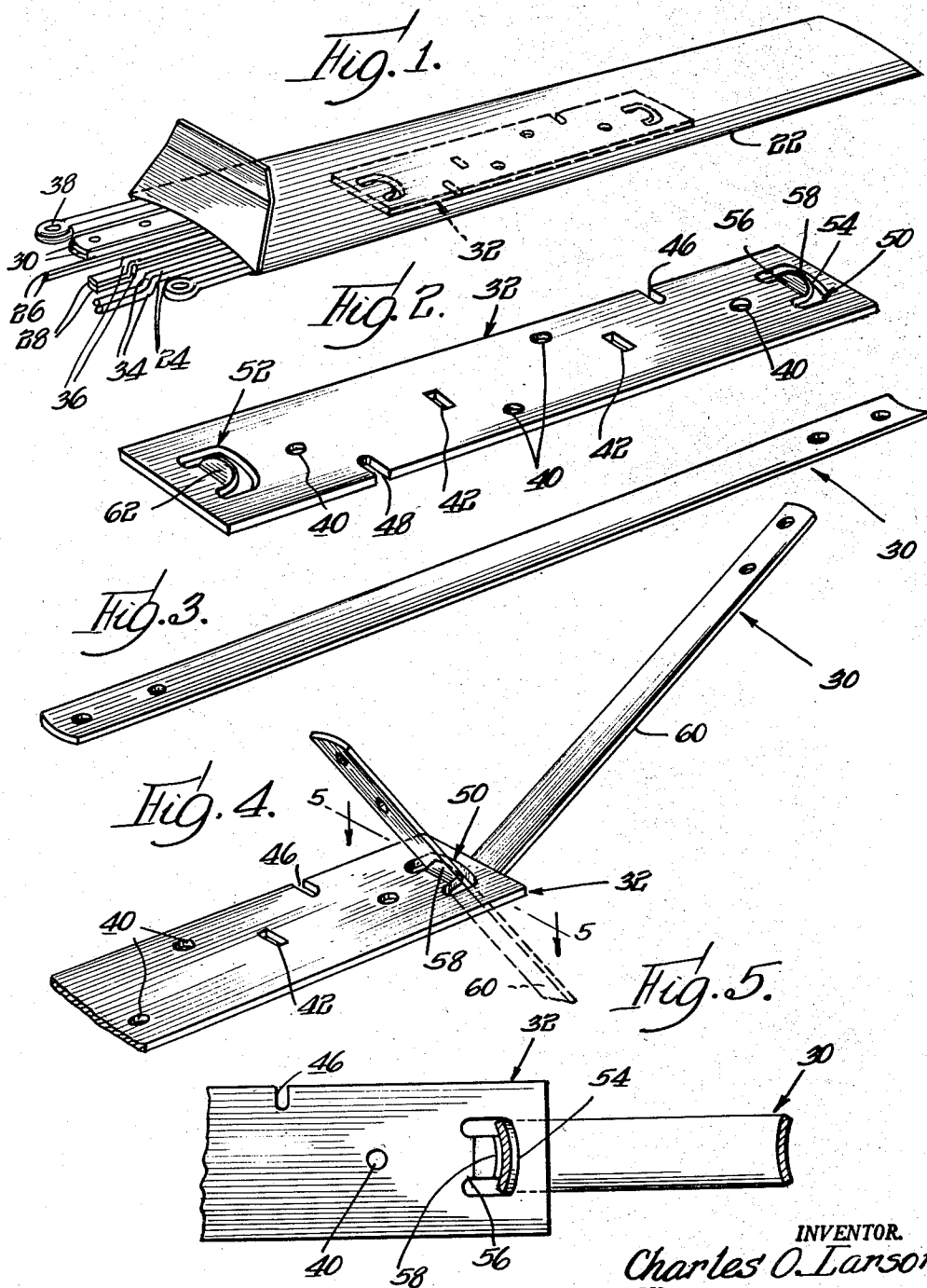
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C. O. LARSON

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SLOTTED MANUAL BENDING TOOL

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INVENTOR.
Charles O. Larson
BY
Olson & Trefler
attys

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SLOTTED MANUAL BENDING TOOL

Charles O. Larson, Sterling, Ill.

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2 Claims. (Cl. 81-15)

The present invention relates to hangers adapted to be mounted on a peg board or other apertured panels and more particularly, to a novel kit and means for forming wire peg board hangers.

As is well known, many forms of hangers formed from wire or metal straps are manufactured and sold for supporting or hanging various articles from a peg board or a suitably apertured wall panel. Such hangers do not always fill the exact requirements of the intended user so that they must be modified by the user. A hanger which must be modified is relatively expensive as compared to a piece of wire or strap stock from which it could be made and in addition, such hangers are relatively bulky and expensive to store and handle as compared to pieces of wire stock. It is, therefore, an important object of the present invention to provide a novel kit which may be more easily stored and handled and which includes pieces of wire and sheet strap stock from which a user may form any desired hanger members without paying the relatively high cost of preformed hanger members.

Another object of the present invention is to provide an extremely simple and economical tool for use in forming pieces of wire and strap stock into any desired shape.

Other objects and advantages of the present invention will become apparent from the following description and the accompanying drawings wherein:

Fig. 1 is a perspective view of a novel kit embodying the features of the present invention;

Fig. 2 is a perspective view showing the novel tool of this invention which is included in the kit;

Fig. 3 shows a strap of sheet stock included in the kit;

Fig. 4 illustrates the use of the tool during the bending or forming of a sheet metal strap; and

Fig. 5 is a sectional view taken along line 5-5 in Fig. 4.

Referring now more specifically to the drawings wherein like parts are designated by the same numerals throughout the various figures, a kit 20 embodying the features of this invention is shown in Fig. 1 and includes an elongated flattened carton 22 which may be formed from cardboard or the like in any known manner. The kit includes within the carton a plurality of relatively heavy gauge or large diameter wire pieces 24, a plurality of relatively light gauge or small diameter wire pieces 26, a plurality of flat wires 28, a plurality of sheet metal straps 30 and a tool 32. Ends of each wire are preferably preformed to provide hook portions 34 and 36 which are adapted to be inserted through and hooked behind a peg board and/or eye portions 38. It should be noted that these hook and eye portions are formed so that they may be inserted within the flat carton. The tool 32 is in the form of an elongated flat bar which fits easily within the carton, and this, in combination with the form of the wire pieces and straps, results in the provision of a kit which is compact and easily handled.

The tool 32 is preferably formed from an elongated bar of economical relatively soft steel. As shown best in Figs. 2 and 4, the tool 32 is provided with a plurality

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of apertures 40 preferably arranged adjacent opposite ends of and diagonally across a mid portion of the bar. These apertures have a diameter which is substantially equal but slightly greater than the diameter of the wire pieces 24 so that they are adapted to receive portions of the wires 24 as well as the wires 26. In addition, the tool is provided with a plurality of rectangular apertures 42 each of which is adapted to receive the rectangular wires 28. The tool is also provided with marginal slots 48 and 46 into which the wires may be easily inserted for bending after they have been bent so that they cannot be inserted through the apertures. Preferably the width of the slot 46 is substantially equal to the thickness of the flat wires to facilitate the formation of a sharp right angle bend. The slot 48 is wider and is substantially equal to the diameter of the wires 24 to facilitate the formation of a sharp bend. The apertures in the tool may become worn after a number of wire bending operations have been performed, but since the tool is provided with a plurality of apertures of each size, it is useful for bending a relatively large number of wire pieces.

The straps 30 are embossed or formed with a concavo-convex transverse cross-section as shown best in Figs. 3 and 5. In order to bend these straps the tool is provided, adjacent its opposite ends, with curved or generally C-shaped slots 50 and 52. The slot 50 is defined, in part, by a curved edge 54 which conforms with the concave side of a strap 30, and a tab 56 having a curved end 58 which conforms with the concave side of the strap. In addition the tab is bent upwardly out of the plane of the bar. It should be noted that the tab 56 projects toward the adjacent end of the bar.

In order to bend the strap 30 laterally of its convex side, a portion 60 of the strap is inserted through the slot 50, as shown in Figs. 4 and 5, whereupon the tool and strap portion 60 are moved relatively so as to shift the portion 60 toward the solid line position. The curved edges 54 and 58 engage the strap and tend to preserve its concavo-convex shape. Since the portion 60 is bent past the end of the bar, a substantially right-angle bend may be easily formed, if desired. Of course, bends of other angles may also be formed.

If it is desired to bend the strap 30 laterally of its concave side, the strap is inserted through the slot 52. The slot 52 is formed in essentially the same manner as the slot 50 except that the tab 62 of the slot 52 projects away from the adjacent end of the bar. This permits bending of the strap 30 laterally of its concave side and outwardly past the adjacent end of the bar.

The wires may be inserted through the apertures and slot provided therefor in the tool and bent in substantially the same manner as the straps. It is contemplated that each of the wire pieces and straps may be formed into a single hanger member. It is also contemplated that each of the wire pieces may be cut and formed into two or more hanger members. It is, of course, understood that the contemplated hanger members may be of any desired shape to fit the requirements of a particular installation.

While the preferred embodiment of the present invention has been shown and described herein, it is obvious that many structural details may be changed without departing from the spirit and scope of the appended claims.

The invention is claimed as follows:

1. A tool for use in bending an elongated metal strap having a concavo-convex transverse cross section, said tool comprising an elongated flat metal bar having curved slot means therein adjacent an end thereof and through which said strap may be inserted for bending, said slot means having one side defined by a curved edge generally conforming with the convex side of said strap, and an integral tab extending from an opposite side of said slot

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means and inclined laterally from said bar and generally toward said curved edge of said slot means, said tab including a curved end conforming with the concavo side of said strap and being cooperable with said opposed curved edge for holding said strap during bending thereof so as to preserve the concavo-convex section of the strap adjacent the bend during the bending operation. 5

2. A tool as claimed in claim 1, wherein the opposite end of the bar is provided with substantially identical slot means and tab facing in the same direction as the first men- 10

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tioned slot means and tab whereby to permit the strap to be bent in the opposite direction beyond the plane of the bar.

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