C. MINTER.

TILTABLE AND COVER LIFTING SUPPORT FOR COVERED CONTAINERS.

APPLICATION FILED JUNE 23, 1917.

1,292,006.

Patented Jan. 21, 1919.

2 SHEETS—SHEET 1.

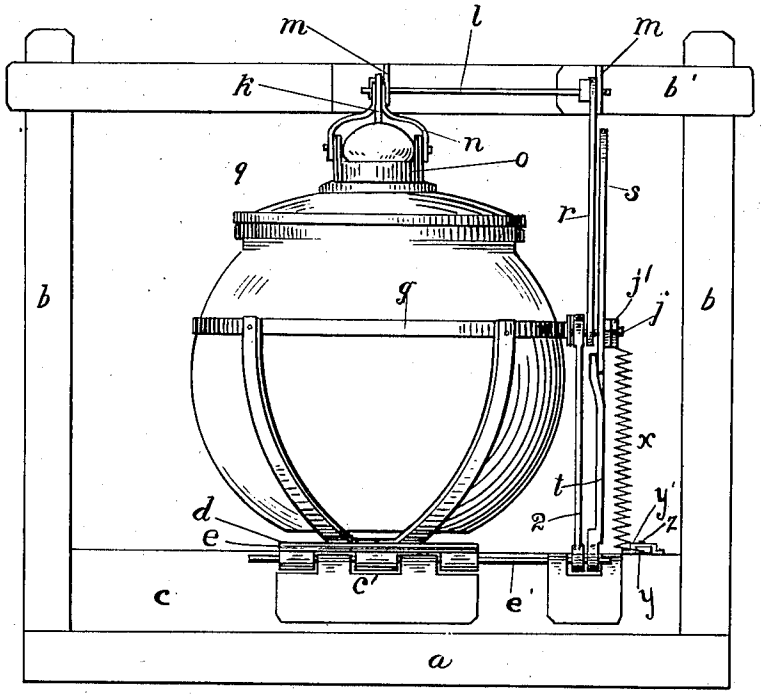


Fig. 1.

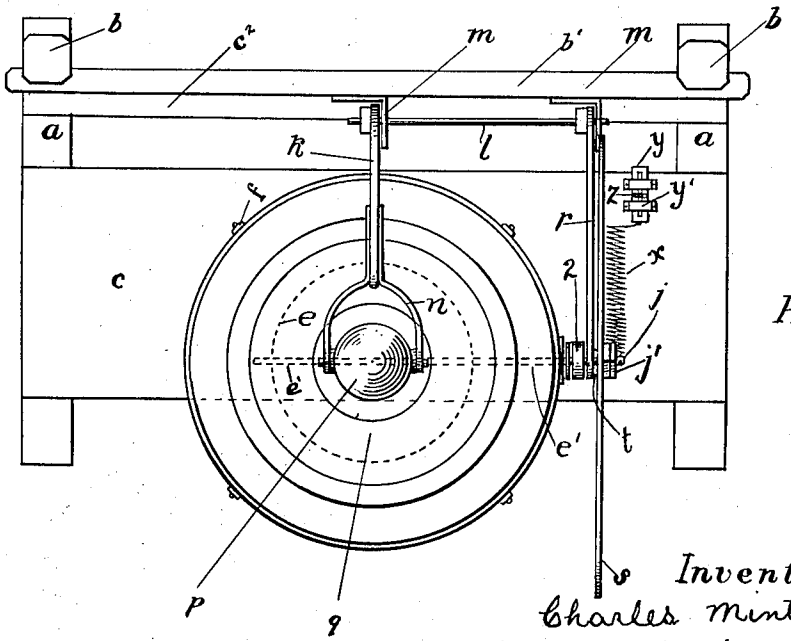


Fig. 2.

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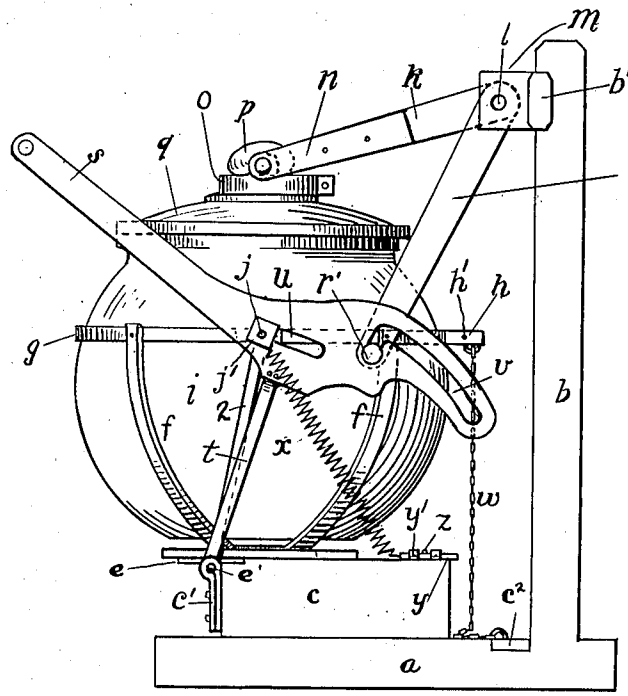


Fig. 3.

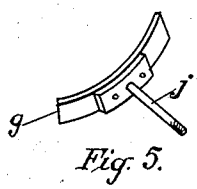


Fig. 5.

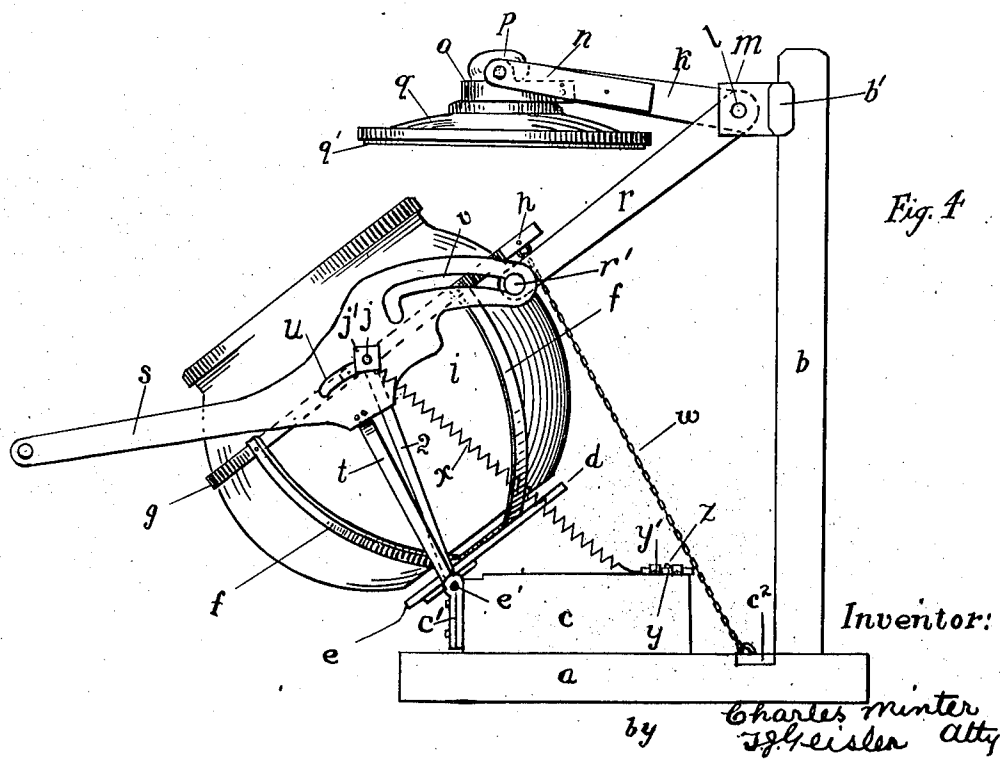


Fig. 4

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UNITED STATES PATENT OFFICE.

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TILTABLE AND COVER-LIFTING SUPPORT FOR COVERED CONTAINERS.

1,292,006. Specification of Letters Patent. Patented Jan. 21, 1919.

Application filed June 23, 1917. Serial No. 176,641.

To all whom it may concern:

Be it known that I, CHARLES MINTER, a subject of the Emperor of Germany, having declared his intention to become a citizen of the United States, and a resident of the city of Portland, county of Multnomah, State of Oregon, have invented a certain new and useful Improvement in Tiltable and Cover-Lifting Supports for Covered Containers, of which the following is a specification.

My invention relates to containers provided with covers, such, for example, as candy and cracker jars, or glass globes. The object of my invention is to provide a support for such containers which is tiltable so as to render the containers more accessible, and move the containers back out of the way when no longer in use; and also to provide mechanically operated means by which, in time with said movements of the container, the cover of the latter is lifted off and replaced.

I attain my object in a device comprising a supporting frame provided with a tiltable support for the container, a hinged cover-supporting arm, and an operating arm, and a coöperative connection between the operating arm and the container-support, and also between the operating arm and the cover-supporting arm, these mechanisms being so coöperatively arranged that by the movement of the operating arm the cover will first be lifted, then the container tilted, then the latter righted and finally the cover replaced.

The details of mechanism by which these results are accomplished are hereinafter fully described, reference being had to the accompanying drawings, in which:

Figure 1 is a front elevation of my device;

Fig. 2 shows a top view thereof;

Fig. 3 shows my device as holding the container in its cover when the former is not to be used;

Fig. 4 illustrates the action and position assumed by the parts when the container-support is tilted so as to render the contents of the container accessible; and

Fig. 5 is a detail of construction.

a represents a frame provided with upright members *b*. *c* is a block rigidly mounted on the frame *a*, and to such block is hinged (as shown at *c'*) the container-support *d*. Said support consists of a plate or bottom piece *e* and a basket-like structure comprising radiating members *f* and a strap *g* affixed to the upper extremities of the latter. Said strap has ends *h* which are locked together by any convenient means (such, for example, as bolt and nut, as indicated by *h'*) after the container *i* has been put in place. It will be noted from Figs. 3 and 4 that the strap *g* is so located as to encompass the container above its greatest circumference, and in this way securely holding the container in place. A pin *j* projects from one end of the strap, as more clearly shown in the detail Fig. 5.

A cover-supporting arm *k* is rigidly mounted on a shaft *l*, which is journaled in brackets *m*, *m*, supported on the cross-piece *b'* at the upper ends of the frame members *b*. The outer or free end of the cover-supporting arm *k* is provided with a yoke *n* to the extremity of which is pivotally attached a collar *o*, adapted to be secured on the neck or contracted part of the knob *p* of the cover *q*. On the shaft *l* is further mounted a rigid downwardly extending arm *r*.

s represents the operating arm. It is provided with a supporting leg *t* which is hinged on the hinge pin *e'* of the container-support *d*. The arm *s* is provided with a curved slot *u* through which projects the pin *j*, on the outer end of which are threaded nuts *j'*. The operating arm is further provided with a slot *v* in which works a headed pin *r'* on the free end of the arm *r*.

As observable from an inspection of Figs. 3 and 4, the operating arm *s*, and its slotted connections with said pins *j* and *r*, are so arranged that by depressing the free end of said arm the cover-supporting arm will first be lifted so as to lift off the cover *q* of the container *i*, then the latter will be tilted forward; and when the container is no longer to be used it is restored to its upright position by merely lifting the arm *s*, and after the container *i* has been righted, then, through the connections described, the arm *k* will be lowered so as to replace the cover *q* of the container. The cover *q* is provided with a gasket *q'* on its lower face, as shown in Fig. 4, so as to prevent the replacing of the cover with undue jar, and in this way protecting the container against being injured or broken, having in mind, especially, the use of glass containers.

The tilting of the container-support *d* is restricted by a chain *w*. The return or righting movement of the container-support is

facilitated by a coil-spring x, so that a slight upward movement, manually, of the operating arm s is sufficient, and the spring x will then act to restore the container-support to its upright position. The pin-and-slot connection between the member r of the cover-lifting arm k and the projecting inner piece of the operating arm s serve to prevent the container-support being drawn to its upright position with undue force by the spring x, and the cover of the container being replaced with undue force.

In order to provide for the adjustment of the spring x, I prefer to attach the lower end thereof to a slidable bar y, sliding in straps y' and secured in place, as adjusted, by convenient and simple means, such, for example, as a set-screw z.

In order to prevent undue strain being imposed on the pin j of the strap g of the container-support, I deem it advisable to use a brace arm, as 2, provided with eyes at its opposite ends, the lower end being supported on the hinge pin e' and the upper end being placed on the pin j. This detail being shown more clearly in Figs. 1 and 2.

I claim:

1. In a device of the character described, a tiltable container support including means for securing a container thereon, a hinged cover-supporting arm, and means for raising and lowering such cover-supporting arm, such means being coöperatively connected with the container-support and being adapted to lift the cover-supporting arm in advance of the tilting of the container support and to lower the arm after the righting of the latter.

2. In a device of the character described, a tiltable container support including means for securing a container thereon, a hinged cover-supporting arm, a pivoted operating arm, and a connection between the operating arm and the container-support and between the operating arm and the cover-supporting arm, said connections being adapted to cause the movement of the operating arm to tilt and right again the container-support, to lift the cover-supporting arm in advance of the tilting of the container support and lower the cover-supporting arm after the righting of the latter.

3. In a device of the character described, a tiltable container-support provided with basket-like means for holding a container thereon, a pin projecting laterally from said holding means of the container-support, a hinged cover-supporting arm, an operating arm, provided with a leg pivoted coincidentally with the axis of motion of said container-support and having slotted connection with said pin, a horizontally journaled shaft, a pair of arms rigidly mounted thereon at an angle to each other, means at the extremity of one arm for suspending the cover of the container therefrom, and a pin at the free end of the other arm bearing in a slot of an extension of the operating arm.

CHARLES MINTER.