Feb. 26, 1952 T. E. RODMAN 2,587,226

RANDOM TOOL RACK

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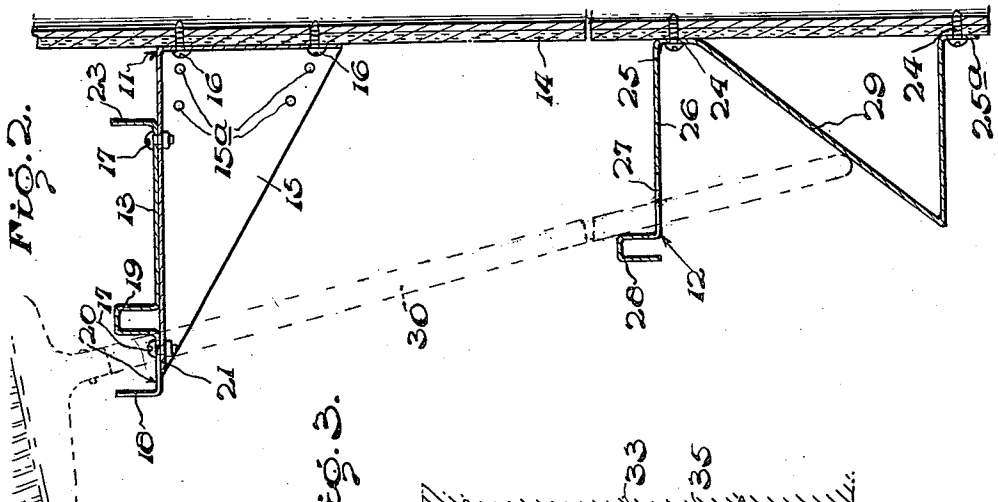


Fig. 2.

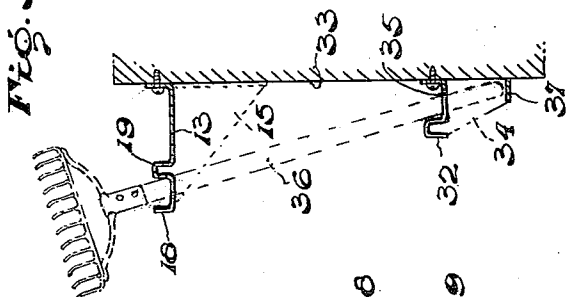


Fig. 3.

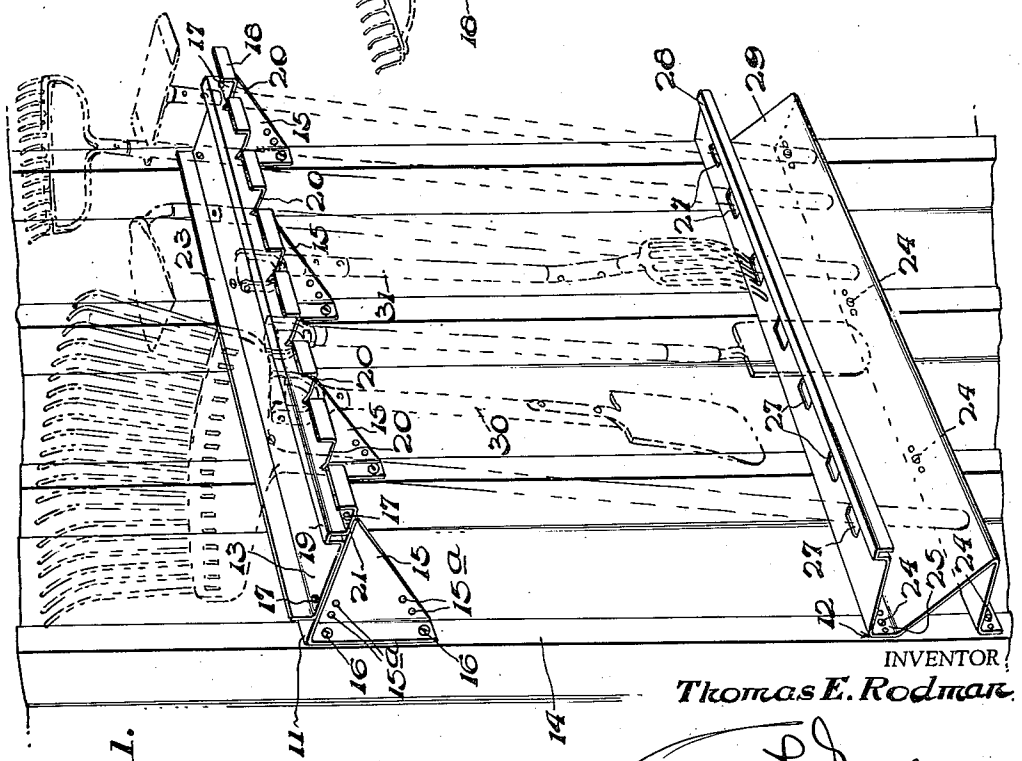


Fig. 1.

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RANDOM TOOL RACK

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2 Claims. (Cl. 211—60)

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This invention relates to racks and is more particularly concerned with racks for holding implements and tools such as rakes, hoes, shovels, pitchforks, spades, brooms, weeders and similar tools, particularly those of the long handled type.

One of the objects of the invention is the provision of a rack which is non-selective in the sense that any tool will go in any vacant holding position so that the user may conveniently store tools at random and there is never any necessity for labelling the position of a particular tool or for always putting it back in the same position. To that end the invention contemplates an arrangement of parts which are simple and inexpensive in construction and use and which can be readily attached to a wall of a building, such as a garage, barn, stable, basement, etc., and, when installed, the large portions of the tools will be held high enough to provide ample clearance for the heads of passers-by.

Another object of the invention is the provision of such a rack which occupies only a small space for holding a large number of tools at one time.

A further object of the invention is the provision of such a rack which comprises upper and lower cooperating members for urging the tools in a given position and preventing the slippage and shifting thereof after they are in place.

Other objects and advantages of the invention will appear from the following description considered together with the accompanying drawing.

Fig. 1 is an isometric view of one embodiment of the invention shown attached to a wall and containing a number of different tools.

Fig. 2 is a cross sectional view of the same embodiment.

Fig. 3 is a cross sectional view of another embodiment of the invention.

Referring with more particularity to the drawing in which like numerals designate like parts the embodiment illustrated in Figs. 1 and 2 comprises an upper member 11 and a spaced parallel lower member 12. The upper member comprises a shelf 13 supported in a horizontal position on a wall 14 by means of angle brackets 15. The brackets may be secured to the wall by any suitable means such as screws 16 and the shelf may be secured to the brackets by suitable means such as bolts and nuts 17. As many brackets may be used as desired to support the shelf, four being shown in the drawing for illustrative purposes. The webs of the brackets are provided with openings 15a which may be used to receive suitable fastenings if it should be desirable to attach the brackets to a side of a stud forming a wall instead of the face of the stud. The brackets for supporting the shelf are set to mount the shelf at an elevation of approximately six feet above the floor level to provide the head clearance previously referred to.

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The forward or outer edge of the shelf 13 is provided with an upstanding lip 18. Behind and parallel to the lip 18 a horizontal abutment 19 is also provided in spaced relation to form a channel of sufficient width to accommodate the handle end of certain tools, such as shovels and spading forks. The abutment 19 may be formed by making an inverted U bend in the shelf, as shown. A series of notches 20 are cut through the lip 18 at spaced intervals and also through the web 21 of the channel. Although these notches may be of any desired form, it is preferred that they be convergent toward the rear such as in the shape of a V to wedgingly receive the tool handle. This shape may be accomplished by cutting or punching out the metal to form the V or by slitting the metal and turning down the edges of the slit to form flanges which converge inwardly to form such shape, and provide surface instead of edge contact with the tool handles.

The rear side of the shelf also has an upstanding flange 23 which serves the dual purpose of providing a guarded space between it and abutment or rib 19 for holding smaller tools and articles such as brushes, paint cans, files, etc., and a fulcrum abutment for tool handles.

The lower member 12 is preferably Z-shaped in cross section and is also secured to the wall 14 by means of screws 24 passing through selected holes in the vertical portions 25 and 25a thereof, which vertical portions are adapted to abut the wall.

The upper flange 26 of the lower member 12 is provied with a row of apertures 27 sufficiently large to receive the handles of tools to be carried by the rack. The front edge of the flange 26 may be bent to form an upstanding lip 28 as shown.

The web 29 of said lower member has a smooth surface at the top and is disposed at such an angle that when the lower end of tool handles are disposed through the apertures 27 and slide to rest on the slanting camming web 29, they will be urged to pivot or fulcrum about the outer edges of their corresponding apertures 27 and

force the upper end of the handle inwardly into the gripping notches 20. An angle of about 60° with the horizontal is usually sufficient for effecting this result with most long handle tools. In the example shown the rib 28 forming the outer boundary of the aperture also assists in forming a fulcruming abutment.

For short handled tools, such as the shovel 30 and spading fork 31, the upper part of the handles are merely set into the notches behind the lip 18 and are prevented from falling out thereby.

In the modification illustrated in Fig. 3 the lower member comprises a lateral shelf 32 supported on the wall 33 by brackets, such as bracket 34, and apertures, such as the aperture 35, is formed therein close to the wall and behind the channel like rib or head. In this manner the lower end of the handle 36 of a tool abuts the wall to accomplish the same automatic camming or pivoting action as the web 29 of the first embodiment. A limiting shelf 37 or stop element may be secured to the wall below the shelf 32 to prevent the tool from dropping down too far.

In both embodiments, the apertures of the lower shelf are preferably at a shorter distance from the wall than the notches of the upper shelf.

In placing tools such as rakes, brooms, etc., on the rack it is preferred that they be disposed with their upper portion at right angles to the wall so as to reduce the space it occupies in a lateral direction and thereby not interfere with other tools which may be placed on the rack, and by placing the upper member 11 at a sufficiently high level, such positioning of the tools will not interfere with head room.

As will readily appear from the above description, the invention is easily installed on a wall and is simple to use. The tools are positively held on the rack, the upper section of the handles of long handled tools being forced or rocked into the V-shaped wedging notches and therefore resist movement against rotational forces or accidental blows so that they will continue to

assume the correct positions in which they are originally placed as previously described.

In installation the members 11 and 12 are spaced relative to each other so as to properly receive long handled tools and at such elevation as to store the tools where they will occupy otherwise unused space and in a convenient and orderly fashion.

I claim:

1. A tool rack comprising an upper shelf member having a row of notches at its outer edge and a lower shelf member having a row of apertures corresponding to said notches in combination with a downwardly projecting surface below said apertures for slidably abutting the end of the handle of a tool disposed through one of said apertures so as to urge the upper end of the handle inwardly about said aperture as a pivot.

2. A tool rack comprising an upper shelf member having a row of notches at its outer edge, means for securing said shelf to a vertical support, a lower shelf member having a row of apertures corresponding to said notches, means for securing said lower member to said support, said notches being adapted to be disposed at a greater distance from said support than said apertures, and an abutment below said lower shelf adapted to contact the bottom of tool handles, said abutment projecting downwardly from said support.

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