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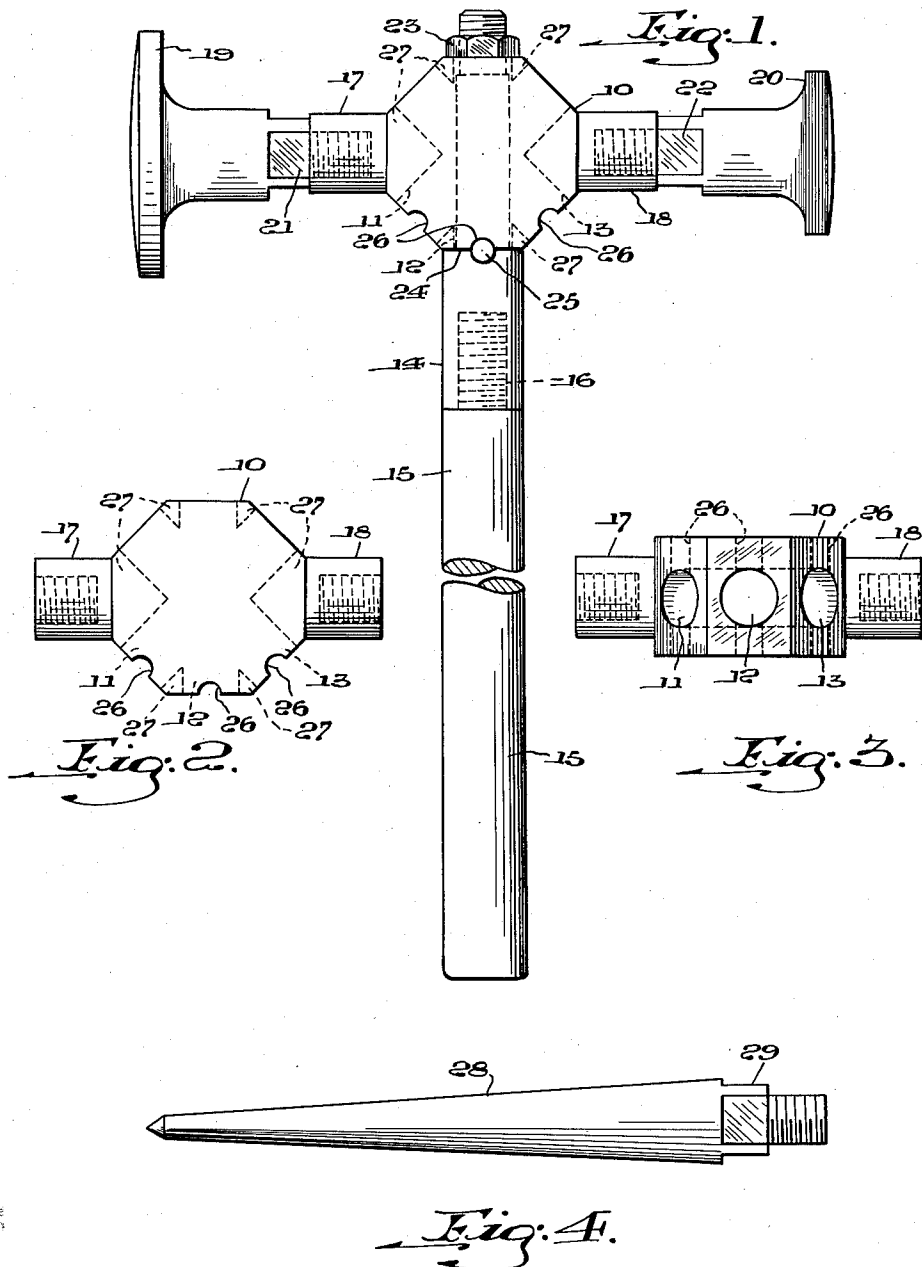
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HAMMERS OF THE HAND-TOOL TYPE

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2 Sheets-Sheet 1



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HAMMERS OF THE HAND-TOOL TYPE

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7 Claims. (Cl. 81-15)

My invention relates to hammers, and more particularly to those of the type commonly used on so-called fender and body work, to smooth out dents and other irregularities of surface.

An object of my invention is to provide a tool of the character referred to wherein various forms of hammer heads and other implements can be substituted for one another in an improved manner.

Another object of my invention is to provide a tool of the character referred to wherein a handle therefor can be placed in a plurality of diagonally-angular positions relative to the axes of the working heads, as well as in the usual right-angular relation thereto.

Still another object of my invention is to provide an improved means of tightly connecting a handle to the body member that carries the hammer heads or other tools.

Some of the forms which my invention may take are shown in the accompanying drawings, wherein Figure 1 is a plan view of the tool assembly;

Fig. 2 is a plan view of the body member of Fig. 1;

Fig. 3 is a side view thereof;

Fig. 4 is a view showing another form of shaping implement that may be applied to the body member;

Fig. 5 shows a modification of the structure of Fig. 1;

Fig. 6 is a side view of the body member of Fig. 5, and Fig. 7 a plan view thereof;

Fig. 8 is a side view of the locking bolt of Fig. 5;

Fig. 9 is an inner end view thereof;

Fig. 10 is a side view of the locking sleeve of Fig. 1, and

Fig. 11 is an inner end view thereof.

A body member 10 is provided with three eyes 11, 12 and 13 that extend completely through the block or casting that constitutes the body, these eyes serving to receive the reduced end of a shank 14 of a handle 15 which is screw-threaded at 16 into the shank 14. The handle will, of course, be of suitable length and can have additional sections applied thereto where greater length is required.

The body member has sockets 17 and 18 integrally formed therewith and tapped to receive the threaded shanks of hammer heads 19 and 20 or other tools such for example as that shown in Fig. 4. The heads 19 and 20 have flats at 21 and 22, for receiving a wrench so that they can be tightly screwed into seating engagement with the outer ends of the sockets.

Shoulders 27 of generally V-shape are formed in drilling the eyes in relatively diagonal relation and serve as widely-spaced coaxially-curved bearing surfaces for the shank 14 of the handle. Fig. 4 shows a tool 28 of another type which has a shank 29 formed as are the shanks of the hammer heads 19 and 20, for connection to the body member.

As shown in Fig. 1, the shank 14 of the handle extends through the eye 12 at right angles to the axial line of the hammer heads and is held in place at its threaded end by a nut 23 that draws a shoulder 24 on the shank

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tightly against the adjacent face of the member 10. Also, the shank has a stud 25 firmly set into it, which seats within semi-circular recesses 26 in the member 10, at the upper and lower side of the eye 12.

The shank or stem 14 of the handle can be placed in either of the diagonally-extending holes 11 and 13, to facilitate access by the hammer heads to semi-concealed areas that are inaccessible by the tool heads when the handle is at right angles to the axial lines of the hammer heads.

Referring now to Figs. 5 to 11, I show a different arrangement for adjusting or positioning a handle 31 to various relatively-diagonal positions with respect to a body member 32 which, between its upper and lower plate-like surfaces 33, has triangular ribs or webs 34 that are integrally formed therewith, there being clear spaces between these ribs, to allow for angular positioning of the shank of the handle 31.

A locking bolt 35 has ribs 36 on its upper and lower sides and a threaded shank 37, the ribs 35 lying in one pair of the recesses 38 in the upper and lower flanged portions of the body member. The locking bolt 35 serves to retain the handle in place. To this end, the shank of the handle has an internally-threaded extension 40 that extends through a locking sleeve 41 and makes threaded engagement with the stem 37 of the locking bolt.

The shank of the handle is freely rotatable in the locking sleeve 41, and as the handle is screwed upon the stem 37, bosses or ribs 42 on the upper and lower portions of the sleeve enter into semi-circular recesses such as 43 in the upper and lower parts 33 of the body member.

It is not necessary to remove the handle from the body member when changing its angular position, because turning of the handle to unscrew it somewhat from the threaded shank 37 for such distance as will permit release of the ribs 36 and 42 from the recesses 38, will allow swing of the handle to another angular position.

I claim as my invention:

1. A tool comprising a body member having an opening therethrough, a handle having a threaded shank portion extending into the opening, from one side of the body member toward the other side thereof, a threaded holding member at said other side, connected to the said shank and holding it against withdrawal from the body member, adjustable clamping elements carried by the shank and the holding member respectively in gripping engagement with said two sides and serving to hold the handle shank at selected angular positions in the plane of the body member, and implement holding means on the body member.

2. A tool as recited in claim 1, wherein the said opening is flared outwardly in both directions from a median line and the clamping elements are held against the said sides of the body member, and the implement-holding means are in the form of sockets extending oppositely from the body portion thereof.

3. A tool as recited in claim 1, wherein the said opening is flared outwardly in both directions from a median line and the clamping elements are held against the said sides of the body member, and spaced notches are provided in the sides of the body member in engagement with the clamping elements, to prevent angular displacement of said elements and the handle.

4. A tool as recited in claim 3, wherein the threaded connection to the holding shank is of such length that it can be extended a distance sufficient to permit complete withdrawal of the clamping elements from the notches, for angular adjustment of the handle without disengagement of the threaded connection.

5. A tool comprising a body member that is provided with means at two opposite sides thereof for supporting

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hammer heads and the like, and also having an opening extending completely therethrough, between the said supporting means, the opening being defined in part by side walls that are flared outwardly from a line that intersects with both of said supporting means, a handle having a shank portion that extends into the opening and between the said side walls, a clamping device carried by the said shank and holding the handle and its shank in gripped engagement with the said other sides of the body member, and means releasably interlocking the clamping device and the body member, with the said shank disposed at selective angular positions relative to the said line, the said openings and supporting means being at approximately a common mid plane of the body member.

6. A tool comprising a body member that is provided with means at two opposite sides thereof for supporting hammer heads and the like, and also having openings that extend completely therethrough at its other sides, the openings being flared from the center of the body member toward said other sides, a handle having a shank portion that extends into the opening and between the said two supporting means, and a clamping device that comprises a nut engageable with the said shank and one of said other sides, and means comprising recesses in

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the side of the body opposite to the last-mentioned side and a shoulder on the handle selectively fitting the recess, for releasably interlocking the handle shank with the body member, at selective angular positions relative to the said line, the said openings and supporting means being at approximately a mid plane of the body member.

7. A tool as defined in claim 6, wherein the openings have side wall areas at said other sides, which serve to brace the handle shank.

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