Sept. 10, 1957 C. O. LARSON 2,805,777

TOOL HOLDER

Filed July 2, 1952 2 Sheets-Sheet 1

Fig. 1

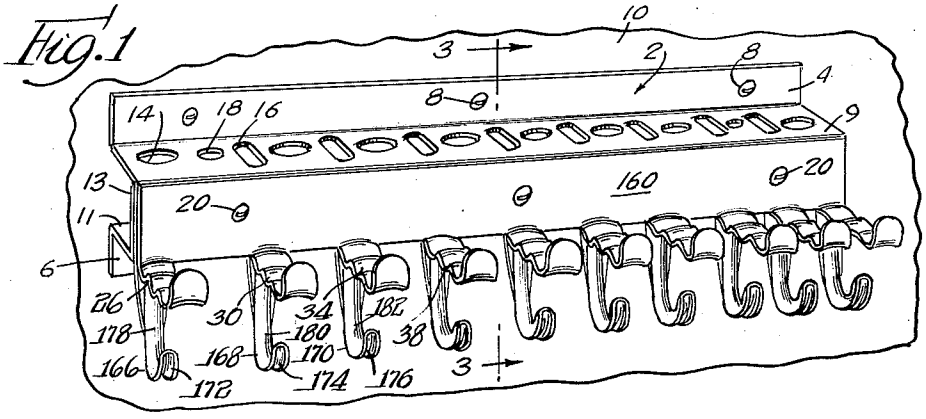


Fig. 2

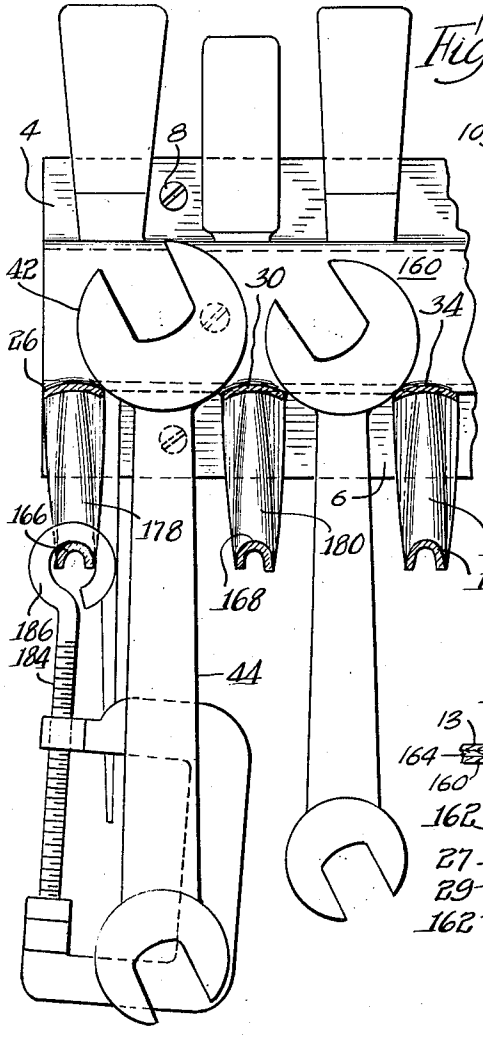


Fig. 3

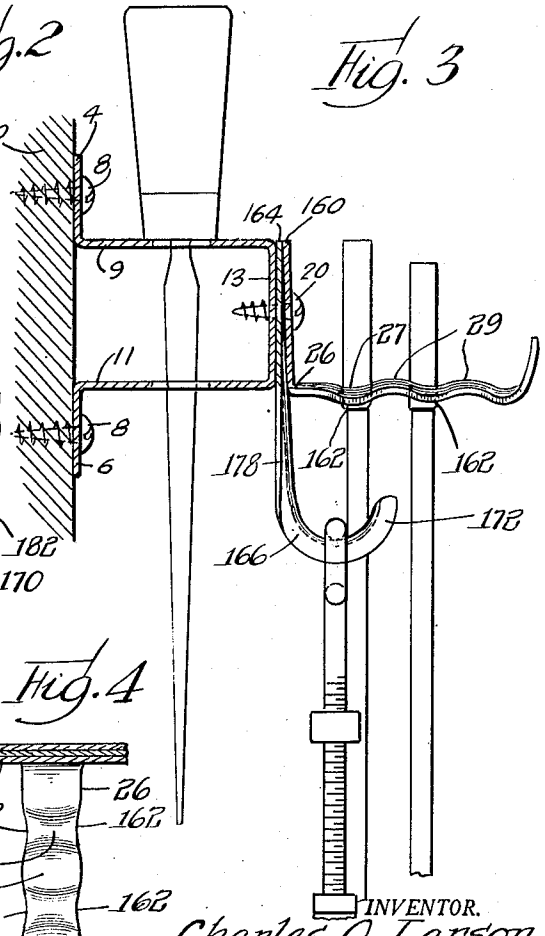
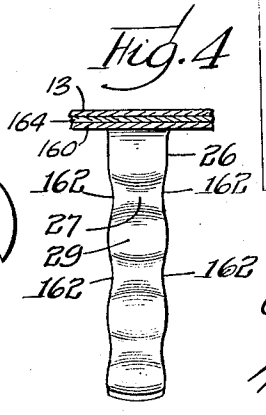


Fig. 4

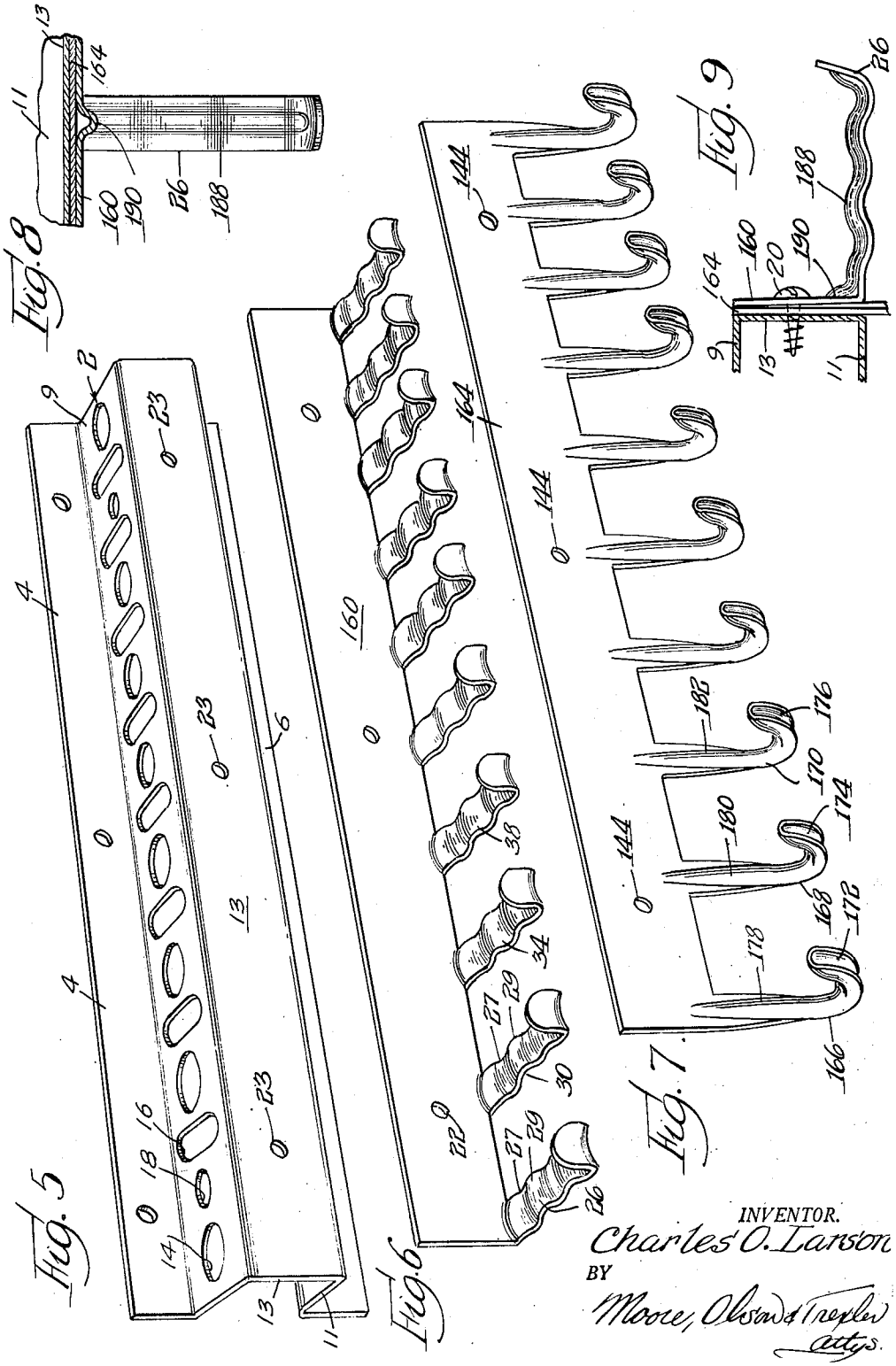


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TOOL HOLDER

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2,805,777

TOOL HOLDER

Charles O. Larson, Sterling, Ill.

Application July 2, 1952, Serial No. 296,830

1 Claim. (Cl. 211—60)

This invention relates to sheet metal brackets for holding tools and other desirable objects in such a manner that they are not only securely and orderly supported, but may be quickly and easily withdrawn from the bracket. This case is a continuation-in-part of my copending application Serial No. 254,336, now abandoned, which was filed November 1, 1951.

Among the objects of the present invention are to provide a sheet metal bracket composed of one or more parts and having means whereby the bracket may be attached to a flat supporting surface, the bracket being provided with spaced tongues, grooves, and slots and constructed and arranged for detachably supporting, in a compact formation, a multitude of tools of various sizes and shapes.

Still another object of this invention resides in providing a sheet metal tool holder composed of three parts, which may be joined together to form a single unit, or which may be used separately, one of which parts is provided with a series of openings of various sizes and shapes adapted to receive the elongated shank of tools, such as bits, files, and the like. The second part is provided with spaced depending tongues having hooked lower portions adapted to support various tools, and the third part is provided with horizontally disposed spaced tongues, which are adapted to support various tools by enlarged portions thereof engaging adjacent tongues.

Another object of this invention is to provide a tool holder of the above described type, wherein the tongues extending from the second and third parts are disposed so that tools supported by these parts are offset from each other, whereby they may be readily removed from the holder.

Still another object of this invention is to form the tongues of the second and third parts so that a very strong and rigid structure is provided.

These and other objects of the invention will be apparent from a perusal of the following specification when taken in connection with the accompanying drawings, wherein:

Fig. 1 is a perspective view, showing the preferred form of my bracket for supporting tools, the bracket being in accordance with and embodying the features of the present invention;

Fig. 2 is a partial vertical cross section through the bracket shown in Fig. 1 and showing various tools supported by the bracket;

Fig. 3 is a vertical cross section taken along line 3—3 in Fig. 1;

Fig. 4 is a plan view, showing one of the horizontally disposed tongues of the bracket of Fig. 1;

Fig. 5 is a perspective view of one of the parts of the bracket shown in Fig. 1;

Fig. 6 is a perspective view of a second part of the bracket of Fig. 1;

Fig. 7 is a perspective view of a third part of the bracket of Fig. 1;

Fig. 8 is similar to Fig. 4, but shows a modified form of the horizontally disposed tongues; and

Fig. 9 is a partial vertical cross section, showing a side view of the tongue of Fig. 8.

Referring now to the drawings more in detail, the bracket shown in Fig. 1 is illustrated as formed of three main parts suitably connected by screws or other fastening means. In general the bracket comprises an upper bracket **2** of sheet metal. The bracket **2** is preferably of rectangular cross section and is provided with an upper elongated normally disposed flange **4** and an oppositely extending lower flange **6**. These two flanges **4** and **6** are suitably perforated at desired intervals to receive fastening screws **8** by which the bracket may be affixed to a vertical wall **10**. The main body of the bracket, not including flanges **4** and **6**, thus provides an upper wall or plate **9** which is normal to the wall **10**. There is also formed a lower parallel plate or wall **11** normal to the wall **10** and connected to plate **9** by a vertically disposed pate **13**. The upper and lower parallel surfaces of walls **9** and **11** of the bracket **2** are provided with registering slots or openings of variant sizes and shapes such as the openings **14**, **16** and **18** which are preferably staggered or alternated and in registration so that the shanks of tools may be passed generally therethrough, and whereby the handle portions of the tools of larger diameter in cross sectional size than the openings or slots provide means for supporting the tools from these openings. The portion of the bracket which is shown in Fig. **5** may be used either as a separate bracket or as shown in Figs. 1 through 3 may be combined with the plate members shown in Figs. 6 and 7 in the manner illustrated in Fig. 1 by screws **20** to provide a single unit.

The plate member shown in Fig. 6 comprises a plate **160** having openings **22** therein through which screws **20** may pass to secure the plate **160** to the bracket **2**. Tongues or fingers **26**, **30**, **34**, **38**, et cetera extend horizontally from the bottom edge of the plate **160**. Each of these fingers is provided with alternate depressions and humps, as at **27** and **29**. Preferably, the finger **26** extends from the plate **160** at or adjacent the end thereof, and, as shown in Fig. 6, the subsequent fingers are spaced along the plate, so that the last finger is disposed at the opposite end thereof. Preferably, the fingers are disposed so that the spaces therebetween decrease in width from one end of the plate **160** to the other. As shown in Fig. 6, the fingers are shown to be spaced wider apart at the left end of the plate **160** than at the right end. In order to make the fingers very rigid, the fingers are formed so that they have a generally arched cross sectional shape, as shown in Fig. 2, and in addition, the side edges thereof are downwardly and inwardly deformed, as at **162** in Fig. 4. Preferably, the deformed areas **162** are located at the depressed portions **27** of the fingers. This formation causes the fingers to have an increased arched cross sectional shape at the depressed portion **27**, which shape provides a very strong and rigid structure.

The plate member shown in Fig. 7 comprises a plate **164** having fastener receiving apertures **144** spaced to align with the apertures **22** in plate **160** and the apertures **23** in the bracket **2**. The plate **164** is provided with depending fingers **166**, **168**, **170**, et cetera. The lower extremities of the fingers **166**, **168**, et cetera, are provided with upturned hook portions **172**, **174**, **176**, et cetera, which are adapted to support various tools, as shown in Figs. 2 and 3. In order to make the fingers **166**, **168**, et cetera, very strong and rigid, the fingers are formed into an arched rib or bead. As shown best in Figs. 3 and 7, the beads **178**, **180**, **182**, et cetera, extend across the entire width of the lower portions of

the fingers, but taper inwardly along the upper portions of the fingers, until they merge with the flat surface of the plate **164**. It is to be noted that the beads **178**, **180**, et cetera, extend upwardly past the lower edge of plate **164** and a substantial distance into the plate. By reason of this structure, any possible weakness at the junction of the plate and the fingers is eliminated. As shown in Fig. 7, the tongues **166**, **168**, **170** are disposed so that the finger **166** is at the lefthand end of the plate **164**, and the last finger is at the righthand end of the plate. The fingers **166**, **168**, et cetera, are spaced along the plate **164** in the same manner as the fingers **126**, **130**, et cetera, are spaced along the plate **160**. Thus, when the parts are assembled, as shown in Figs. 1 and 2, the finger **26** and the finger **166** are aligned vertically, and the subsequent adjacent fingers on plates **160** and **164** are also aligned vertically. By reason of this structure, when tools are supported on the fingers of plates **160** and **164** in the manner shown in Fig. 2, they will be alternately spaced, so that they may be readily removed from the bracket. In other words, the clamp **184**, which is supported by the loop **186** on the hook of finger **166**, is offset from the wrench **44**, which is supported by its head **42** from the fingers **26** and **30**. It is seen, therefore, that when it is desired to remove the clamp **184**, it may be easily grasped without undue interference with the wrench **44**.

Figs. 8 and 9 illustrate another embodiment of the fingers **26**, **30**, et cetera, which is shaped to provide a rigid structure. In this embodiment, a raised bead or rib **188** is formed in the mid portion of the finger **26** to add rigidity thereto. It is noted that the bead **188** extends from adjacent the outer end of the finger **26** and into the plate **160** above the junction of the finger and the plate, as at **190**. This structure provides a very strong junction between the plate **160** and the finger **26**. In this embodiment, all of the subsequent fingers **30**, **34**, **38**, et cetera, are formed with a similar bead **188**.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

I claim:

A tool holder comprising a bracket including a pair of spaced apart plates adapted to be positioned horizontally and a third plate interconnecting said pair of plates along one longitudinally extending edge thereof, means adjacent the other longitudinally extending edge of said pair of plates for securing said pair of plates to a support, said pair of plates having registering apertures therein adapted to receive portions of tools therethrough, a first vertical plate member mounted on said bracket adjacent said third plate, said first plate member having a series of fingers depending from the lower edge thereof and terminating in upturned hook portions, a second vertical plate member mounted on said bracket adjacent said first vertical plate member, a second series of fingers extending from said second plate member in a direction transverse to the plane of said second plate member and having a generally arch shaped cross section, each successive finger in said second series being disposed directly above the corresponding finger in said first series and each pair of said registering apertures being aligned between adjacent fingers whereby interference is avoided between tools supported between adjacent fingers of said first series and tools supported by the hook portions of the said second series and tools supported by said bracket with portions extending through said registering apertures, and means attaching said first and second plate members to said third plate, each finger in the first series of fingers having a rigidifying rib extending from adjacent the terminal end of the hook portion to substantially the other end thereof and each of the fingers in the second series of fingers having spaced areas of increased arched cross section to rigidify said second series of fingers, the spacing between adjacent fingers in each series of fingers being greater at one end of the said tool holder and less at the other end of said tool holder.

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