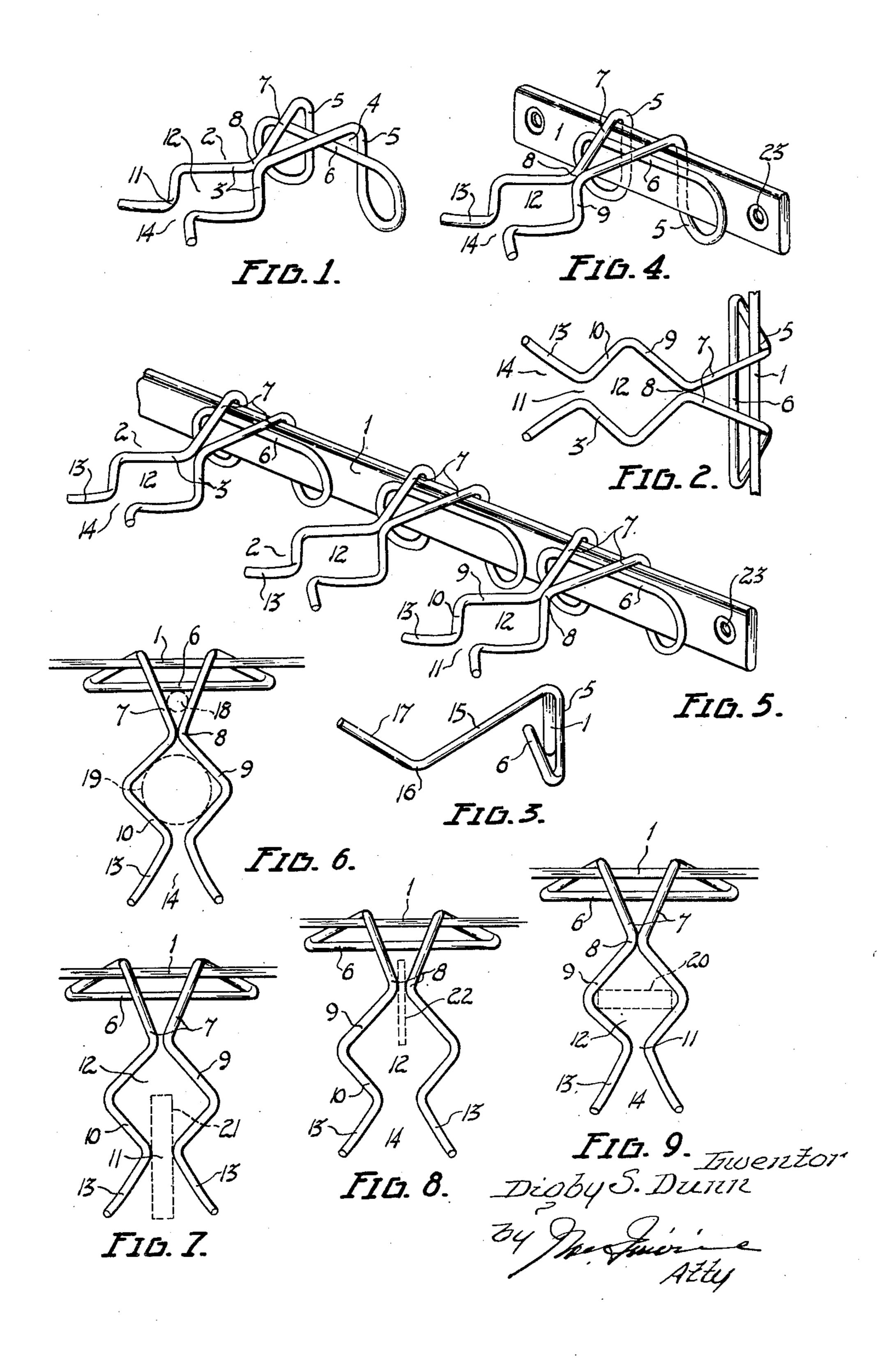
HOLDER FOR TOOLS

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UNITED STATES PATENT OFFICE

HOLDER FOR TOOLS

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3 Claims. (Cl. 211—89)

This invention relates to an improved rack or holder for supporting tools or other articles, and is particularly intended for use in garages, engineering workshops and the like although it is

also suitable for other uses.

One object of the invention is to provide a tool rack or holder of this kind having specially designed supporting clips which will effectively grip and support a wide variety of tools of different shapes and sizes.

Another object is to provide a tool supporting rack or holder which can be readily made or cut into specified lengths as desired to suit the location or the purpose for which it is to be used and in which the tool supporting clips can also be readily adjusted to any desired or convenient position prior to the erection of the rack or holder.

According to the invention, the improved rack or holder comprises a base bar and a plurality of spring wire clips fitted on said base bar in such manner as to be slidably movable along the bar for spacing before the rack or holder is attached to a wall or other surface but adapted to be clamped between the rear surface of the base bar and the wall when the rack or holder is secured in

position.

The spring wire clips have downwardly bent portions which pass across the rear surface of the base bar and an upwardly looped portion which embraces the front surface of the bar. Each clip 30 also has two forwardly extending arms which form the tool supporting portion, said arms first converging to meet, then diverging and converging again coming close together so that they form a holder portion, and finally diverging to form an $_{35}$ open mouth.

The invention is more fully described aided by reference to the accompanying drawings wherein—

Fig. 1 is a perspective view of one of the tool supporting clips.

Fig. 2 is a plan view showing the clip fitted on the base bar.

Fig. 3 is an end view of Fig. 2.

Fig. 4 is a perspective view showing one of the tool supporting clips fitted on the base bar.

Fig. 5 is a similar view to Fig. 4, but showing a plurality of clips fitted on the base bar.

Figs. 6, 7, 8 and 9 are plan views showing in dotted lines how different tools can be supported in the clip.

As is shown in these views, the improved holder comprises a base bar I and any desired number of clips 2.

The clips are preferably each made from a 55 extent gives the rack or holder its high utility.

single length of spring wire bent to the shape shown in Fig. 1. Each clip has two forwardly extending arms 3 which form the tool supporting portion of the clip and a central bent part 4 which serves to attach the clip to the base bar 1.

The central part 4 has two downwardly bent portions 5 which pass across the rear surface of the base bar I and an upwardly looped portion 6 which embraces the front surface of the base bar.

The portions 5 and 6 between them form a socket or holder by means of which the clips 2 can be slidably fitted onto the base bar from its end and supported in position thereon. Said portions 5 and 6 also, by reason of the springiness of the wire, have a frictional grip on the base bar to retain the clips in the positions to which they are adjusted.

The arms 3 of the clips are fashioned as shown in Figs. 1, 2 and 3. Commencing from the base bar I, the arms first converge at 7 so that they meet or substantially meet at the point 8. They then diverge at 9 and converge again at 10 coming close together at the point I so that they form a holder portion 12. Finally the arms diverge at 13 to form an open mouth 14.

In addition to the above shaping, the arms 3 are bent downwardly as at 15 to a point 16, see Fig. 3, and then upwardly as at 17 to provide a substantially hook-shaped form in end elevation.

The special formation of the clip as described enables a wide variety of tools or articles of different shapes and sizes to be supported on the clips. Small diameter tools such as centre punches, drills and the like can be gripped between the rear looped portion 6 and the converging portions 7 of the arms, see dotted lines 18 in Fig. 6. Larger diameter tools such as chisels, spanners and hammers can be gripped in the holder portion 12, see dotted lines 19. Flat tools or articles can also be gripped in the holder portion 12 as shown by the dotted lines 20 in Fig. 9 or can be gripped between the points II as shown by the dotted lines 21 in Fig. 7. Thin tools or articles such as rules, squares and the like can 45 be gripped between the inner points 8, see the dotted lines 22 in Fig. 8. Other articles can also be supported by hooking them onto one or both of the arms 3, the hook-shaped formation of said arms as above described serving to hold them in 60 position.

In practice, it is found that tools of practically all shapes and sizes within reason can be supported in one way or another on the clips as above described and this versatility of the clip to a great

Moreover, it is found that the clips will effectively hold the tools even when subjected to considerable vibration, as for instance, in engineering workshops or aboard ships.

The rack or holder is secured to the wall or 5 other surface by any approved means such as, for instance, screws passed through suitably spaced holes 23 in the base bar 1. Before the holder is attached to the wall, the clips 2 can be spaced along the base bar I as desired by slidably 10 moving them endwise and, when the holder is attached to the wall, said clips are secured against movement by the clamping of the portions 5 between the rear surface of the base bar and the wall.

The rack or holder may be of any desired length to suit the location or the purpose for which it is to be used and, if supplied in long lengths, can be readily cut to the length desired according to the number of clips to be used. 20

The improved rack or holder as described can be manufactured at low cost and will be found very effective in use and can be readily erected without special skill.

What I claim is:

1. A spring clip tool holder comprising a single piece of wire formed with a central horizontal straight portion terminating at both ends in downwardly and inwardly turned loops which extend into spaced straight upright portions that 50 cross behind said horizontal portion and are then bent forwardly above said horizontal portion into substantially horizontal tool holding arms to provide a clip for slidable but rigid attachment to a horizontal base bar with said horizontal 35 portion in front of the bar, and said upright portions behind the bar, said loops spanning the bottom of the bar and said arm forming bends overlying the bar, said arms including straight portions extending from said bends in angular 40 relationship toward each other and overlying said horizontal portion and cooperating therewith to define a triangular clamp for holding small tools. said arm straight portions extending into engagement intermediate their outer ends and then 45 bent into diverging portions to define jaws for gripping thin tools between the engaging bends.

2. A spring clip tool holder comprising a single piece of wire formed with a central horizontal straight portion terminating at both ends in 50 downwardly and inwardly turned loops which extend into spaced straight upright portions that cross behind said horizontal portion into substantially horizontal tool holding arms to provide a clip for slidable but rigid attachment to a horizontal base bar with said horizontal portion in front of the bar, and said upright portions behind the bar, said loops spanning the bottom of the bar and said arm forming bends overlying the bar, said arms including straight portions extending from said bends in angular relationship toward each other and overlying said horizontal portion and cooperating therewith to define a triangular clamp for holding small tools, said

arm straight portions extending into engagement adjacent their inner ends and then bent into diverging portions to define jaws for gripping thin tools between the engaging bends, said diverging portions being at substantially right angles and terminating in substantially right angular bends into converging portions to define substantially square jaws for gripping larger tools, said converging portions extending to outward bends that are slightly spaced and terminate in diverging tips to facilitate insertion of a tool into said square jaws.

3. A spring clip tool holder comprising a single piece of wire formed with a central horizontal 15 straight portion terminating at both ends in downwardly and inwardly turned loops which extend into spaced straight upright portions that cross behind said horizontal portion and are then bent forwardly above said horizontal portion into substantially horizontal tool holding arms to provide a clip for slidable but rigid attachment to a horizontal base bar with said horizontal portion in front of the bar, and said upright portions behind the bar, said loops 25 spanning the bottom of the bar and said arm forming bends overlying the bar, said arms including straight portions extending from said bends in angular relationship toward each other and overlying said horizontal portion and cooperating therewith to define a triangular clamp for holding small tools, said arm straight portions extending into engagement intermediate their outer ends and then bent into diverging portions to define jaws for gripping thin tools between the engaging bends, said diverging portions being at substantially right angles and terminating in substantially right angular bends into converging portions to define substantially square jaws for gripping larger tools, said converging portions extending to outward bends that are slightly spaced and terminate in diverging tips to facilitate insertion of a tool into said square jaws, said arms being flat V-shaped in profile and bent downwardly from the supporting bends at said upright portions to said right angle bends and then being bent upwardly through said tips.

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