Jan. 7, 1936. H. H. PEARL 2,026,701

UTENSIL COVER

Filed March 26, 1935

Fig. 1.

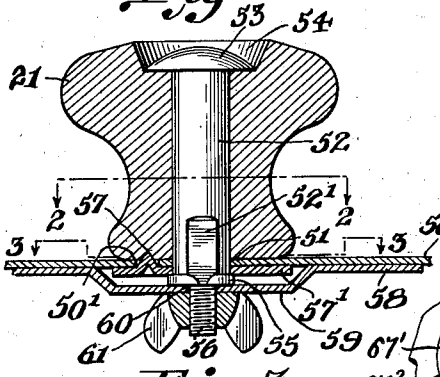
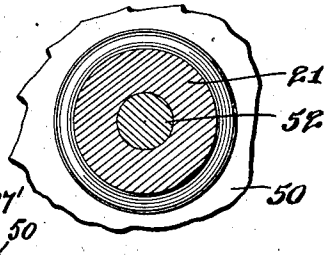


Fig. 2



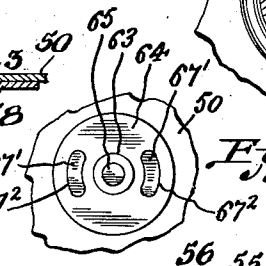


Fig. 9.

Fig. 3.

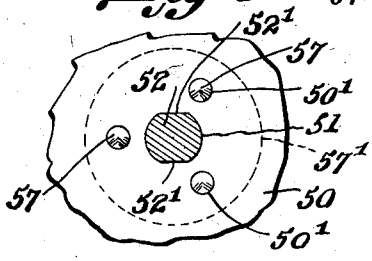


Fig. 4.

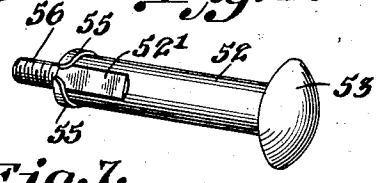


Fig. 7.

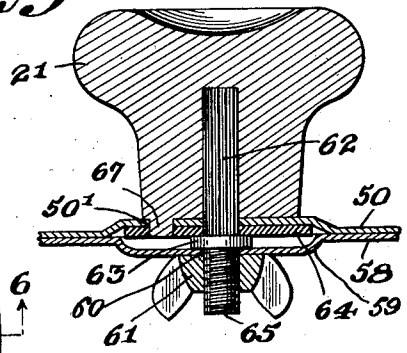
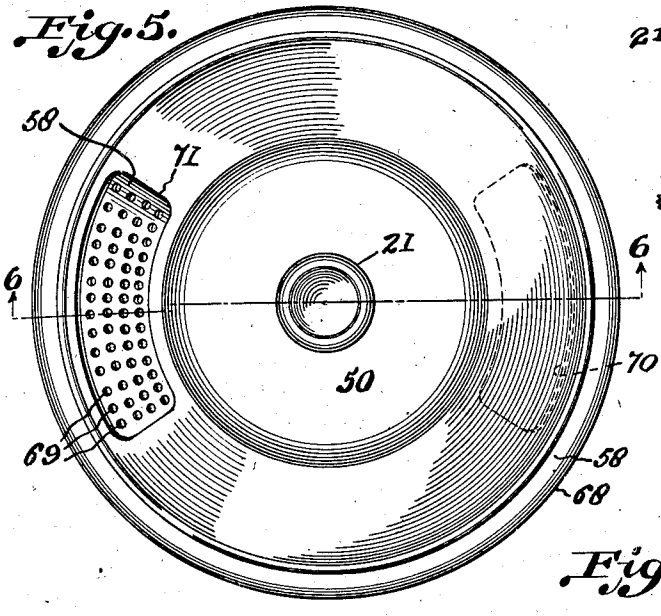


Fig. 5.



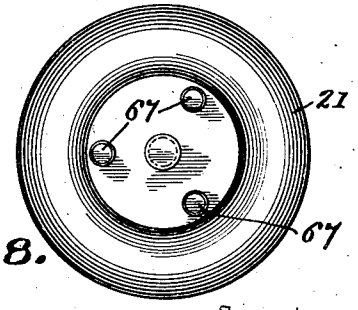


Fig. 8.

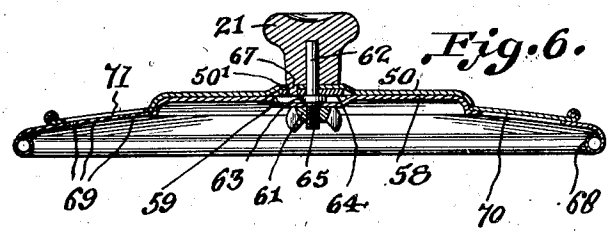


Fig. 6.

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Patented Jan. 7, 1936 2,026,701

UNITED STATES PATENT OFFICE

2,026,701

UTENSIL COVER

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Application March 26, 1935, Serial No. 13,166

9 Claims. (Cl. 53—8)

The present invention relates to utensil covers, and more particularly to knobs or handles therefor, and has for an object to provide a cover knob holder which is secure and by means of which the loosening of the knob is avoided during use of the cover, as is very frequently the case.

The present application constitutes a continuation in part of my prior application Serial No. 677,643, filed June 26, 1933 for Utensil covers and releasing means therefor.

A further object of the present invention is to provide an improved means for yieldingly binding the knob to the cover and to provide means for positively holding the knob from turning or twisting on the cover so that the cover and the knob will be intimately interconnected or interlocked and thus held together substantially as a unit.

Another object of the invention is to provide a knob connected to a pair of cover sections so that the turning of the knob will turn the sections one on the other to register openings in the sections for venting the receptacle and pouring off liquid therefrom, and which is so attached to the sections that the knob will not become loosened and detached incident to the turning movements.

With the foregoing and other objects in view, the invention will be more fully described hereinafter, and will be more particularly pointed out in the claims appended hereto.

In the drawing, wherein like symbols refer to like or corresponding parts throughout the several views,

Figure 1 is a vertical section taken through the cover knob as applied to the cover, the latter being shown fragmentarily and in section.

Figure 2 is a transverse section taken through the intermediate portion of the knob substantially on the line 2—2 of Figure 1.

Figure 3 is a sectional view taken through the stem or bolt of the knob immediately beneath the knob on the line 3—3 of Figure 1.

Figure 4 is a detail perspective view of the bolt for holding the knob in place.

Figure 5 is a top plan view of the complete cover having a modified form of knob attached thereto.

Figure 6 is a transverse section taken through the same on the line 6—6 of Figure 5.

Figure 7 is a fragmentary sectional view through the modified form of knob and holding means therefor.

Figure 8 is a detail bottom plan view of the knob of Figure 7, showing the anchoring projections or pins; and

Figure 9 is a detail bottom plan of the knob shown in Figure 7, being a modified form of projection of arcuate shape.

Referring now to the drawing, and first to the form shown in Figures 1 to 4, the utensil cover 50 carries a knob 21 which is given any suitable configuration for easy grasping in the hand. The cover plate 50 is provided with a central hole 51 through which passes a bolt 52 having an upset head 53 which engages in a recess 54 provided in the upper or outer end of the knob body 21. The bolt 52, throughout its major portion is cylindrical in exterior shape, as shown to advantage in Figure 4. The bolt 52 has at its inner end, or the end opposite the head 53, flat opposed faces 52', shown in Figure 3, to engage in the body portion 21 and hold it from turning on the bolt. At the end of the flat surfaces 52', the metal of the bolt is swaged or upset into substantially annular shoulders 55, and the extremity of the bolt 52 is preferably reduced and screw threaded as at 56.

The cover plate 50 is provided with a plurality of holes 50' for receiving therethrough prongs or projections 57 struck or carried upon a circular plate 57' which is disposed at the inner side of the cover plate 50 and is suitably apertured at its center portion to register with the opening 51 in the cover plate for the reception of the bolt 52 therethrough.

This reinforcing plate 57' bears against the upper faces of the shoulders 55 of the bolt. The shoulders 55 may be swaged or struck up against the plate 57' to hold it on the bolt and tightly against the cover plate 50. The shoulders 55 also operate against the head 53 to hold the knob body 51 firmly on the bolt and against the cover plate 50. The prongs 57 extend outwardly or upwardly through the openings 50' in the cover plate and also project or bight into the inner end of the knob body 21 for holding the latter against turning. The prongs 57, engaging in the openings 50', also hold the plate 57' against turning on the cover plate 50 and, incident to the flat faces 52' on the bolt, the latter is also held against turning. The prongs 57 thus serve the double purpose of independently holding the knob body 21 and the bolt 52 against turning. A subsidiary or auxiliary plate 58 is shown in detail in United States Letters Patent No. 1,055,072, granted March 4, 1913, and also in Figures 5 and 6. This auxiliary plate 58 is provided with a central depression 59 and an opening 60 through which the screw

threaded end 56 of the bolt may pass. The depressed part 59 seats against the lower sides of the shoulders 55 and is held thereto by a wing nut 61 which is threaded on the stem or projection 56 and turned up against the depressed part 59 of the auxiliary plate.

One manner of assembling and securing the parts on the bolt 52 is to insert the threaded end of the bolt 52 through the cover 50 and through the reinforcing plate 57', and to then apply a hollow punch slidably over the threaded end 56 and upset the metal to form the annular shoulders 55. Thus, the shoulders 55 firmly hold the parts together and bind the reinforcing plate 57' against the cover 50 so that the latter, together with the reinforcing plate 57', will turn as a unit with the knob 21 on the lower plate 58 when the knob is turned.

In the modification shown in Figures 5 to 8 the knob body 21 carries a bolt 62 which may be secured in the knob body 21 in any suitable manner, as by knurling the upper portion of the bolt 62, as shown in Figure 7. The bolt 62 has an annular shoulder or collar 63 near its inner end which is swaged or otherwise pressed up against a reinforcing disc or plate 64 which seats against the under side of the cover plate 50 about the bolt 62. The lower end of the bolt 62 is externally threaded as at 65 to receive thereon the winged nut 61. The winged nut 61 presses against the depressed portion 59 of the auxiliary plate 58 to hold the bolt 62 thereto and admit the turning of the upper plate 50 on the lower plate 58 by the turning of the knob 21.

As shown particularly in Figures 7 and 8, the inner end of the knob 21 is provided with a plurality of prongs or projections 67 which extend through the openings 50' in the cover plate 50 and through correspondingly formed openings in the reinforcing plate 64 for interlocking the plates 50 and 64 to the knob. These prongs or projections 67 may be cast integrally with the body 21 of the knob or they may be independently inserted or otherwise embedded therein.

As shown in Figures 5 and 6, the cover has the lower plate 58 which is larger than the upper plate 50 and is adapted to fit at its marginal portion 68 over the upper open end of a receptacle to substantially seal the same. One of the plates, such as the plate 58, may have a group of perforations 69 at one side of its axis and a slot or opening 70 at the other side of its axis. The other plate, the top plate 50 in the present instance, may have a slot or opening 71 at one side of the axis of the cover to be selectively brought into register with the perforations 69 and the other opening 70 by turning the knob 21 with the plate 50 connected thereto. Preferably the top plate 50 is of less diameter than that of the bottom plate 58 to reduce the weight of the cover and the extent of the frictional contact surfaces between the plates. The top plate 50 is of sufficient diameter to close the perforations 69 and opening 70 when turned into an intermediate position.

In Figure 9, the three projections in Figure 8, are substituted by two arcuate-shaped projections 67^1 passing through arcuate-shaped openings 67^2 in the disc 64. It has been found that by this arrangement a very strong connection results.

The advantage of this knob structure with the two-part cover or lid is that wood knobs and screws and the like expensive and inefficient devices heretofore employed, and subject to rusting and rotting, are done away with, and an inexpensive, durable and strong knob attaching means is provided.

It is obvious that various changes and modifications may be made in the details of construction and design of the above specifically described embodiment of this invention without departing from the spirit thereof, such changes and modifications being restricted only by the scope of the following claims:—

What is claimed is:—

1. A cover for vessels, having a knob for the cover, a headed stem engaging the bore of the knob and having at its other end upset flanges extending beyond the knob and having flattened sides in proximity to the flanges, and a plate adjacent said cover having projections engaging the knob after passing through holes in the cover, said plate abutting the upset flanges of the stem and said plate having a central opening of the same configuration as the configuration of the flattened end of the stem.

2. A cover for vessels, having a knob for the cover provided with a bore, a headed stem in the bore with its head engaging the knob and having at its other end an upset flange extending beyond the knob and having flattened sides in proximity thereto, a plate adjacent said cover having projections engaging the knob after passing through the holes of the plate, said plate abutting the upset flanges and said plate having a central opening of the same configuration as the configuration of the flattened end of the stem, a second plate disposed on the other side of the flanged portion of the stem, a screw-threaded portion extending from the stem, and a wing nut engaging the screw-threaded end of the stem for holding the last-named plate to the flanged end.

3. A cover for vessels, having a knob for the cover, a bolt carried by the knob and having interlocking means therewith for holding the bolt from turning in the knob and provided with holding means at its outer end, said bolt adapted to engage through said cover, and a reinforcing disc arranged about the inner end of the bolt against the inner side of the cover and behind said holding means of the bolt, said disc having prongs projecting therefrom and engaging through said cover and into the knob for holding the knob and the bolt from turning on the cover.

4. A cover for vessels comprising superposed plates having openings therein relatively disposed for closing and registering the openings upon relative turning of the plates, a knob for the cover having a bolt therein extending axially through the plates, a reinforcing disc disposed between the plates and about the bolt, interlocking means between the knob, the reinforcing disc and the top plate of the cover for interconnecting the same to turn as a unit, and a connection on the bolt engaging the lower plate of the cover to hold the same against the top plate and to the bolt of the knob.

5. A cover for vessels comprising superposed plates having openings therein relatively disposed for closing and registering the openings upon relative turning of the plates, the lower plate of the cover having a marginal portion to engage the top of the container and having a central depression, a knob having a bolt engaging axially through both plates and having a lower threaded end and an upset shoulder against the upper face of the lower plate in the depression thereof, a reinforcing disc on the bolt between the shoulder and the lower face of the top plate, interlocking means between the knob, the

top plate and the disc, and securing means on the threaded lower end of the bolt engaging the lower plate to hold the same to the bolt and against the top plate.

6. A cover for vessels comprising superposed plates having openings therein relatively disposed for closing and registering the openings upon relative turning of the plates, the lower plate having a marginal portion to engage a container to hold the cover thereto and having a central depression providing a central space between the plates, a reinforcing disc in said central space, a knob having a bolt extending axially through the plates and the disc and having an upset shoulder in said central space beneath the disc to clamp the disc against the top plate, interlocking means between the knob, the top plate and the disc for turning the same as a unit when the knob is turned, and retaining means on the lower end of the bolt to hold the lower plate thereto and for turning against the top plate.

7. A cover for vessels comprising superposed plates having openings therein relatively disposed for closing and registering the openings upon relative turning of the plates, the lower plate having a marginal portion to engage a container to hold the cover thereto and having a central depression providing a central space, a knob for the cover, a knurled bolt secured in the knob and extending at its lower end axially through the plates and the disc and having a shoulder upset thereon against the lower side of the disc to clamp the same and the top plate to the knob, and a nut threaded on the lower end of the bolt for binding the lower plate against said upset shoulder, said knob having projections on its lower end and said top plate and disc having openings therein for said projections to interlock the top plate with the knob and the disc to turn as a unit.

8. A cover for vessels, having a knob for having a bolt therein, said bolt having an annular shoulder near its inner end engaging the inner end of the knob and adapted for passage through the cover, a reinforcing disc surrounding said annular shoulder against the inner side of the cover, said bolt having a threaded portion projecting inwardly from the annular shoulder, and clamping means carried by said threaded portion of the bolt and engaging the same to bind the disc and cover together, said knob having spaced arcuate projections extending from its inner end for passage through the cover, and said disc having arcuate openings for the reception of said projections for interlocking the knob, cover and disc together.

9. A cover for vessels, including superposed plates, a knob having a bolt therein passing through both plates, a reinforcing disc mounted on the bolt between the plates, and interlocking means disposed between the disc and the knob and engaging through the interpositioned plate for holding the latter to turn with the knob independently of the other plate.

HERMAN H. PEARL.