

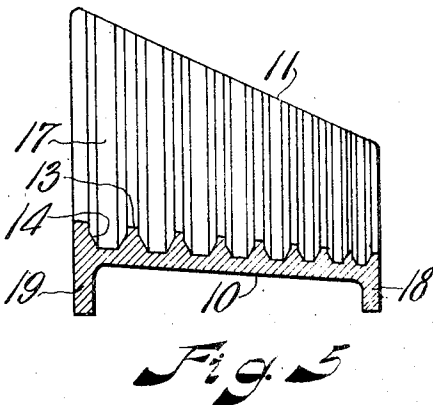
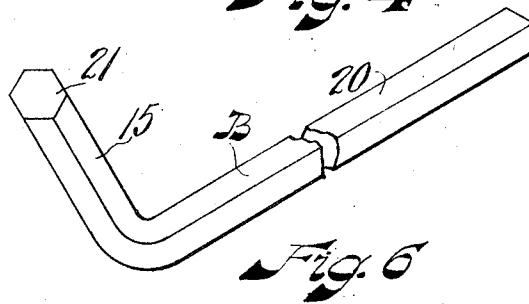
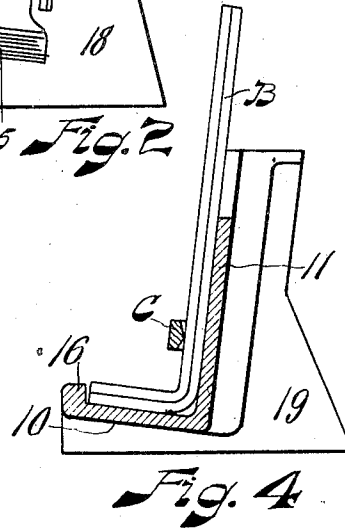
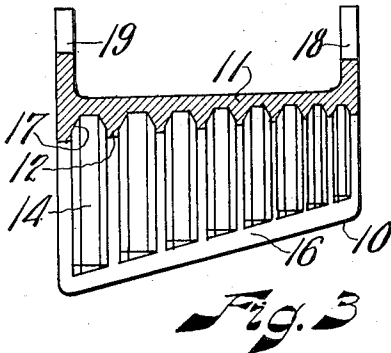
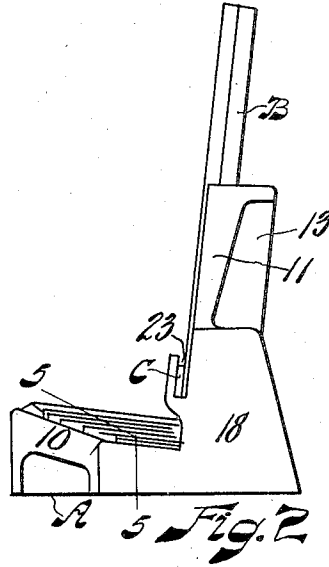
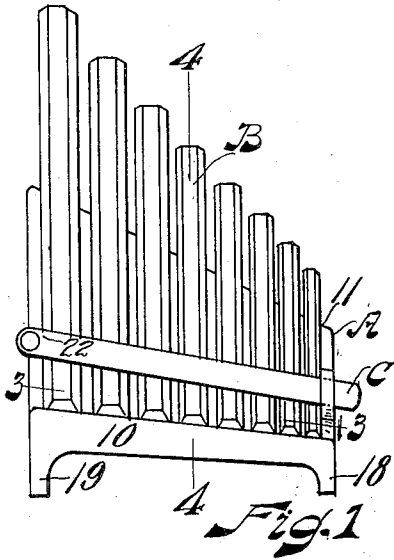
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WRENCH STAND

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WRENCH STAND

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My invention relates to means for retaining wrenches in sets.

In manufacturing, repairing, and maintenance institutions generally there always is a necessity for wrenches of various sizes for various purposes.

Usually those wrenches lie about in a haphazard manner and considerable time is lost in finding them when needed.

The object of the present invention is to provide a wrench stand for general purposes or for any particular purpose and to provide a means thereon for keeping wrenches in a proper order as to size or otherwise and retaining them thereon each fully visible and each easily removable individually and without disturbing any other wrench on the stand and to provide feet on the stand so that the same can be conveniently set on a level or on an inclined surface, even or uneven.

Other objects will be pointed out in this specification or will become obvious or apparent upon an inspection of the accompanying drawing and this specification.

I attain my objects by the mechanism illustratively shown in the accompanying drawing in which:

Fig. 1 is a front view of a wrench embodying my invention and having wrench locating and retaining means thereon.

Fig. 2 is an end view of Fig. 1.

Fig. 3 is a horizontal section taken on the line 3—3 of Fig. 1 showing the wrench locating and retaining channels in the table part and in the back part.

Fig. 4 is a vertical section taken on the line 4—4 of Fig. 1 showing more clearly the angular relations of the table and back parts to the base of the stand.

Fig. 5 is a transverse section taken on the line 5—5 of Fig. 2 showing more clearly the channels in the table part and continuing up on the back part.

Fig. 6 is a perspective view of the type of wrenches for which the stand is designed.

Similar reference characters refer to similar parts throughout the views.

The wrench stand A may be made by castings, or by forging, or by stamping and, in the form shown, comprises the table part 10, the back part 11, and the flange or rib parts 12 and 13.

The table part 10 is angular or inclined with the bottom of the stand so that the wrenches lean backward when on the stand. I have found that a 20 degree angularity gives very good av-

erage results as to retaining the wrenches in correct or desired position under most circumstances or conditions of surfaces upon which the stand may be placed.

The table part 10 has the channels 14 in the top surface thereof. Each of these channels conforming in size to a particular wrench to be retained therein. I prefer to make these channels a little wider than the cross-sectional size of the part 15 and a little deeper than half of that size and a little longer than the length of the part 15. The front of these channels is closed by the part 16 as shown in Fig. 4.

The object of these channels is to provide a suitable vertical resting place which also spaces the wrenches a suitable distance apart laterally or sidewise and keeps them apart so that they can not mix or get entangled with each other.

The back part 11 is shown as extending upwardly from and disposed substantially at right angles with the table part 10 and as having the channels 17 in the front face thereof. The channels 17 are continuations of the channels 14 and of the same cross-sectional size as the channels 14. The upper ends of the channels 17 are open.

At one end of the stand, the table part is narrower and the back part is shorter than at the other end to better accommodate the wrenches and add to the appearance of the stand and of the set as a whole.

The end flange 18 is on the narrower end of the table part and on the shorter end of the back part and extends below the table part to form feet for the stand to raise the table part above the lower end thereof to provide a better and more secure footing for the stand on even and on uneven and on level and on inclined surfaces and even on surfaces which have other things thereon.

The end flange 19 is on the wider end of the table part and on the longer end of the back part and also extends below the table part for the same reasons as the flange 18.

The bottom parts of the flanges extend some distance backwardly of the table and back parts to provide better security for the stand. The upper parts of the flanges 18 and 19 extend some distance back of the back part 11 to stiffen the stand as a whole and to form a means to take hold of the stand when the same is rather long. For short stands one flange, in the form of a rib, extending backwardly of the back part 11, preferably from substantially the middle thereof,

will answer for taking hold and stand supporting purposes.

Each of the wrenches B comprises the screw hole engaging part 15 mentioned above and the handle part 20 in this instance bent at right angles to the part 15 and of one piece of material throughout.

The bar C may or may not be used as desired to better hold the wrenches in place particularly when the stand is tilted to great angles. The bar C may have the end 22 hinged onto the back part 11 and the other end latched into the notch 23 in the back part 11 as shown.

The stand is made so that the table part is not level when the stand rests on a level surface but is angular to that surface and closer to that surface at the back than at the front thereof which structure also inclines the back part 11 in relation to that surface so that the wrenches may normally remain in position on the stand and remain in position even when the stand is tilted to quite a degree.

The handle parts 20 of the wrenches extend above the upper edge of the back part 11 and the channels space the same laterally so that any one of the wrenches of the set can easily and conveniently be taken hold of by the handle thereof and taken from the stand.

Each one of the wrenches on the stand is always in full view so that any one of the wrenches can be easily selected for removal and no time consuming cut and try methods are necessary for selection of a proper wrench.

Owing to the angular disposition of the wrenches on the stand and the disposition of the center of gravity thereof, the stand as a whole can be tilted to quite a degree before the wrenches will have a tendency to move in relation to the stand even when the bar C is not used.

The bar C is used, the stand can be tilted to a greater degree without the wrenches changing their positions and the wrenches can then be removed by a somewhat arcuate movement thereof so that the wrench part 15 clears the bar during such removal. The bar C is shown somewhat close to the table part 10 for convenience of such removal.

When the bar C is placed in a position or location about as shown, the wrenches will remain in correct positions on the stand even when the same is tilted to a very great degree and will remain on the stand, probably not in exact normal position, but separate from each other even when the stand is turned completely up side down and will resume their normal positions when the stand is turned right side up. The distance from the bottom of the bar C to the top of the part 15 of the member is a little less than the diameter of the parts 15 so that the wrenches can not move away from the table in a straight movement thereof to let the parts 15 completely out of the channels so that the same will always drop back into their respective channels when the stand is righted. As a convenience for removing wrenches, the bar C is relieved opposite the wrenches as seen in Fig. 4.

The device shown and described provides a stand for a set of wrenches useful for many purposes and also provides a convenient stand to keep these wrenches in proper place and separate from each other and easily selectable and

easily removable due to the ends thereof extending above the stand where the same can be taken hold of easily for taking the same from the stand and replacing the same thereon.

I am aware that changes and modifications can be made in the structure and arrangement of parts shown and described within the scope of the present invention and the appended claims; therefore, without limiting myself to the precise structure and arrangements of parts as shown and described,

I claim:

1. A wrench stand comprising a substantially horizontal table to retain wrenches endwise and a substantially vertical back upwardly of said table to retain said wrenches laterally, and means to easily removably locate said wrenches in position on said stand.

2. A wrench stand comprising a table for endwise abutment of wrenches and a back for retaining said wrenches and locating means for each of said wrenches in said table and in said back and inclined to the bottom of said stand.

3. A wrench stand comprising feet on the bottom of the stand, a table part having a wrench locating channel in the upper surface thereof, the bottom of said channel angular with the bottom of said feet, and a back part angular with said table part and having channels therein in continuation of said channels in said table part.

4. A wrench stand comprising a table part having sidewise spaced, wrench locating channels transversely in the upper surface thereof, a back part angular with said table part and having wrench locating channels therein in continuation of said channels in said table part, and a flange to stiffen the stand and to form a take hold means on the stand.

5. A wrench stand comprising feet on the bottom of the stand, a table part above said feet, a back part extending upwardly from said table part, and sidewise spaced, sidewise open wrench locating channels aligned in said table and back parts.

6. A wrench stand comprising feet on the bottom of the stand, a table part above said feet, a back part extending upwardly from said table part, and sidewise spaced, sidewise open wrench locating channels aligned in said table and back parts and backwardly inclined to the bottom of said feet.

7. A wrench stand comprising a table part, a back part extending upwardly from said table part, means for locating and removably retaining wrenches individually on said table and back parts comprising aligned sidewise open channels in said table and back parts, and a bar transversely of and spaced from said channels to retain said wrenches in position individually and to permit removal thereof.

8. A wrench stand comprising feet on the bottom of the stand, a table part above and angular with said feet, a back part extending upwardly from said table part and angular with said table part and with the bottom of said feet, a flange on the stand to stiffen the same and to form a take hold means for the stand, aligned sidewise spaced wrench locating channels in said table and back parts, and a retaining means to removably hold wrenches on the stand.

JOSEPH VERDERBER.