A holder for sockets of a socket wrench combination which takes the form of a housing having a pair of spaced apart top and bottom walls in which a row of U-shaped spring clips are mounted for releaseably holding sockets of the socket wrench combination in a row in side by side relationship with their ends confronting said walls. The housing has an opening or openings through which sockets can, selectively, be passed so as to be moved into an outer releaseable engagement with the spring clips. The top wall has a plurality of slots which open at one end into the opening and extend over the spring clips. The slots are of a sufficient width to accept the drive stud of the wrench of the combination so that the sockets can be inserted into and removed from the housing while attached to the wrench.

5 Claims, 6 Drawing Figures
HOLDER FOR SOCKETS OF A SOCKET WRENCH

BACKGROUND OF THE INVENTION

Field of the Invention

This invention relates to tool holders and in particular to a holder for releasably holding sockets of a socket wrench combination in a manner in which they can be removed from and inserted into the holder while attached to the wrench.

It is generally the practice to store a set of sockets of a socket wrench in a tray or the like which is usually tapered to provide a neat fit for the sockets which are arranged in order of size. Although the sockets are presented in a manner in which the size required can be easily determined and the socket then removed from the tray for attachment to the wrench of the socket wrench, the sockets being loose in the tray are thus not secured against dislodgement should the tray be overturned. It is, therefore, necessary to when transporting sockets in such holders, that means must be provided for securing the sockets therein. Some holders of this type are fitted with removable covers and others have swinging clamps, however, removable covers, as generally known are prone to becoming lost and releasable clamps also have a tendency to become lost and are subject to damage.

Also as the sockets are loose in their holders or trays when they are in use, there is a tendency for some mechanics, when using sockets of various sizes to forget to return a socket to the tray when it is replaced by a socket of a different size, resulting very frequently in sockets becoming lost.

SUMMARY OF THE INVENTION

The present invention provides a socket holder for a socket wrench combination in which each socket is independently and releasably secured without the provision of removable covers and the like which can be easily lost.

The holder of the present invention, furthermore, is so devised that the sockets can be most easily removed therefrom and replaced therein when they are attached to the wrench of the combination so that when it is necessary, when doing a job, to change sockets a user is more likely to replace the socket being changed in the holder before removing another socket from the holder with the wrench.

The socket holder of the present invention is, furthermore, relatively inexpensive to produce and enables a user to replace one socket for a socket of a different size with the use of one hand alone.

The holder of the present invention comprising a housing having a pair of spaced apart top and bottom walls, a row of U-spring clips mounted in the housing for releasably holding a row of sockets in a side by side relationship with ends of the sockets confronting the top and bottom walls, an opening in the housing for enabling the sockets individually and selectively to be inserted in and removed from the spring clips, the top wall having a slot formed therein over each of the spring clips and opening out of the opening and being sufficiently wide to enable the drive shank of the wrench of the combination to be extended therethrough into any of the sockets so that the sockets can be removed from and replaced in the holder with the wrench alone.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a plan view of a portion of one embodiment of the holder of the invention, portions being broken away for reasons of clarity.

FIG. 2 is a longitudinally sectioned elevation of the holder shown in FIG. 1.

FIG. 3 is a plan view of a portion of another embodiment of the invention, portions being broken away for reasons of clarity.

FIG. 4 is an end view of the embodiment shown in FIG. 3.

FIG. 5 is a plan view of yet another embodiment of the invention with portions being broken away for reasons of clarity.

FIG. 6 is a central section of elevation of the embodiment shown in FIG. 5.

DETAILED DESCRIPTION

Referring to the drawings, FIGS. 1 and 2 show one embodiment 10 of a socket holder of the invention for releasably storing a set of sockets 12 of varying sizes of a socket wrench combination having a wrench 14. Conventionally, the sockets are cylindrical and are provided at one end with drive-sockets 13 of a square cross-sectional shape which slideably accept the drive shank 15 of the wrench. The drive shank, conventionally, has an outwardly sprung ball detent 16 which frictionally engages the walls of the drive socket 13 when the socket is applied to the wrench so as to prevent their accidental disengagement when in use. The sockets also vary in diameter and length in relation to the size of nut or bolt with which each is to be used.

The holder 10 has an elongated housing 19 having a substantially square transverse cross-section and which has spaced top 21 and bottom walls 22, respectively, and side walls 23 and 24. The housing tapers from a large end 25 to a small end 26 so that it nicely accommodates a set of sockets which also range from large to small.

A plurality of transversely extending partition walls, severally 31, divide the housing longitudinally into a plurality of compartments, each compartment being adapted to receive a socket. The partition walls, which can be of heavy gauge metal, are preferably secured to the side walls by welding.

The top wall is provided with a plurality of key-hole shaped apertures 33 each of which has a circular opening 34 and a longitudinally extending slot 35. The circular openings of each of the key-hole shaped apertures reduce in diameter from the large end of the housing to the small end to suit socket size. The slots of each of the key-hole shaped apertures are all of the same width and are just wide enough to slideably accept the drive shank of the wrench.

Each of the partition walls has mounted thereon a U-spring clip, severally 36, which can be secured as by rivets 36.1, the clips being located beneath each of the slots of the apertures and opening into the circular openings. The clips also are arranged in order of descending size from the large end to the small end of the housing, so that each fittedly receives an associated socket so as to releasably hold the sockets in position.
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Referring to FIG. 2, it is seen that taper of the housing is such that with a socket inserted in its associated spring clip, the lower end of the socket rests against the bottom wall and the upper end or drive end of the socket is flush against the top wall.

In order to remove the socket from the socket holder the drive shank of the wrench is thrust down into the drive socket of the chosen socket. The socket is then pushed forward out of its spring clip to a position centered below the circular opening of its associated key-hole aperture and then is lifted upwards out of the housing. The sockets, are of course, replaced in their associated compartments by simply lowering the socket through the circular opening of the key-hole aperture of the proper compartment then moving it into its associated spring clip and the wrench then disengaged.

It is apparent that although other tools can be used to remove a socket from the holder the wrench is most suitable, so that whenever one socket on the wrench must be replaced by a socket of a different size a mechanic will be more likely to replace it in the holder before removing another.

FIGS. 3 and 4 show another embodiment of the holder of the invention. Holder 40 has an elongated housing 41 which is U-shaped in transverse cross-section having top and bottom walls 42 and 43, respectively, and a base wall 48. Spring clips 49, similar to the spring clips 36, are secured to the base wall and open outwards of the open side of the housing. Slots 51 which are the same width as the slots 35 are formed in the top wall centrally over each of the spring clips and open out of the free edge of the top wall.

The housing 41 also tapers in the same manner as housing 19 to suit the sockets which are arranged in descending order of size from the large end of the housing to the small end thereof. Use of holder 40 is somewhat the same as above described except that the sockets can be moved into and out of the clips through the open side of the housing with the use of the wrench, the drive shank of which can be extended through the slots.

FIGS. 5 and 6 show another embodiment of a holder of the invention. The holder 60 is substantially the same in function as the holder 40 except that whereas holder 40 provides a linear arrangement of the sockets, holder 60 provides a circular arrangement thereof.

The holder 60 has a cylindrical hollow core 61 having at opposite ends outwardly projecting annular top and bottom flanges, 62 and 63 respectively. The flanges are canted in steps, as seen in FIG. 6, with the largest socket and smallest socket in diametric opposition. The sockets are held in position between the flanges by U-spring clips 65 and the top flange 62 is provided with slots 66 disposed over each of the clips and which open out of the free edge of the top flange for enabling the passage of the drive shank of the wrench, the sockets being inserted in and moved from the spring clips as described with reference to holder 40.

I claim:

1. A holder for sockets of a socket wrench combination comprising:
   a. a housing having a pair of spaced apart top and bottom walls,
   b. a row of U-spring clips mounted in the housing for releaseably holding a row of sockets in a side by side relationship with ends of the sockets confronting the top and bottom walls,
   c. an opening in the housing for enabling the sockets individually and selectively to be inserted in and removed from the spring clips,
   d. the top wall having a slot formed therein over each of the spring clips and opening out of the opening and being sufficiently wide to enable the drive shank of the wrench of the combination to be extended therethrough into any of the sockets so that the sockets can be removed from and replaced in the holder with the wrench alone.

2. A holder as claimed in claim 1 in which the opening is constituted by a row of key-hole shaped apertures in the top wall, each aperture having a circular portion through which a socket can be extended into the housing.

3. A holder as claimed in claim 1 in which the housing is elongated and has a U-shaped cross-section having spaced top and bottom walls and a connecting base wall, said clips being secured in a row to said base wall and said slots extending transversely across the top wall above each clip and opening out of the free edge of the top wall.

4. A holder as claimed in claim 1 in which the housing has a central cylindrical hollow core and radially projecting annular flanges at each end of said core, the clips being secured to the hollow core between the annular flanges and the slots extending from a free edge to the top flange radially inwards over each of the spring clips.

5. A holder as claimed in claim 1 in which the housing tapers to suit sockets arranged in order of descending size.

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