March 6, 1945. A. TAURMAN ET AL 2,370,822

CONTAINER HOLDER

Filed Nov. 1, 1943 3 Sheets-Sheet 1

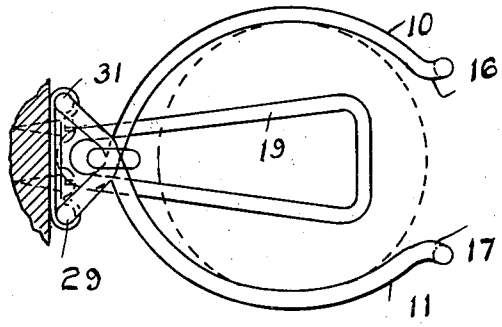


Fig 1

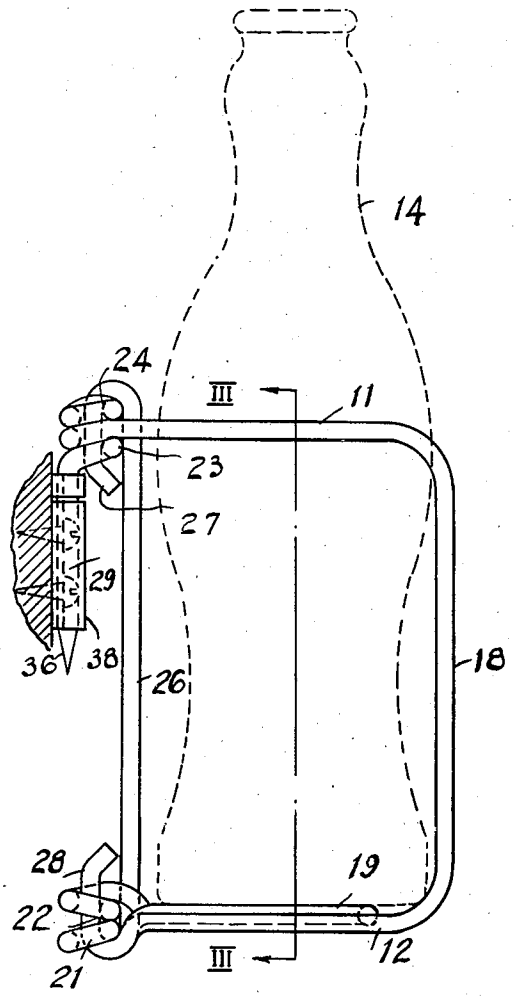


Fig 2

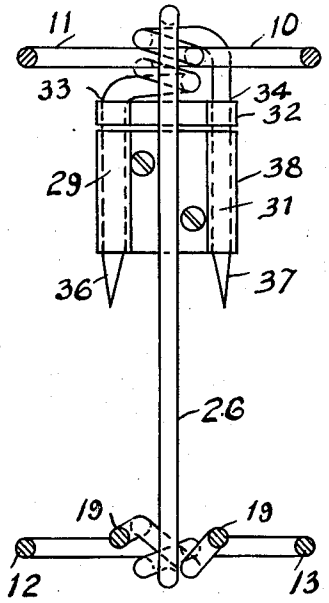


Fig 3

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CONTAINER HOLDER

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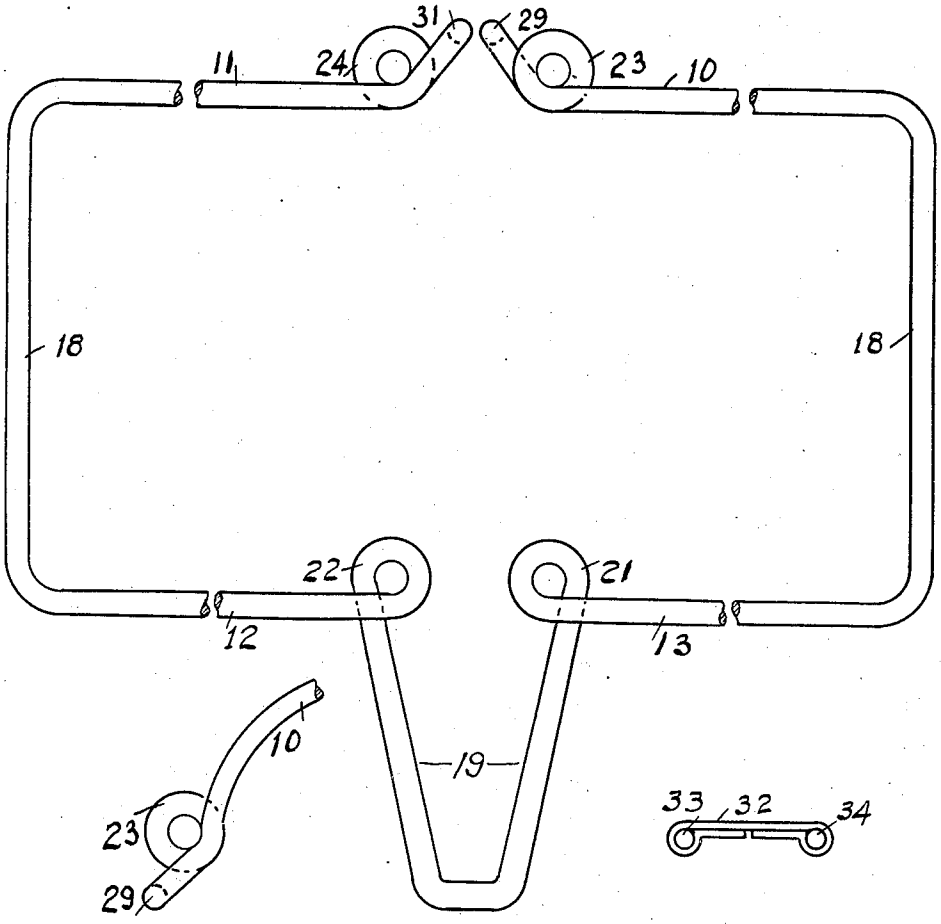


Fig 4

Fig 5

Fig 6

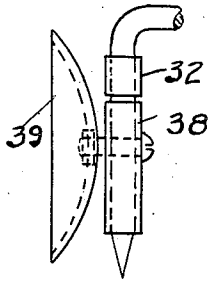


Fig 7

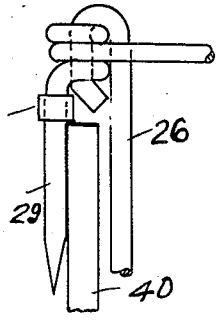


Fig 8

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CONTAINER HOLDER

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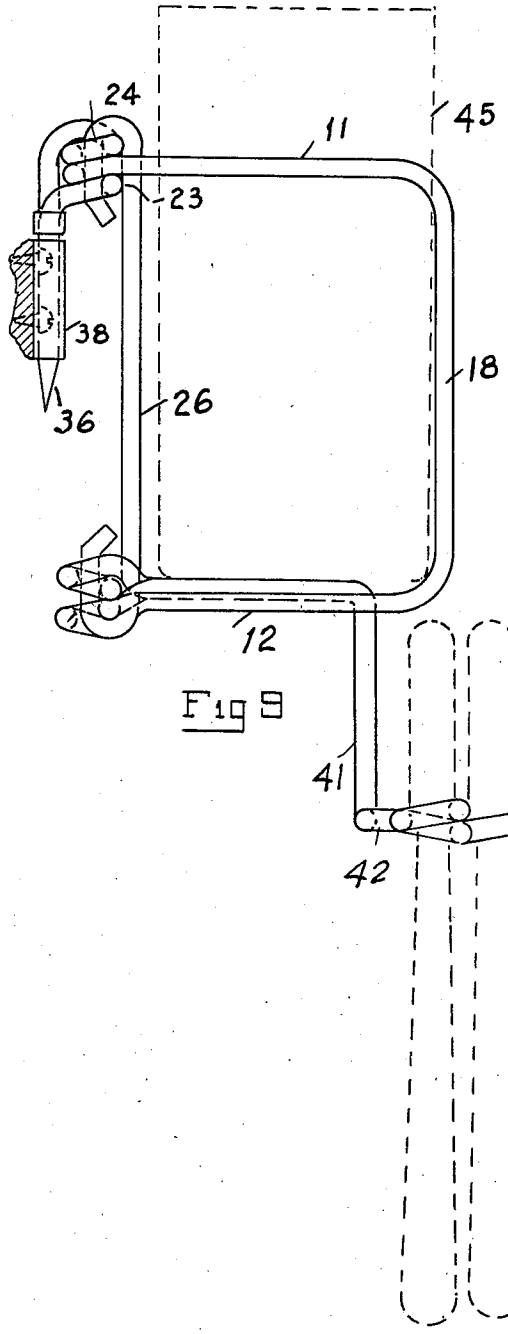


Fig 9

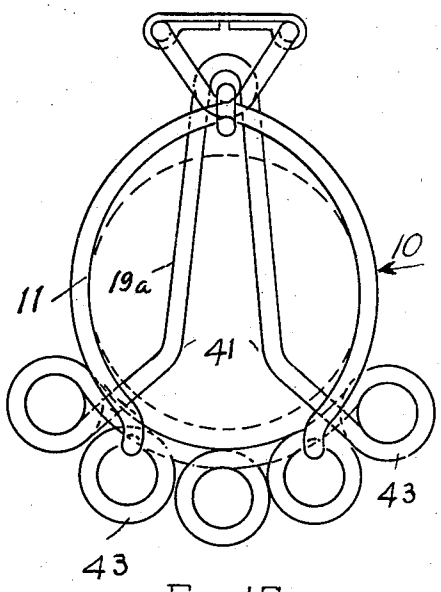


Fig 10

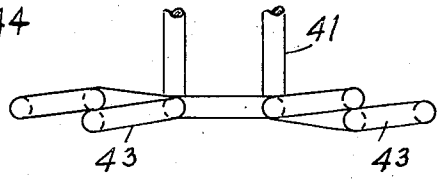


Fig 11

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UNITED STATES PATENT OFFICE

2,370,822

CONTAINER HOLDER

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Application November 1, 1943, Serial No. 508,654

11 Claims. (Cl. 211—75)

This invention relates to container holders and particularly to a holder adapted to receive and retain bottles, beverage glasses, display containers and the like, and has for an object the provision of a device of the character designated which shall be simple of design and easy to manufacture and which shall have a wide field of use.

A still further object of our invention is to provide a container holder made from spring wire and comprising integral resilient side clasps, a supporting base for the container, and supporting means for the holder.

Another object of our invention is to provide a container holder embodying side clasps, a container support, torsion springs for holding the clasps in firm engagement with the container, and supporting means for the holder all formed from a single piece of spring wire.

More specific objects of our invention are: to provide a container holder which shall be adapted to receive a container by a horizontal movement into position and to hold it firmly; which may be readily removed for cleaning and replaced; and which is adapted for nesting in shipping.

A device embodying features of our invention is illustrated in the accompanying drawings, forming a part of this application, in which

Fig. 1 is a top plan view;

Fig. 2 is a side elevation showing the device attached to a support;

Fig. 3 is a sectional view taken along the line III—III of Fig. 2;

Fig. 4 is a view showing an intermediate step in the construction of the device;

Fig. 5 is a fragmental view showing a torsional spring embodied in the device and one of the supporting means;

Fig. 6 is a view of the means for holding the ends of the wire in fixed relative positions and for governing the action of container clasps;

Fig. 7 shows a modified form of a wall bracket;

Fig. 8 is a fragmentary view showing anchor pins hooked over a supporting panel;

Figs. 9 and 10 are a side elevation and plan view respectively showing a modified form of our invention, and

Fig. 11 is a fragmentary front view of the supporting base shown in Figs. 9 and 10.

Referring to the drawings for a better understanding of our invention, the principal parts of our improved holder are formed from a single piece of spring wire which is bent to form side clasps comprising upper horizontal clasp members 10 and 11 and lower horizontal clasp members 12 and 13 which are adapted to receive and engage a container such as the bottle 14 shown in dotted lines in Fig. 2 by a horizontal movement into position.

At the front, the clasps are bent outwardly as shown at 16 and 17 to facilitate the insertion of the container which can be done by merely pushing it inwardly of the holder. The upper and lower clasp members, on both sides, are joined by a vertical member 18. The wire forming the container is further bent to provide a supporting base 19 for the container on which it rests as shown in Fig. 2. Our improved holder is thus particularly adapted for display stands in stores wherever it is desired to group and display a number of articles for sale and replacement as sold.

Included in our improved holder are coils 21 and 22 at the lower end and coils 23 and 24 at the upper end where the sides of the clasps terminate at the rear, which coils form torsional springs for holding the clasps in tight engagement with a container. The upper and lower coils just described are joined together by means of a tie wire 26 which is passed through all the coils and is bent over as shown at 27 and 28 so as to hold the coils in fixed relative positions with respect to each other. The ends of the wire forming the principal parts of the holder are turned downwardly as shown at 29 and 31 to form supporting anchors for the holder. A link 32 having holes 33 and 34 therein through which the ends 29 and 31 pass serves to hold the ends of the wire in fixed position with respect to each other. The ends of the wire are sharpened as shown at 36 and 37 so that they may be inserted in a supporting means such as the bracket 38 shown in Figs. 1, 3 and 7. Also the ends of the wire may be hooked over a panel 40 as shown in Fig. 8 or the sharp ends may be inserted in a soft surface such as the upholstery of an automobile. Also, the bracket 38, as shown in Fig. 7, may be mounted on a rubber vacuum cup 39 so that it may be attached to any smooth surface.

Referring to Fig. 4, the manner of forming our improved holder will be explained. The spring wire forming the holder is preferably first bent to form the loop 19 for the supporting base for the container. The coils 21 and 22 are then formed and the wire turned outwardly to form the lower clasp members 12 and 13. The vertical members 18 are then turned at right angles to the clasp members 12 and 13 and the lower horizontal clasp members 10 and 11 turned inwardly at right angles to the front vertical sides 18. The coils 23 and 24 are then turned at right angles to the plane of the view in Fig. 4 and the tie wire

26 inserted through the coils and bent over as shown at Fig. 3. The horizontal side clasp members are then shaped and the anchors 29 and 31 turned downwards. It will be understood of course that the sequence of the operations just described is for the purpose of illustration only, the better to understand the construction of our holder, as the actual manufacture of the device is accomplished by wire bending machines, not shown. When the device is assembled as described, the supporting base 19 at the bottom joins the coils 21 and 22 and acts as a relatively rigid abutment for the springs formed by said coils. The link 32 which joins the ends 29 and 31 together acts as a relatively yielding abutment for the springs formed by the coils 23 and 24 permitting a limited forward and rearward movement of the coils with respect to the link. This feature causes the upper clasp members 10 and 11 to yield more readily than do the lower clasp members 12 and 13. When assembled therefore, our improved holder provides a firm, steady grasp on any object placed in it.

The two anchors 29 and 31, when inserted in the bracket 38, secure the holder firmly in place and rigidly against lateral displacement. The fact that the upper clasp members 10 and 11 yield more readily than do the lower makes the insertion and removal of a container easier and adapts the holders for easier nesting in shipping. At the same time a container, when inserted, is held firmly in the holder against accidental displacements.

Referring now to Figs. 9 to 11 inclusive we show a modification of our invention particularly adapted as a glass and tooth brush holder. In accordance with this modification, the clasps, spring coils and anchors are formed in the same manner as previously described and the description thereof need not be repeated. In forming the holder, however, the supporting base 19*a* is turned downwardly at 41 and then outwardly at right angles as shown at 42 and a plurality of loops 43 are formed in the wire which are adapted to support tooth brushes 44 as indicated in dotted lines in Fig. 9. The supporting base is otherwise formed as previously described. As shown in Figs. 9 and 11 the tooth brushes 44 are held clear of a glass 45 indicated in dotted lines in the holder and cannot come in contact with each other. The mounting of the holder in the wall bracket 38 renders it readily removable for cleaning, while the spring wire construction provides few places for the accumulation of dirt.

Besides the uses heretofore mentioned, our container is adapted for use in holding milk bottles at entrances to apartments and homes so that they will be out of the way of prowling animals; for holding oil containers around filling stations; for fire extinguishers; display means in stores; and many other uses which will readily suggest themselves to the public.

While we have shown our invention in but two forms, it will be obvious to those skilled in the art that it is not so limited, but is susceptible of various other changes and modifications, without departing from the spirit thereof, and we desire, therefore, that only such limitations shall be placed thereupon as are specifically set forth in the appended claims.

What we claim is:

1. A container holder formed from spring wire bent to comprise upper and lower resilient clasp members on opposite sides joined together in front by vertical members, and a supporting base for the container joining the lower horizontal clasp members, said wire having both ends turned downwardly from the rear of the upper horizontal clasp members to form supporting means for the holder, means to secure the ends of the wire, and a separate tie rod connecting the horizontal clasp members at the rear.

2. A container holder formed from spring wire bent to comprise upper and lower resilient clasp members on opposite sides joined together in front by vertical members, and a supporting base for the container joining the lower horizontal clasp members, a coil formed at the rear of each of the horizontal clasp members, the several coils thus formed being superposed, a tie bar extending through the coils to hold them in superposed relation, and supporting means for the holder formed by turning the ends of the wire downwardly.

3. A container holder formed from spring wire bent to form clasps comprising upper and lower resilient clasp members on opposite sides joined together in front by vertical members and a supporting base for the container joining the horizontal clasp members, a coil formed at the rear of each of the horizontal clasp members, a tie bar extending through the several coils to hold them in superposed relation, supporting means for the holder formed by turning the ends of the wire downwardly, the ends of the wire being adapted to hook over a panel to support the holder.

4. A container holder comprising a single piece of spring wire bent to form upper and lower horizontal clasp members on opposite sides adapted to receive and grasp a container, said clasp members being flared at the front to receive the container, a vertical member formed by the wire on both sides to join the upper and lower clasp members, a supporting base for the container formed from the spring wire and extending forwardly from the rear of the lower clasp members and connecting said clasp members at the rear, a coil in the wire at the rear of each of the clasp members providing a torsional spring to bias the clasps toward each other, the several coils being superposed, the ends of the wire being turned downwardly at the rear from the upper coils to form a supporting means for the holder, and means to hold the ends in fixed relative positions.

5. A container holder as described in claim 4 in which the supporting base provides means for holding tooth brushes.

6. A container holder as set forth in claim 4 in which the supporting base for the container is turned downwardly and outwardly and has formed a plurality of coils therein for supporting tooth brushes clear of the holder.

7. A container holder formed from a spring wire bent to provide lateral clasps adapted to engage the container on opposite sides and a supporting base for the container joining the clasps, said wire having both ends turned downwardly from the rear at the upper ends of the clasps to form supporting anchors for the holder, and means to secure said supporting anchors relative to each other.

8. A container holder formed from a spring wire bent to provide lateral clasps adapted to engage the container on opposite sides and a supporting base for the container joining the clasps, supporting anchors for the holder formed by turning the ends of the wire downwardly at the upper rear of the clasps, and means to retain said ends in spaced apart side by side relation.

9. A container holder formed from a spring wire bent to provide lateral clasps adapted to engage the container on opposite sides and a supporting base for the container joining the clasps, a coil formed in the wire on each side at the rear of the supporting base, a coil formed in the wire at the rear of each of the clasps, a separate tie wire extending through all the coils to hold them in superposed relation, and supporting anchors for the holder formed by turning the ends of the wire downwardly at the upper rear of the clasps.

10. A container holder formed from a spring wire bent to provide lateral clasps adapted to engage the container on opposite sides and a supporting base for the container joining the clasps, a coil formed in the wire on each side at the rear of the supporting base, a coil formed in the wire at the rear of each of the clasps, a separate tie wire extending through all the coils to hold them in superposed relation, supporting anchors for the holder formed by turning the ends of the wire downwardly at the upper rear of the clasps, and means to secure said supporting anchors in side by side relation.

11. A container holder formed from spring wire bent to provide resilient clasps adapted to engage the container on opposite sides, a supporting base for the container joining the clasps, a coil at the rear of each of the clasps, and supporting means for the holder formed by turning the ends of the wire downwardly, the ends of the wire being pointed to adapt them to be inserted in a supporting surface, means to secure the ends of the wire against relative movement, and a tie bar extending through the coils to hold them in superposed relation.

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