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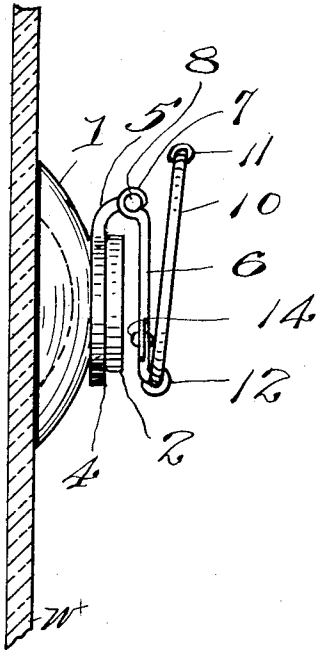


Fig. 1

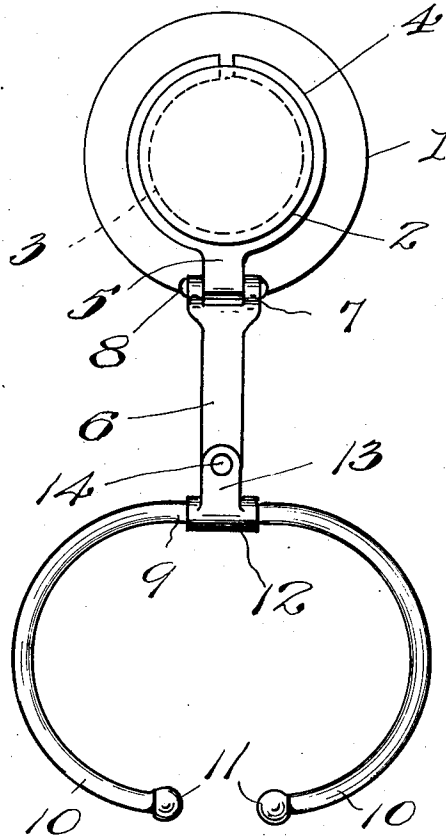


Fig. 2

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UNITED STATES PATENT OFFICE.

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To all whom it may concern:

Be it known that I, FRANK M. PHELPS, a citizen of the United States, residing at Usk, in Pend Oreille County, and State of Washington, have invented certain new and useful Improvements in Holders, of which the following is a specification.

The present invention relates to improvements in holders or supports of the suction cup type, especially designed for attachment to smooth surfaces as glass windshields of automotive vehicles. The device is also adaptable with facility for use in show windows, or on glazed store furniture for the purpose of supporting and displaying various articles of merchandise, such as dolls for instance.

The primary object of the invention is the provision of a device of this character which is so constructed that it may with convenience and dispatch be adjusted to many different forms and shapes and located in different positions for the purpose of supporting a wide variety of articles. To this end the invention consists in certain combinations and arrangements of parts giving a flexibility for adjustment of the device as will hereinafter be more fully set forth and claimed.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention wherein the parts are combined and relatively arranged according to the best mode I have thus far devised for the practical application of the principles of my invention.

Figure 1 is a view in side elevation showing the device in compact arrangement and supported by suction on a wall.

Figure 2 is a front view of the device with its several parts extended in the same vertical plane, and with the supporting ring turned to a position different from that of Figure 1.

For convenience of illustration I have indicated in Figure 1 a supporting wall as W which may be a glass wind shield, glass window or panel, or other object having a smooth surface against which the cup 1 is held by suction. The cup is of the well known concavo-convex form and of rubber, but is specially formed with a central, round head or disk 2, between which and the cup an annular groove or bearing throat 3, is provided.

Around the annular groove of the cup a

split ring 4, of metal, extends, and this ring possesses sufficient resiliency to embrace the grooved cup with the required friction so that the ring may be swung around on the grooved cup as a bearing. Thus in Figure 1 the split end of the ring is located at the bottom of the grooved portion of the cup, while in Figure 2 the split end of the ring is located at the top of the grooved portion of the cup. The frictional engagement between the ring and the grooved cup is sufficient to hold the ring in various positions, but this engagement will permit the ring to be swung around by hand pressure.

The swiveled ring is fashioned with a perforated lug 5 to which a link 6 having a forked end or bifurcated head 7 is hinged on the rivet 7, and this hinge joint, as seen in Figure 1 is preferably offset between the ring and hinge in order that the parts may be folded for compact arrangement as in Figure 1.

An adjustable supporting yoke 9 forms the end of the support or holder, and this yoke is fashioned with a pair of opposed integral arms 10, 10. The spaced ends of these arms terminate in rounded heads 11, and it will be apparent that the yoke is designed to receive and support an article which may be deposited therein. The arms may be of resilient material and the article may be forced within the resilient arms of the yoke. and in this manner a bouquet of flowers for instance may be supported in the yoke. Other articles may be supported in the yoke if desired.

The yoke is adjustable and may be swung around in a vertical plane in its bearing sleeve 12 with which it has a frictional engagement sufficient to hold the yoke in adjusted position.

The bearing sleeve is an integral part of a perforated lug 13 which is pivoted by means of a rivet 14 at the outer end of the link 6.

In Figure 1 the device is folded to compact position with the ring, link, and yoke centered with relation to the suction cup, while in Figure 2 the device is shown with its parts extended. It will be apparent that the yoke may be turned up to horizontal position in Figure 2 and that the link may also be turned on its hinge to horizontal position in this figure of the drawing. The yoke may be turned on its pivot 14 out of axial alinement with the link, and the link

6 may be turned with the split ring either to right or left in Figure 2 to a selected angle from the perpendicular. All of these movements may be utilized in adapting the holder or support for various purposes, and when the parts are adjusted they are so held by the frictional engagement of the jointed parts.

Having thus fully described my invention, what I claim and desire to secure by Letters Patent is—

1. The combination with a suction cup having a head and annular bearing groove, of a resilient ring swiveled in the groove, a foldable link hinged to the ring, and an adjustable supporting yoke pivotally connected with said link.

2. The combination with a suction cup having a head and an annular bearing

groove, of a resilient ring swiveled in and frictionally engaging the walls of said groove, a foldable link hinged to the ring, a bearing sleeve having a pivotal connection with said link, and an adjustable supporting yoke frictionally engaged in said sleeve.

3. The combination with a suction cup having a head and an annular bearing groove, of a split resilient ring frictionally engaging and swiveled in said groove, an offset hinge-lug on said ring, a link having an offset lug pivoted in the hinge-lug, a lug hinged at the outer end of the link and provided with a bearing sleeve, and a yoke frictionally engaging and adjustable in said sleeve.

In testimony whereof I affix my signature.
FRANK M. PHELPS.