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Marschak

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[54] **MEANS FOR PREVENTING UNAUTHORIZED REMOVAL OF A POWER TOOL OR THE LIKE FROM A DISPLAY BOARD**

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[51] **Int. Cl.** **A47f 5/00,** E06b 7/28, A47h 1/10

[58] **Field of Search** 248/223, 224, 225, 220.5, 248/DIG. 3, 203; 211/4, 87

[56] **References Cited**

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[57] **ABSTRACT**

Means for preventing the unauthorized removal of a power tool or the like from a display, said means comprising a first member which is the tool support member having hooking means insertable in the spaced openings of a shelf or back panel of a display stand, with said first member having an upstanding post, a second member which is the locking member provided with means insertable in other of said openings in said display, with said second member positionable over said first member but exposing said upright member, and a tool in which the chuck of the tool is positioned on said upright so that when the jaws of the chuck are tightened by a chuck wrench or the like with respect to said upright, said chuck and tool will be locked against unauthorized removal from said first member and the tool will be supported in a display position.

10 Claims, 5 Drawing Figures

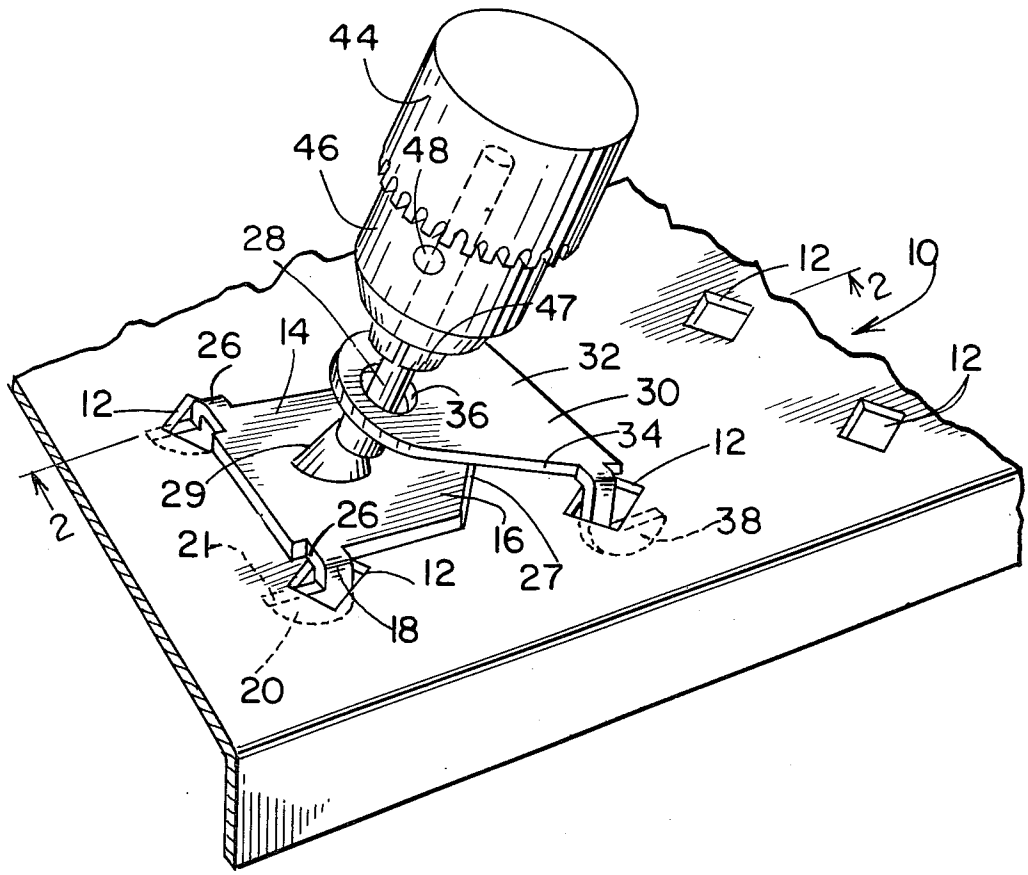


FIG. 1

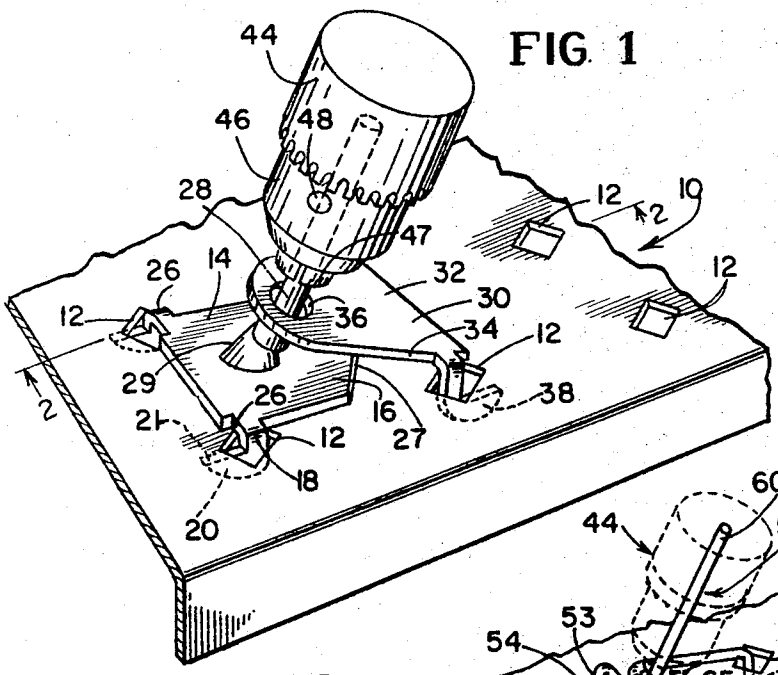


FIG. 2

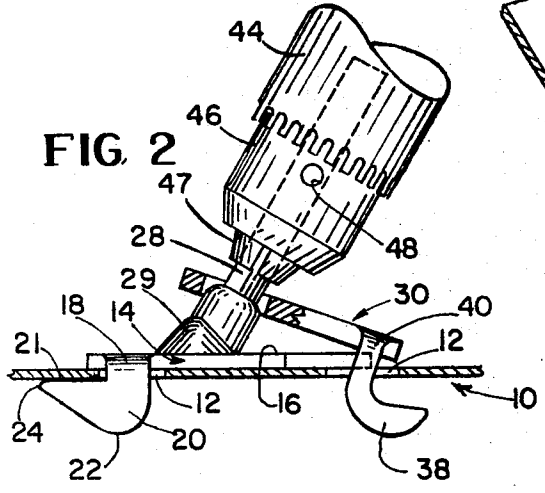


FIG. 3

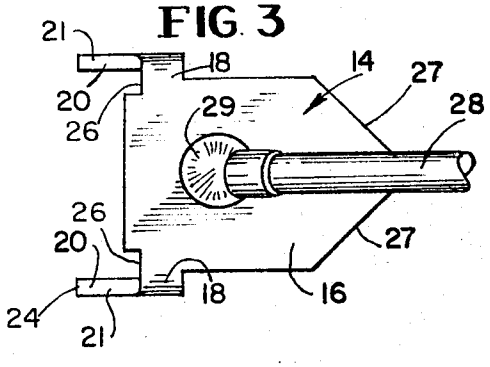


FIG. 4

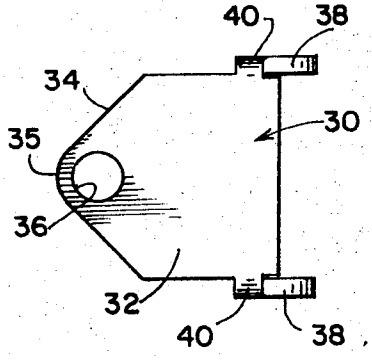
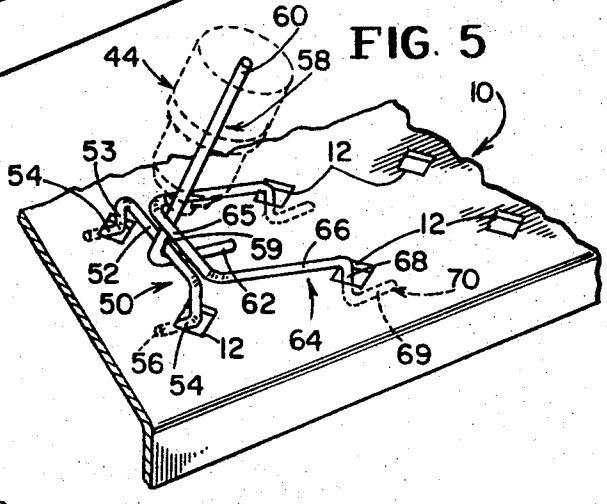


FIG. 5



MEANS FOR PREVENTING UNAUTHORIZED REMOVAL OF A POWER TOOL OR THE LIKE FROM A DISPLAY BOARD

BRIEF SUMMARY OF THE INVENTION

It is an established common practice to mount and display power tools such as electric drills and the like on a display board or shelf, which board is provided with spaced openings wherein a tool support member which has hooking means is insertable in a plurality of the spaced openings for detachably securing said tool support member to said display board, with said tool support member having an upstanding upright or post and with the chuck of the power tool positioned on the upright or post and the jaws of the chuck tightened with respect thereto for the purpose of supporting said power tool in a display position. The disadvantages inherent in such prior displays is that it permits removal by an unauthorized person of a power tool merely by unhooking the tool support member from the display board with the power tool thereon and removing it from the premises. An object of the present invention is to make such removal from a display board or shelf impossible without first removing the power tool from the tool support member, which of course would necessitate the use of a tool such as a chuck wrench or the like for releasing the grip of the chuck jaws on said upright. Thus, by increasing the difficulty in removing a power tool from the tool support member by the application of this invention, the incidents of theft of power tools from display units are considerably reduced and in most cases stopped.

Another object of this invention is to provide locking means for use with conventional display boards and conventional tool support means to prevent the unauthorized removal of tools and the like which are on display.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. **1** is a perspective view showing the invention secured to a display board with the power tool and its chuck supported thereon and locked in display position.

FIG. **2** is an enlarged view partly in section taken on line **2—2** of FIG. **1.**

FIG. **3** is a top plan view of the first member or tool support member.

FIG. **4** is a top plan view of the second member or locking member, and

FIG. **5** is a perspective view of a modification.

FIGS. 1 - 4

The conventional display may be a unit with one or more horizontally positioned shelves, generally indicated at **10,** suitably supported on an upright (not shown) with each shelf provided with equally spaced diamond-shaped openings, generally indicated at **12,** which may extend over the entire surface of the shelf. To support a conventional power tool or the like which might be an electric drill, there is provided a first member generally indicated at **14** which is formed preferably of metal and which forms the tool support member for the power tool. The first or tool support member **14** comprises a top plate **16** which at the front end is shaped to provide lateral extensions generally indicated at **18** which extend downwardly and then forwardly of the front end of the plate to provide front spaced hooking members generally indicated at **20.** The top surface of each of the hooking members is planar as at **21,** with the underside curvilinear as at **22** to terminate at the front in a pointed end **24.** The front edge of the plate adjacent each of the hooking members is recessed or cut out as at **26** to facilitate the inserting and hooking of the hooking members to the display shelf. The rear of the plate is shaped to provide sides **27** with a generally V-shaped configuration.

Extending upwardly from the top plate is a short post or pin generally indicated at **28** which extends rearwardly at approximately a 45° angle with respect to the horizontal plane of the top plate. Between the top plate and the bottom of the post there is an embossed surface **29** which serves to make it easier to weld the post **28** to the plate. The post **28** may be welded, brazed or otherwise secured to the plate at the embossed surface **29** to form an integral part thereof.

The first member or tool support member **14** is adapted to be hooked into any pair of diamond-shaped openings **12** in the shelf **10,** as shown in FIGS. **1** and **2,** so that when same is hooked into a pair of said openings the underside of the plate **16** will be parallel to and abut against the top of the shelf and same will be positioned so that the plate **16** extends rearwardly of the hooking member **20,** with the post **28** extending upwardly and rearwardly at an inclined angle.

The second member which serves as the locking member, generally indicated at **30,** is likewise formed preferably of metal and comprises a plate **32** having converging front edges **34** with a rounded front **35.** The plate **32** is provided adjacent the front end with an annular opening **36** which is adapted to be inserted over the inclined post **28,** as will be presently described. The second member or locking member **30** is provided with spaced rearwardly extending J-shaped hooks **38** which are formed from extensions **40** extending laterally downwardly and rearwardly of the plate **32.**

The second or locking member **30** is positioned over the first or support member **14** by positioning the opening **36** of the locking member **30** on the upright post **28** and then sliding the locking member downwardly on said post and tilting the locking member at an angle to insert the rearwardly extending hooks **38** thereof into other spaced openings **12** of the shelf **10** which are adjacent the spaced openings **12** into which the hooking members **20** of the first member are inserted. The second member or locking member **30** will then be hooked to the display shelf and will be connected to the post **28** and will overlie a portion of the first member **14.** In this locked position the first and second members are locked relative to the shelf **10** after the power tool is placed on and secured to the post **28.**

A conventional tool, such as for example, an electric drill, generally indicated at **44,** which is to be displayed has the conventional chuck **46** and jaws **47** at the front end thereof, which chuck and jaws normally will support the bit, however, for the purpose of display the chuck and tool minus the bit is positioned on the post **28,** as shown in FIGS. **1** and **2,** and tightened relative thereto by inserting the conventional chuck wrench (not shown) in the conventional socket **48** on the chuck and rotating the chuck wrench. When the jaws **47** of the chuck **46** are tightened on the post **28** the tool will be so positioned that it will be locked relative to the

shelf so that no one can remove the tool as the first and second members are locked to the shelf. The only way to remove the tool from the display shelf is to loosen the jaws of the chuck from the post **28** by means of a chuck wrench and remove the tool and chuck from the post. Thus with this invention a tool is supported in a display position and is locked relative to the display and cannot be removed from the display unless a chuck wrench is used, which reduces the likelihood of unauthorized removal.

While the invention is herein shown in connection with a horizontal shelf it will be understood that same could also be supported on a vertical display and that in lieu of the diamond-shaped openings, round openings could be used, and that same could be supported on a conventional pegboard in the same manner as shown herein.

FIG. 5

FIG. **5** shows a modification in which both the first and second members are formed of wire. In this modification the first member or tool support member, generally designated at **50,** comprises a substantially rigid wire member preformed to form an intermediate section **52** with downwardly extending sides **53** extending from the opposite sides thereof, with the sides extending forwardly as at **54** to form L-shaped hooks generally indicated at **56.** A J-shaped wire member **58** is welded or brazed as at **59** to the intermediate portion **52** and the upright portion of said wire member forms the upwardly and rearwardly extending post **60,** similar to the post **28,** with the lower end **62** of said member extending horizontally rearwardly and resting on the shelf **10.**

The second member or locking member, generally indicated at **64,** is likewise a wire member shaped to form an intermediate portion **65** and rearwardly extending side portions **66** which then continue downwardly as at **68** and then extend rearwardly horizontally as at **69** to form the hooking members **70** at the rear end. The first or tool support member **50** is secured in a pair of spaced openings **12** in the pegboard or shelf and the second member or locking member **64** is locked by positioning the second member over the first member, as shown in FIG. **5,** with the intermediate portion of the locking member engaging the post adjacent the bottom of the post. Thus, the second member serves as a locking means for the first member after the tool is positioned and secured on the post.

As a further modification, a first member **14,** such as illustrated in FIGS. **1** and **2,** may be utilized and a wire locking member similar to the wire locking member **64** shown in FIG. **5** may be utilized and said locking member may be positioned thereover and same serves the purpose of locking the first member relative to the second member on said shelf. Or conversely, a wire member **50** (FIG. **5**) which is the tool support member, could be combined with a locking plate **30** (FIGS. **1, 2** and **4**).

What is claimed is:

1. Means for supporting a tool for display in a locked position on a display board, shelf, or the like, which display board or shelf has spaced openings, said means comprising a first member having means insertable in the spaced openings of the display board to support said first member on the display board, said first member having an upright extending upwardly thereof, a second member having means insertable in other of said openings in said display board, with said second member positioned over said first member but exposing said upright member of said first member, a tool positioned on said upright and secured to said upright and when so secured will prevent unauthorized removal of said tool from said first member.

2. The structure as set forth in claim **1** in which the first member has hooking means which are insertable in the spaced openings of the display board to support said first member on said display board and in which the second member has hooking means which are insertable in other of said spaced openings in the display board.

3. The structure as set forth in claim **2** in which the upright member is a post which is positioned at an inclined angle with respect to the plane of the first member.

4. The structure as set forth in claim **1** in which the first member comprises a plate having a pair of spaced hooking members adjacent one end thereof, which hooking members are insertable in any pair of spaced openings, and in which the second member is a plate having an opening positionable on said post, and in which the second member has spaced hooking members insertable in other of said spaced openings, and in which the plate of the second member extends partially over the first member.

5. The structure as set forth in claim **1** in which the first member is a tool support member and the second member is a locking member which locks the first member to the display board when the tool is secured on the upright of the first member.

6. The structure as set forth in claim **2** in which the first member comprises a plate having an extension at each of the opposite sides which extension extends downwardly and forwardly of the plate to form the front hooking means.

7. The structure as set forth in claim **2** in which the second member comprises a plate having a rearwardly extending hook extending rearwardly from each side of the plate.

8. The structure as set forth in claim **1** in which the first member is formed of wire and has spaced hooking means and an upright, and in which the second member is another wire member having spaced hooking means, and in which the second member interlocks with the first member to prevent unauthorized removal of the first member when a tool is secured on the upright of the first member.

9. The structure as set forth in claim **8** in which the first wire member includes an intermediate portion with a forwardly extending hooking member at each of the opposite ends, with the upright extending centrally and upwardly of the intermediate portion at an inclined rearward angle, and in which the second wire member extends rearwardly of the first member and has rearwardly extending hooking members.

10. The structure as set forth in claim **9** in which the second wire member has a generally U-shaped configuration in top plan with the rear ends of the sides forming hooking members, and in which the second member extends over the first member.

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