Nov. 18, 1958 A. W. CAREW 2,860,942

ADJUSTABLE SUPPORT

Filed June 17, 1957

FIG. 1

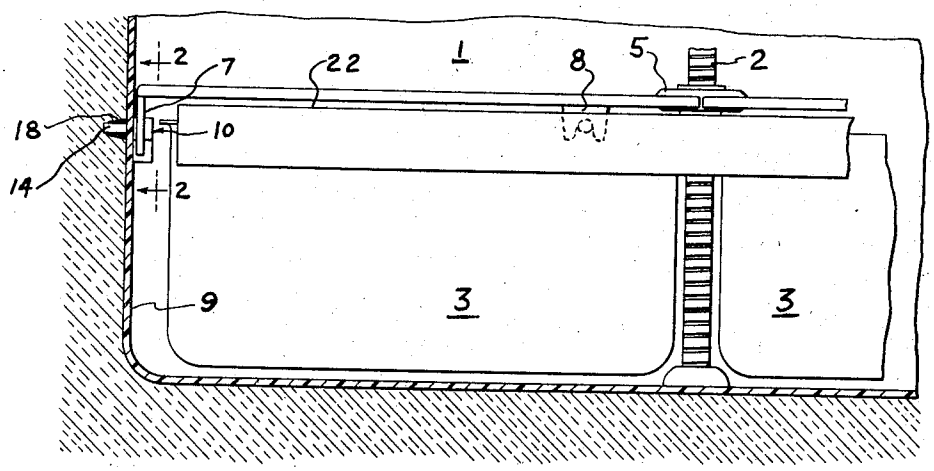


FIG. 4

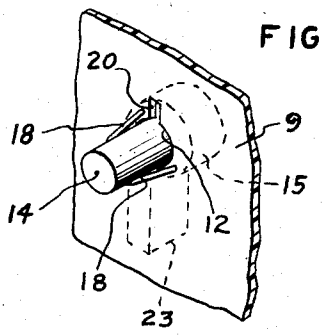


FIG. 3

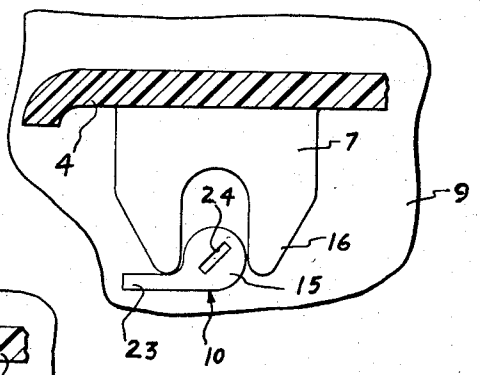
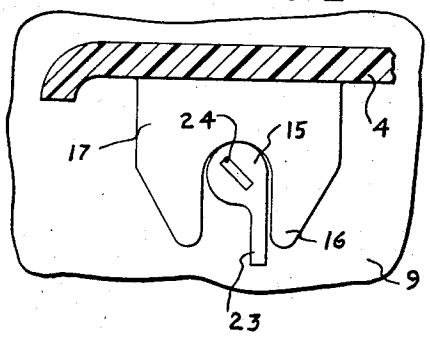


FIG. 2



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ADJUSTABLE SUPPORT

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2 Claims. (Cl. 312—270)

The present invention relates to an adjustable support means and is more particularly concerned with the adjustable means for supporting a stationary cover of a removable vegetable pan or other storage receptacle for a household refrigerator.

The usual household refrigerator includes one or more receptacles designed for the storage of fruits, vegetables or the like and either slidably or rotatably mounted within the refrigerator cabinet. To provide for limited or controlled circulation of the cooled cabinet air into and out of the receptacle there is also provided a stationary cover disposed above and in spaced relationship with the top of the receptacle. The cover is usually supported on the walls of the cabinet so that the receptacle served by the cover can be moved or removed without disturbing the cover.

The present invention has as its principal object the provision of an adjustable support for a receptacle cover of the above mentioned type whereby the cover which may be supported by means other than the means supporting the receptacles can be adjusted relative to the top of the receptacle.

Further objects and advantages of the invention will become apparent from the following description of the invention and the features of novelty which characterize the invention will be pointed out with particularity in the claims annexed to and forming part of the specification.

In accordance with the present invention, there is provided an adjustable support for a storage receptacle cover or the like of the type employed in household refrigerators which permits adjusting or leveling of the cover relative to the receptacle. The supported cover is provided with a bracket including spaced depending legs and the adjustable supporting member includes a stud portion adapted to be rotatably mounted in an aperture in a supporting wall such as the liner of the refrigerator and in frictional engagement with that wall. The supporting member also includes a head portion extending between the legs of the bracket carried by the supported cover and an arm radially extending from the head portion and integral therewith for engaging the lower extremity of one of the legs upon rotation of the supporting member in order to vary the vertical position of the supported cover. In the preferred form of the invention, the means for frictionally engaging the supporting member and the supporting wall is designed to prevent reverse rotation of the supporting member once the proper adjustment of the cover has been obtained.

For a better understanding of the invention reference may be had to the accompanying drawing in which:

Fig. 1 is a sectional elevational view of a portion of a refrigerator cabinet embodying the present invention;

Fig. 2 is an enlarged sectional view, partially broken away, taken along the line 2—2 of Fig. 1;

Fig. 3 is a view similar to Fig. 2 showing the adjustable supporting member of the present invention in a cover raising position; and

Fig. 4 is a perspective view illustrating certain details of construction of the adjustable supporting member of the present invention.

With reference to Fig. 1 of the drawing, there is shown a refrigerator cabinet including a food storage compartment 1. Provided within the compartment 1 are a plurality of rotatable shelves (not shown) supported on a vertically extending shaft 2. Also carried on the shaft 2 below the shelves are a pair of storage receptacles 3 which are supported for rotation on the shaft 2 in such a manner that one or the other of the two receptacles 3 can be rotated outwardly from the interior of the compartment into an accessible position.

In order to reduce the air circulation through the open top receptacles 3 when they are positioned in their normal storage positions within the compartment 1 and thereby to provide relatively high humidity conditions within these receptacles, there is provided a cover 4 extending horizontally across the top of each of the receptacles.

In accordance with the present invention, these covers 4 are generally sector-shaped and conform to the horizontal dimensions and shape of the receptacles 3. Each of the covers 4 is supported at one corner on the collar 5 carried by the shaft 2. Each of the covers also carries depending brackets 7 and 8 at their outer and rear edge portions which are adapted to engage suitable supporting means provided on the walls 9 forming the liner of the cabinet or compartment 1. By this arrangement it will be seen that the storage receptacles 3 are essentially supported by the shaft 2 disposed within the storage compartment 1 while the covers 4 are supported partly by the shaft on which the collar 5 is carried and partly by the liner wall 9 of the compartment 1. It is desirable therefore, in order to compensate for any manufacturing variations between the receptacle supporting structure and the cover supporting structure, to provide means for adjustably supporting the cover on the cabinet wall 9.

The means for accomplishing this result provided by the present invention comprises an adjustable supporting member 10 adapted to be received in an aperture 12 provided in the wall 9 and having a stud portion 14 extending through the aperture and a head portion 15 which fits between the depending legs 16 provided on the brackets 7 forming part of the cover 4. The supporting member 10 is held in frictional engagement with the wall 9 by contact of the collar 16 with the wall, this contact being maintained by a pair of spring-like legs 18 which engage the rear side of the wall 9.

In order to mount the support member 10 on the wall 9 there are provided a pair of opposed notches 20 on opposite sides of the aperture 12, these notches 20 being in a size to receive the legs 18. Once the stud 14 passes through the aperture 12 a distance sufficient to bring the collar 16 into engagement with the wall 9 rotation of the supporting member causes the legs 18 to ride onto the rear surface of the wall 9 in a slanting and sliding position relative to the stud 14 so that reverse rotation of the supporting member is prevented by contact of these legs 18 with wall 9.

The legs 18 on the supporting member 10 and the notches 20 provided in the walls defining the aperture 12 are so positioned that when the supporting member 10 is inserted into the aperture 12 and rotated a distance sufficient to bring the legs 18 into frictional engagement with the rear surface of the wall 9, the supporting member occupies approximately the position shown in Fig. 2 of the drawing. In this position the cover 4 or more specifically bracket 7 rest directly on the head portion 15 of the supporting member. In order to level the cover 4 relative to the top edge 22 of the receptacle 3, there is provided an arm 23 integral with member 10 and ex-

tending more or less radially from the head **15**, this arm **23** having a length such that it extends below the lower ends of the legs **18** when in the position shown in Fig. 2. The arm **23** provides means for elevating the cover **4** relative to receptacle **3**. Rotation of the member **10** as for example by means of a screw driver placed in the slot **24** provided in the head **15** causes the arm **23** to contact one of the legs **16**, continued rotation of the supporting member **10** causing the arm **23** to raise the shelf **4** upwardly as shown in Fig. 3 of the drawing. During this rotation of the supporting member **10** the legs **18** slide relative to the rear surface of the wall **9** and except for their spring forces do not interfere with this rotation. Reverse rotation of the member **10** due to the load of the cover **4** on the arm **23** is prevented by the fact that the legs **18** bite into the wall **9** thereby increasing the frictional engagement of the member **10** with the wall **9** under the effect of the weight of the cover **4**.

While there has been disclosed a specific embodiment of the present invention, it is to be understood that the invention is not limited to the particular construction illustrated and it is intended by the appended claims to cover all modifications within the spirit and scope of the invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. An adjustable support structure comprising a supported member having a bracket thereon including spaced depending legs, an adjustable supporting member including a stud portion adapted to be rotatably mounted in an aperture in a supporting wall in frictional engagement with said supporting wall and a head extending between said legs, and an arm integral with said head for engaging the lower extremity of one of said legs upon rotation of said supporting member to vary the vertical position of said supported member.

2. An adjustable support structure comprising a supported member having a bracket thereon including spaced depending legs, an adjustable supporting member including a stud portion adapted to be rotatably mounted in an aperture in a supporting wall in frictional engagement with said supporting wall and a head portion extending between said legs, and an arm integral with said head for engaging the lower extremity of one of said legs upon rotation of said supporting member to raise said supported member.

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