Oct. 17, 1961 J. W. WILSON 3,004,745

ROTARY SHELF DEVICE

Filed Sept. 5, 1958 2 Sheets-Sheet 1

Fig. 1

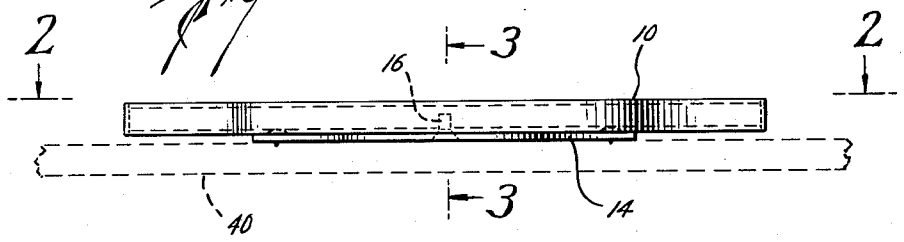


Fig. 2

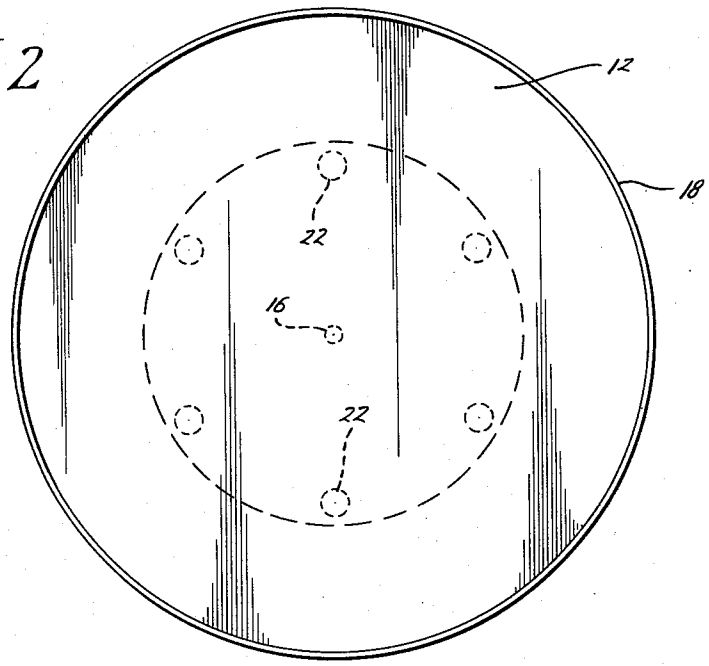
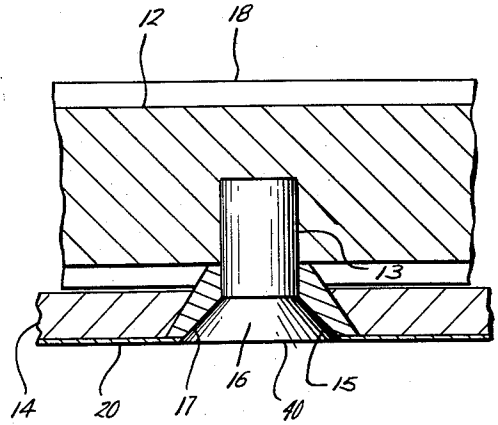


Fig. 3



James W. Wilson
INVENTOR.

BY James F. Heiler
Jefferson D. Gilley
William A. Stout
ATTORNEYS

Oct. 17, 1961 J. W. WILSON 3,004,745

ROTARY SHELF DEVICE

Filed Sept. 5, 1958 2 Sheets-Sheet 2

Fig. 4

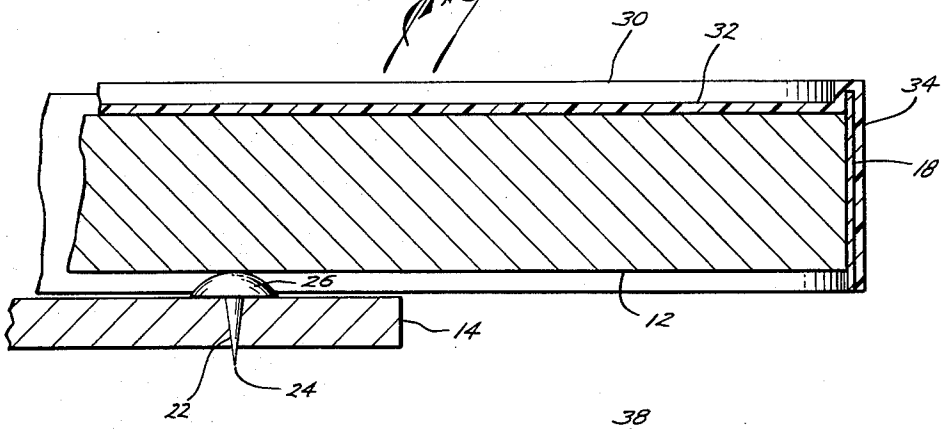


Fig. 5

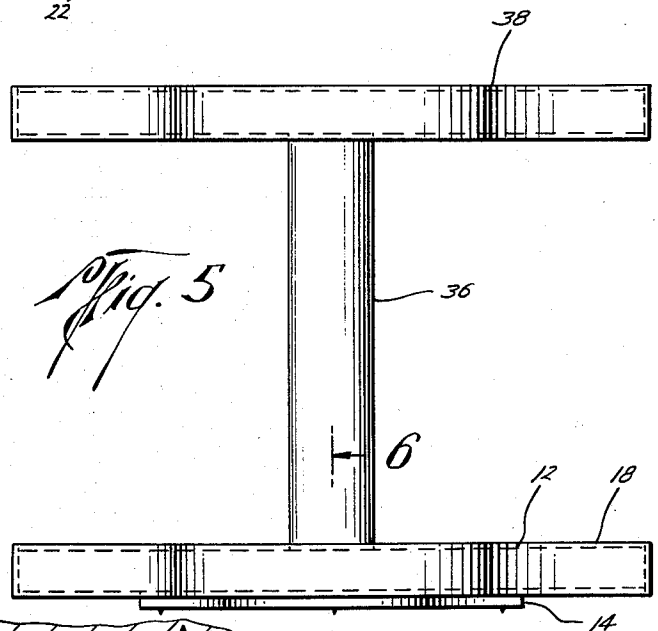
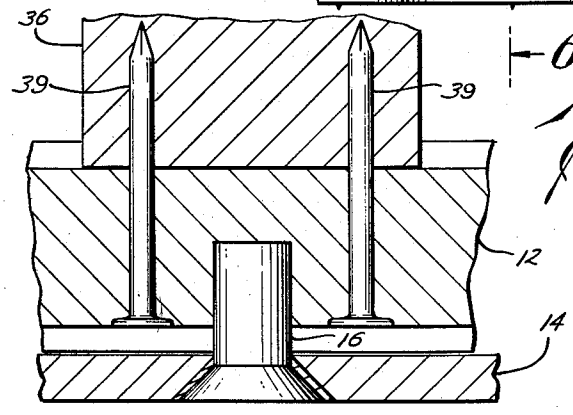


Fig. 6



James W. Wilson
INVENTOR.

BY James A. Heiler
Jefferson D. Gillen
William A. Stout
ATTORNEYS

United States Patent Office 3,004,745 Patented Oct. 17, 1961

3,004,745

ROTARY SHELF DEVICE

James W. Wilson, 5865 SW. 108th St., Miami, Fla.

Filed Sept. 5, 1958, Ser. No. 759,199
8 Claims. (Cl. 248—349)

The present invention relates to a rotary shelf device, and more particularly relates to an improvement in such a device which is adapted for installation in kitchen cabinets, bars and other spaces in order to make items located in the back of the space readily available for easy access.

Generally rotary shelf devices have been used for attachment to kitchen shelves and cabinets, on counters, and other places to make stored goods more readily available for access or to provide an attractive apparatus for display of goods so as to make them readily available for observation and selection. The present invention is directed to improvements in such an apparatus.

It is an object of this invention to provide a rotary shelf device with a pressure sensitive adhesive coating so that the shelf may be quickly installed on any type of material and in the desired location.

A further object of the present invention is the provision of a removable cover that provides an attractive and easy to clean surface.

Yet a further object of the present invention is the provision of an inexpensive installation means which also provides a bearing point for the revolving shelf.

A still further object of the present invention is the provision of a rotary shelf device having a plurality of shelves.

Another object of the present invention is the provision of a simple, inexpensive, and easy to manufacture rotatable shelf device.

Other and further objects, features and advantages will be apparent from the following description of presently preferred embodiments of the invention, given for the purpose of disclosure and taken in conjunction with the accompanying drawing where like character references designate like parts throughout the several views, and where:

FIGURE 1 is an elevational view illustrating a rotary shelf device according to the present invention,

FIGURE 2 is a view taken along the line 2—2 of FIGURE 1,

FIGURE 3 is an enlarged partial view, in cross-section, taken along the line 3—3 of FIGURE 1 illustrating the pivot connection and a modified means for installation,

FIGURE 4 is an enlarged fragmentary view, in cross-section, illustrating one means of installation and a removable shelf cover,

FIGURE 5 is a side elevational view illustrating a modified form of the present invention having a plurality of rotary shelves, and

FIGURE 6 is a fragmentary view taken along the line 6—6 of FIGURE 5.

Referring now to the drawings and particularly to FIGURES 1, 2 and 3, the reference numeral **10** generally designates the rotary shelf device of the present invention and includes generally the circular shelf **12** which is securely mounted upon pivot member **16** which projects through the bearing plate **14** which is adapted to be secured to kitchen cabinets, shelves, counters and the like as will be more fully described herein.

The rotary shelf **12** is preferably circular and may be made of any desired material such as metal, wood or plastic. A retaining band **18** may be provided around the outer periphery of shelf **12** to act as a guard rail to retain goods on the shelf **12**. The shelf **12** is preferably provided with a hole **13** for a press fit mounting of the shelf **12** on the pivot member **16**. The pin member

16 may be permanently secured to the shelf **12** by a head (not shown) formed on the top of the pin member **16**. The bearing plate may be comprised of any desirable material such as wood, metal or plastic and is provided with an opening **15** and a dimpled washer **17**, if desired, for the passage of pivot member **16** which preferably is a steel pin. Thus the shelf **12** and the pivot member **16** rotate as a unit and are supported on the hole **15** or the washer **17**. This is preferable as the shelf **12** is prevented from tipping over when unbalanced loads might pull the shelf off a loosely fitting center pin.

Referring to FIGURES 1, 2 and 4, one method and means of installation of the rotary shelf device to a desired member **40** is shown. Tacks or nails **22** are provided which have a point **24** and a round head **26**. These tacks **22** project through the bearing plate **14** and secure the rotary shelf device **10** to the desired member **40**. Also it is noted that the round head **26** provides a bearing surface or slidable support for the shelf member **12** which is desirable if the shelf is heavily loaded or unevenly loaded. Preferably a plurality of tacks **22** are circularly spaced around and through the bearing plate **14**.

Referring now to FIGURE 3, another method and means of securing the rotary shelf **10** to a desired location is shown. A pressure sensitive adhesive coating **20** is provided on the lower surface of the bearing plate **14**. As this type of adhesive is well known no further description is believed necessary. Thus, the rotary shelf **10** may be installed in the desired location by merely pressing the bearing plate **14** or shelf **12** into position. This method of installation is advantageous in many instances where securing means such as the tacks **22** are not desired or could not be used because of the nature of the location such as metal kitchen cabinets.

Referring now to FIGURE 4, a removable cover **30**, which is preferably plastic, includes an annular band **34** and an integral web **32** of the same size as the shelf **12** may be provided to form a protective and easy to clean structure over the shelf **12**. This plastic cover may be of any desired color or pattern so as to provide the desirable decorative qualities. Furthermore, by the use of this cover **30** with its annular band **34** the retaining band **18** may be omitted from the shelf **12**.

Referring now to FIGURES 5 and 6, a rotary shelf device having a plurality of shelves is shown. In addition to the shelf **12** a similar shelf **38** is provided which is secured to shelf **12** by supporting means **36**. The supporting means **36** may be a wooden dowel and may be secured to the shelf **12** by nails **39**, screws (not shown), or any other conventional means. Shelves **38** and **12** could also be provided with a plastic cover **30** if desired, in which case the cover for the lower shelf could be provided with a slit and opening for removal and installation on the lower shelf. Of course, a plurality of shelves could be provided and various means could be used to interconnect them. And, of course, the shelf **12** may as shown in FIGURE 6 rotate on or with the pivot member **16**, especially if used with the tack installation so that unbalanced loads may be supported on the tack heads **26**.

In use, the entire assembly is preferably permanently assembled at the factory with the bearing plate **14** secured to the shelf **12** by the pin **16**. In installing the shelf the pressure required to imbed the tacks or secure the adhesive may easily be transmitted through the shelf **12** to the tack heads **26** or the bearing plate **14**, thus requiring nothing more for installation than placing the shelf **10** in location and firmly pressing downward on the entire assembly. The shelf **12** or plurality of shelves **12** and **38** may then be provided with a plastic cover **30**. The shelf **12** now may be freely rotated with respect to

the bearing plate **14** to place the shelf and its goods in the desired position. In the case of the tack supports **22** with the round head **26** the shelf **12** is provided with additional and inexpensive supports or bearing surfaces. It is noted that from time to time the plastic covers **30** may be conveniently removed and cleaned and reinstalled without the necessity of removing the rotary shelf device **10**.

The present invention, therefore, is well adapted to carry out the objects and attain the ends and advantages mentioned as well as others inherent therein. While presently preferred embodiments of the invention are given for the purpose of disclosure, numerous changes in the details of construction and arrangement of parts may be made which will readily suggest themselves to those skilled in the art which are encompassed within the spirit of the invention and the scope of the appended claims.

What is claimed is:

1. A rotary shelf device comprising a bearing plate, a pivot member projecting from the bearing plate, a shelf mounted on said pivot member, a retaining band secured to the periphery of said shelf, and a plurality of round headed tacks projecting through and securing the bearing plate to a desired structure, said tack heads slidably supporting the rotatable shelf.

2. A rotatable shelf device comprising a bearing plate, a pivot member secured from the bearing plate, a shelf mounted on said pivot member, and a washable plastic cover including an annular band and an integral web of the same size as said shelf said band positioned around the periphery of the shelf and extending about the shelf.

3. The invention of claim 2 including a pressure-sensitive adhesive formed on the lower side of the bearing plate whereby the rotary shelf may be secured to a desired structure.

4. The invention of claim 2 including a plurality of round headed tacks projecting through and securing said bearing plate to a desired structure, said tack heads slidably supporting the first rotatable shelf.

5. A rotatable shelf device comprising a bearing plate, a pivot member projecting from the bearing plate, a first shelf mounted on said pivot member, a support member secured to said first rotatable shelf, a second shelf secured to said support member and spaced parallel from said first shelf, and a washable plastic cover removably attached to each shelf, said cover including an annular band and an integral web of the same size as said shelf said band positioned around the periphery of the shelf and extending above the shelf.

6. The invention of claim 5 including a pressure sensitive adhesive formed on the lower side of the bearing plate whereby the rotary shelf may be secured to a desired structure.

7. The invention of claim 5 including a plurality of round headed tacks projecting through and securing said bearing surface to a desired structure, said tack heads slidably supporting the first rotatable shelf.

8. A rotary shelf device comprising a bearing plate, a pivot member projecting from the bearing plate, a first shelf member mounted on said pivot member, a support member secured to said first rotatable shelf, a second shelf secured to said support member and spaced parallel from said first shelf, and a plurality of round headed tacks projecting through and securing said bearing plate to a desired structure, said tack head slidably supporting the first rotatable shelf.

References Cited in the file of this patent

UNITED STATES PATENTS

353,554	Godfrey	Nov. 30, 1886
611,739	Pease	Oct. 4, 1898
1,240,208	Holtmeyer	Sept. 18, 1917
2,643,840	Lanman	June 20, 1943
2,719,413	Panzer	Oct. 4, 1955
2,765,998	Engert	Oct. 9, 1956
2,793,887	Moore	May 28, 1957

FOREIGN PATENTS

307,679	Germany	Jan. 5, 1920