Nov. 16, 1954 G. E. JOHNSON 2,694,541

COLLAPSIBLE BAG SUPPORT

Filed May 2, 1951

FIG. 1.

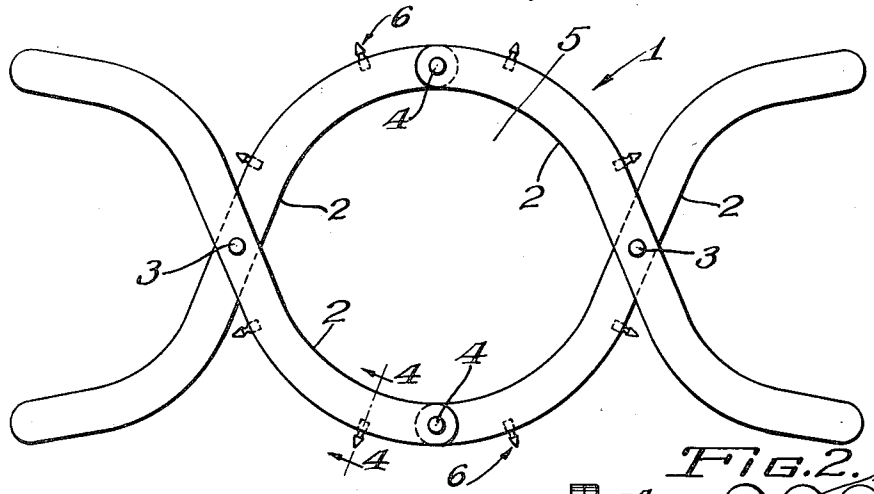


FIG. 2.

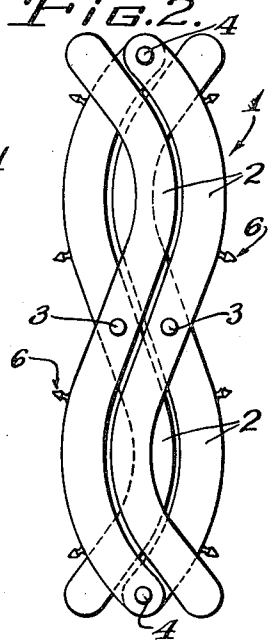


FIG. 5.

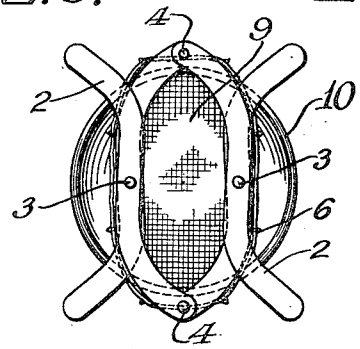


FIG. 3.

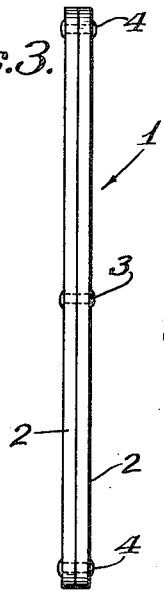


FIG. 6.

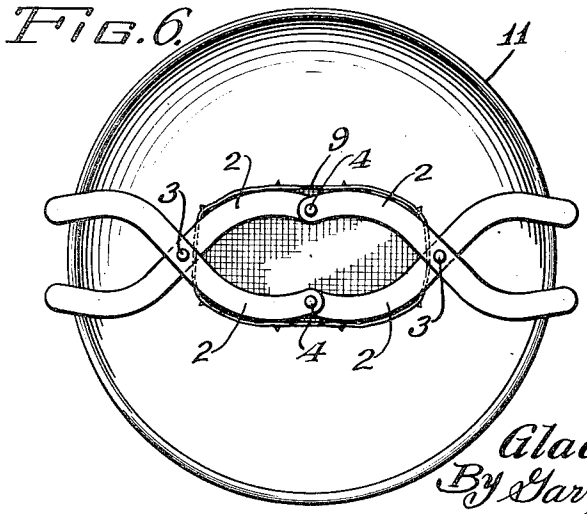
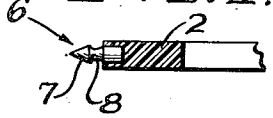


FIG. 4.



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COLLAPSIBLE BAG SUPPORT

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1 Claim. (Cl. 248—100)

This invention relates to improvements in a supporting device for bags or the like, the device being adjustable to permit the supporting of a bag over the mouth of different sizes of containers.

In the filtering or straining of materials, such as, for instance, in the making of jellies, the mashed fruit including the solids portion thereof and the liquid portion is frequently introduced into a fabric bag and the bag being suspended over an open mouthed container whereby the liquid portion of the fruit is permitted to drain through the bag and be accumulated in the container.

In carrying out such an operation some means must be provided for supporting the bag in the mouth of the container so that the bag may hang down into the container and thus drain into the container.

As a feature of my invention I contemplate a device upon which a bag may be supported, the device being foldable or collapsible into small compass when not in use, and which when used may be expanded to support a bag over or in the mouth of a container.

As a further feature of my invention, a bag supporting device is contemplated which will support a bag in the mouths of containers having wide ranges of diameters, whereby substantially any of the usual household pots may be employed to catch the liquid drained from the bag.

As an additional feature of my invention, pins are permanently carried upon portions of the bag-supporting device whereby the open end portion of a fabric bag may be conveniently secured and removed from the device.

Other objects and advantages of my invention will be apparent from the accompanying drawing and following detailed description.

In the drawing, Fig. 1 is a top plan view of my improved bag-supporting device shown in expanded position.

Fig. 2 is a similar view of the device in contracted or collapsed position.

Fig. 3 is a side elevational view of the device shown in Fig. 2.

Fig. 4 is a sectional view of one of the supporting arms, taken on line 4—4 of Fig. 1, illustrating one of the bag-hanging pins.

Fig. 5 is a top plan view of the bag-supporting device holding a bag in the mouth of a relatively small container.

Fig. 6 is a view similar to Fig. 5 showing the use of the device with a relatively large container.

Referring in detail to the drawing, 1 indicates generally my improved bag-supporting device which comprises two pair of similarly shaped arms 2. Each of the arms 2 is reversely curved and two arms of each pair are pivotally joined at their centers by pivot pins 3. The end portions of each arm of each pair are pivotally joined to the corresponding end portions of the arms of the other pair by means of pivot pins 4. Thus the arms are joined in a fashion resembling the usual "lazy tongs."

However, as a feature of my invention the curvature of the arms 2 is such that the concave side of corresponding arms faces the concave side of its paired companion and the concave sides of each pair face the concave sides of the opposed pair between the pivot pins 3 and 4. Thus, in the central portion of the device a closed area 5 is defined by the concave sides of the opposed pairs of arms 2.

When the device 1 is to be used it is expanded, as

shown best in Fig. 1. When not in use the device 1 may be collapsed, as shown best in Figs. 2 and 3, the configuration of the arms 2 being such that the pair of arms on each side of the device register with each other or "nest," whereby the device occupies a minimum of space.

On those portions of the arms 2 which define the central area 5, a plurality of spaced bag-hanging pins 6 are positioned. The pins 6 each comprise a relatively sharp conical head 7 connected to an annular grooved neck 8. In employing the pins 6, the sharp conical portion 7 can be made to protrude through the weave of the fabric comprising a bag 9, the bag finally resting upon the grooved necks 8 of the pins from whence it cannot readily be accidentally disengaged.

The arms 2 may be constructed of any suitable rigid material such as wood or metal, but I prefer to use plastic material because of its light weight and resistance to rot or corrosion. The pins 6 may be formed integral with the arms 2 or may be formed as inserts which are positioned in suitable apertures provided in the outer edges of the arms.

As a feature of my invention and to exemplify its flexibility of use, Fig. 5 illustrates a device 1 supporting a bag 9 in the mouth of a relatively small container 10. In this case the device is so manipulated as to space the opposite pivot pins 4 a relatively great distance from each other. It will be noted that the upper portion of the bag 9 extends beyond the mouth of the container, but this is not disadvantageous since the material carried in the bag is normally confined in about the lower half portion of the bag. The device 1 forms a stable support for the bag, the device contacting the defining mouth of the container at eight spaced points.

In Fig. 6, the device is shown as supporting a bag 9 in the mouth of a relatively large container 11. In this case the spaced pivots 4 are brought relatively close to each other and the entire bag hangs in the container. The support for the bag is stable since the arms 2 contact the rim of the container at four spaced points.

It can readily be seen that the device comprising my invention has great flexibility of use, forming a stable support for a bag in the mouth of relatively small and relatively large mouthed containers and containers of any size between the extreme limits. Convenient pins are carried by the portion of the device bordering the area 5 for the support of a bag, and the arcuate shape of the arms 2 defining the space 5 providing ready access to the interior of the bag.

If desired, the device 1, instead of being supported upon the edge defining the mouth of a container, may be supported by any type of spaced supports, such as, for instance, two spaced chairs, two spaced boxes or other objects whereby the bag will be freely suspended above a receptacle wherein the strained material is draining thus permitting access and visibility of the progress of the straining operation. Of course, the bag 9 may be constructed of any suitable material and does not necessarily have to be a bag as such, but may be merely a suspending and straining agency adapted to accomplish the straining operation.

I claim as my invention:

A collapsible bag support comprising two pair of similar arms, each of said arms being reversely curved in substantially S-shape, the arms of each pair being pivoted together substantially centrally of their lengths, an end portion of each arm of each pair being respectively pivotally connected to an end portion of each arm of the other pair, those portions of the arms included between said pivots having concave sides facing each other to define a closed space, and a plurality of spaced projecting pins carried by those portions of the arms included between said pivots, said pins extending outwardly from the convex portions of said arms for engagement with the mouth of a bag to be supported transversely to the plane of pivotal movement of said arms beneath said closed space, those portions of the arms on the opposite sides of said first-mentioned pivots from said closed space extending outwardly in opposite directions whereby to

support the arms and carried bag upon the walls of a container.

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