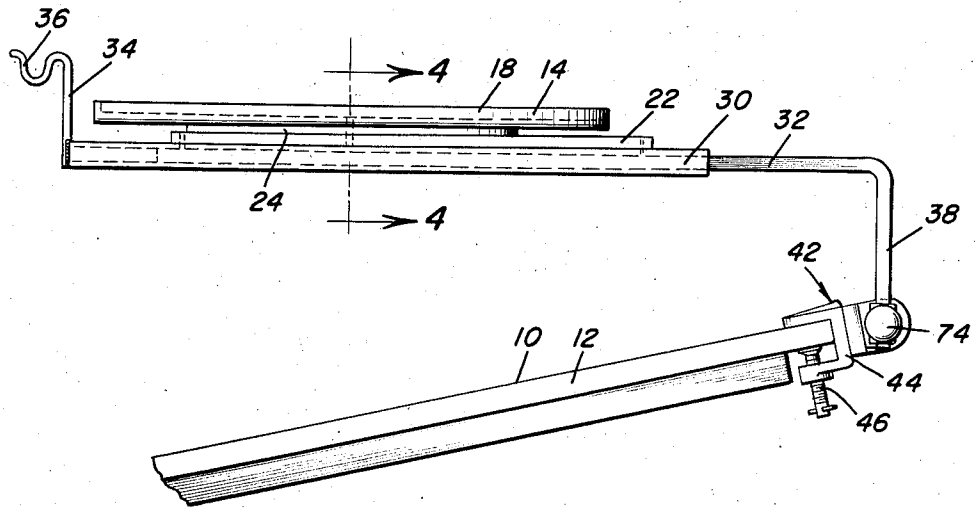
July 8, 1958 V. C. SIMMONS 2,842,413

ROTATABLE TRAY

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Fig. 1



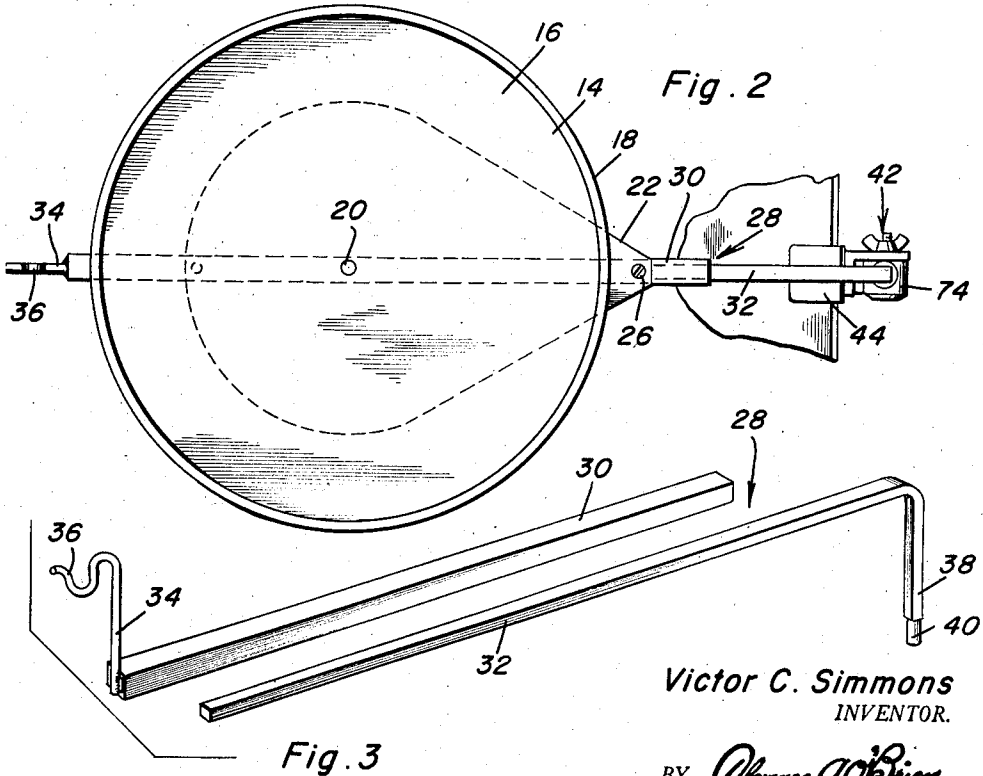


Fig. 2

Fig. 3

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ROTATABLE TRAY

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Fig. 4

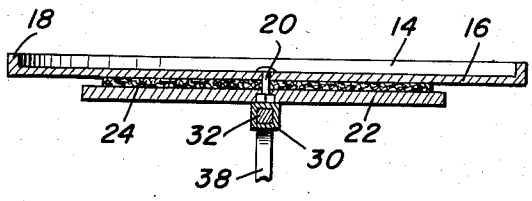


Fig. 5

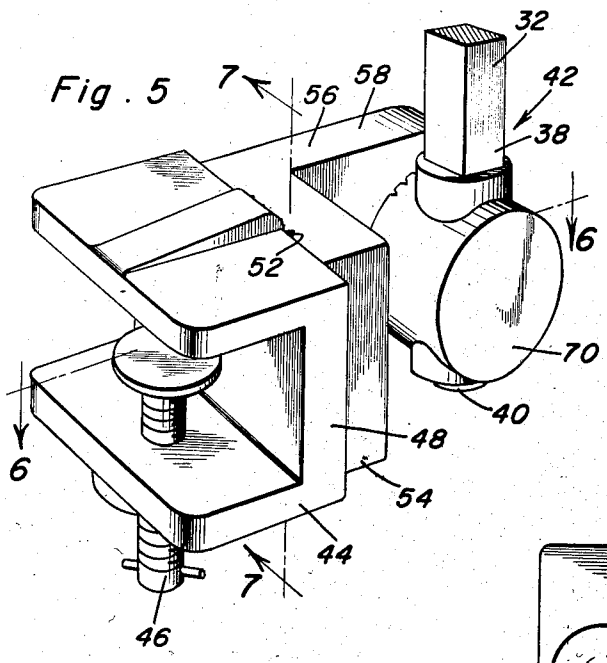
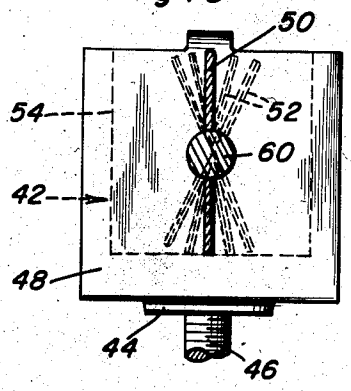


Fig. 8



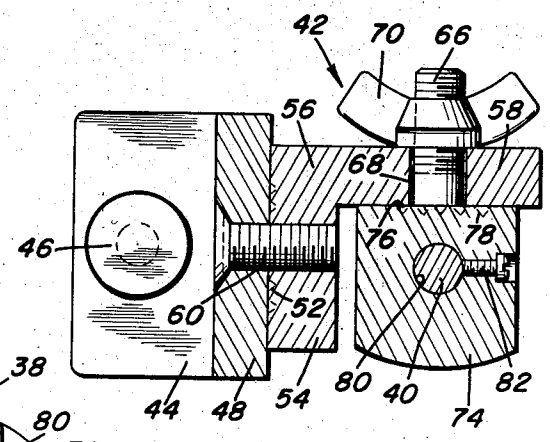


Fig. 6

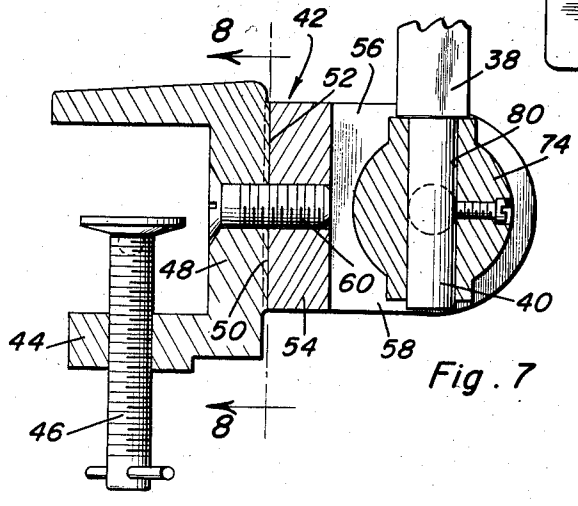


Fig. 7

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United States Patent Office 2,842,413 Patented July 8, 1958

2,842,413

ROTATABLE TRAY

Victor C. Simmons, Freeport, Tex.

Application November 14, 1956, Serial No. 622,053

2 Claims. (Cl. 311—32)

This invention relates to a utility tray.

An object of the invention is to provide an attachment for a working surface, for example a drawing board, work bench, table, etc. wherein there is provided a convenient and time saver for holding tools, materials, equipment, etc. readily available to the one using the work surface but yet, keeping the surface free from various articles, tools, etc. which would clutter the work surface and make the use thereof inconvenient if not more difficult.

A further object of the invention is to provide a clamp which is adapted to be adjusted or adjustable to any angularity so that arms supported by the clamp when holding the tray may be moved to any selected position and be readily available to the worker but yet, movable to an unobtrusive place when found desirable or necessary.

A more specific object of the invention is to provide an attachment for a working surface wherein there is a clamp provided for numerous adjustments and an arm supported by the clamp, the arm being extensible to provide further adjustment for the rotatable table that is carried by the extensible arm. The table may be flat, dished slightly, compartmented or of any other configuration and it is preferred that there be a hook or like support on the arm so as to provide means to accommodate special items.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is an elevational view of an embodiment of the invention showing the same applied to a working surface;

Figure 2 is a top view of Figure 1;

Figure 3 is an exploded perspective view of the arm which constitutes a part of the invention;

Figure 4 is a transverse sectional view taken on line 4—4 of Figure 1;

Figure 5 is a fragmentary perspective view of a universally adjustable clamp which is used in the invention;

Figure 6 is a sectional view taken on the line 6—6 of Figure 5;

Figure 7 is a sectional view taken on the line 7—7 of Figure 5; and

Figure 8 is a sectional view taken on a line 8—8 of Figure 7 and showing in dotted lines various locking notches which are engageable with the locking rib, these forming a part of the universally adjustable clamp.

In the accompanying drawings there is a surface 10, this surface being part of a table or drawing board 12, the latter schematically representing any type of working area on which tools, materials, equipment, etc. are used. For the convenience of the user of surface 10 the invention provides a tray 14 which may be of any shape, any

dimension and which may be provided with any patterns of compartments, all of the variations being within the scope of the purpose for which the tray is used. For example, a draftsman may prefer to have compartments to specially hold ink bottles, pens, and other equipment whereas, another draftsman may prefer to have a completely open tray as shown at 14 wherein the draftsman may use his own judgment as to the organization of instruments or other articles that are supported by the tray. The same holds true for other professions and trade wherein the invention is applied. Tray 14, then, consists of a flat panel 16 or circular formation together with a short upstanding wall 18 at the periphery thereof. A center bolt, rivet 20 or the like passes through an opening in the bottom 16 of tray 14 and a support plate 22 to which the bolt or the like is attached. This mounts the tray 14 for rotation on the support plate 22, there being a felt bushing 24 between the tray and the plate 22. The felt bushing functions as such making the tray easily rotatable but not excessively rotatable and keeping the tray on a general horizontal plane. Support plate 22 is connected by screws 26 or like fasteners, to a part of the extensible support arm 28.

Support arm 28 consists of a sleeve 30 which is noncircular in cross-section, for example square, and a similarly cross-sectionally shaped bar 32 which is fitted in the bore of the sleeve 30. At the extremity of sleeve 30 there is an upstanding post 34 whose upper end is formed with a hook section as at 36 in order to support an electric eraser or some other special article peculiar to the profession or trade with which the invention is used. There is an angulated end 38 on the bar 32 and the extremity 40 is cylindrical in order to fit in the universally adjustable clamp 42 (Figures 5–8).

Clamp 42 consists of a C-shaped member 44 which is adapted to fit over the edge of table 12, and there is a screw 46 carried by one side of the C-shaped member 44. This screw is manually adjustable in order to clamp the C-shaped member on the table regardless of the thickness of the table, this being within the practical limits set by the manufacturer of the invention. Back wall 48 of C-shaped member 44 has an upstanding rib 50 which is engageable with locking notches 52, there being a group of such notches formed in the front face of leg 54 of L-shaped member 56. The L-shaped member 56 has one leg 54 and a leg 58 at right angles thereto. Center bolt 60 passes through aligned apertures in leg 54 and side 48 so that the L-shaped member is rotationally adjustable to selected positions. This provides for adjustment about a horizontal axis. Adjustment about a vertical axis is obtained by rotation about screw 66, the latter being passed through an opening 68 in leg 58 of the L-shaped member 56. Wing nut 70 is on bolt 66 to hold the bolt firmly clamped and at the same time holding the block 74 in selected rotational position. One or more locking ribs 76 are formed on the surface of side 58 of L-shaped member 56 which abuts the confronting surface of block 74. Notches 78 to accept the ribs 76 are formed in the block 74 so as to hold the selected adjustment of the block 74 after it is obtained.

The previously described cylindrical end 40 of arm 28 is rotatably mounted in bore 80 in block 74. Friction producing screw 82 is in a top bore in block 74 and the extremity thereof abuts against the surface of the cylindrical end 40 of arm 28. Accordingly, the arm is rotationally adjustable and held by friction in selected positions within the block 74.

In practical use of the invention the utility tray is applied on the working surface by the use of clamp 42 that is adjustable in all planes and about various intersecting axes. The extensible arm 28 permits the tray

that is carried by one part of the extensible arm to be slid inwardly and outwardly from and toward the clamp **42** in accordance with the desires of the user. The tray itself furnishes a very handy plate in which to hold various articles that are periodically needed or desired near the working surface. Hook **36** schematically represents the option of providing special supports for various items, the supports being tailored to suit the items.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A utility tray comprising a circular, substantially flat tray, an upstanding flange connected to the peripheral edge of said tray, a support plate, a tube having a polygonal cross section, said support plate being mounted upon said tube, said support plate having an area equal to at least half the area of said tray so that a substantial supporting surface is provided for said tray being supported by said plate and rotatably attached thereto by said bolt, a felt pad of slightly smaller dimensions than said plate interposed between said tray and said support plate providing a soft, smooth surface for the bottom of said tray and preventing random rotation thereof, said support plate being attached to said tube near one end thereof, the other end of said tube projecting beyond the peripheral edge of said tray, a rod slidably telescoped in one end of said tube, said rod having a polygonal cross-section of slightly smaller external dimensions than the internal dimensions of said tube, and means for clamping said rod and supporting said utility tray on a supporting surface.

2. A utility tray comprising a circular, substantially flat tray, an upstanding flange connected to the peripheral edge of said tray, a support plate, a tube having a polygonal cross section, said support plate being mounted upon said tube, said support plate having an area equal to at least half the area of said tray so that a substantial supporting surface is provided for said tray, a bolt, said tray being supported by said plate and rotatably attached thereto by said bolt, a felt pad of slightly smaller dimensions than said plate interposed between said tray and said support plate providing a soft, smooth surface for the bottom of said tray and preventing random rotation thereof, said support plate being attached to said tube near one end thereof, the other end of said tube projecting beyond the peripheral edge of said tray, a rod slidably telescoped in one end of said tube, said rod having a polygonal cross-section of slightly smaller external dimensions than the internal dimensions of said tube, and means for clamping said rod and supporting said utility tray on a supporting surface, a vertical upstanding member connected to said tube at the open end thereof preventing movement of said rod past said member whereby a limiting stop is provided.

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