April 22, 1958 K. H. MacKAY 2,831,647

CUP HOLDER

Filed July 31, 1953 2 Sheets-Sheet 1

Fig. 1.

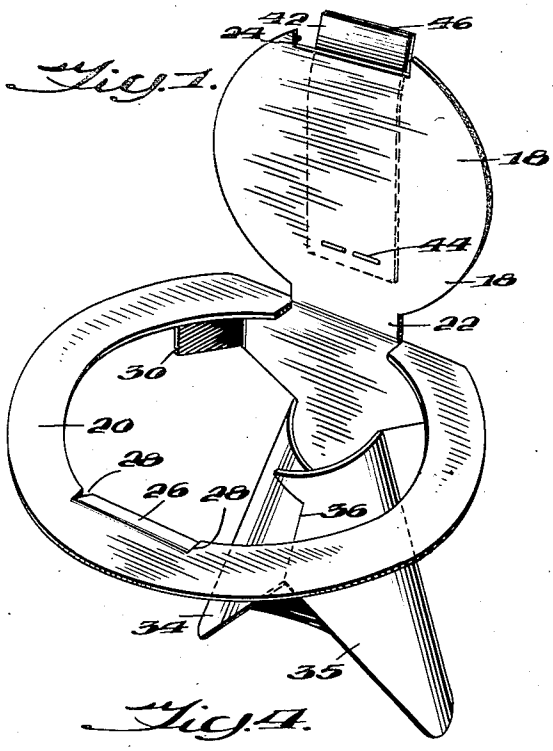


Fig. 2.

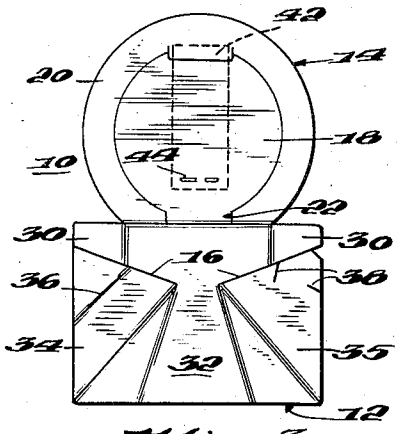


Fig. 3.

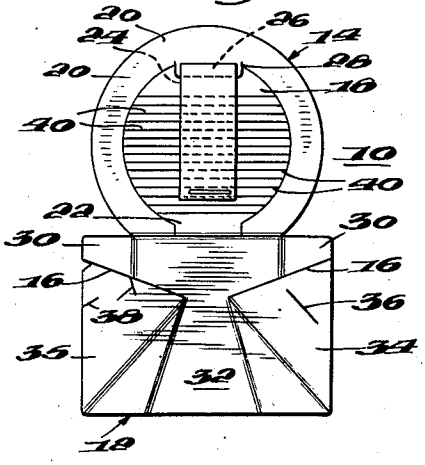


Fig. 4.

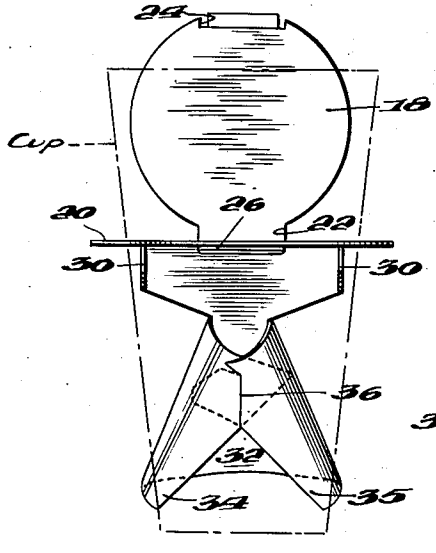
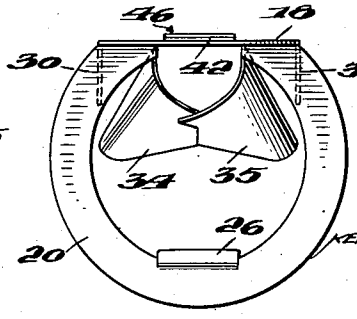


Fig. 5.



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April 22, 1958 K. H. MacKAY 2,831,647

CUP HOLDER

Filed July 31, 1953 2 Sheets-Sheet 2

Fig. 6

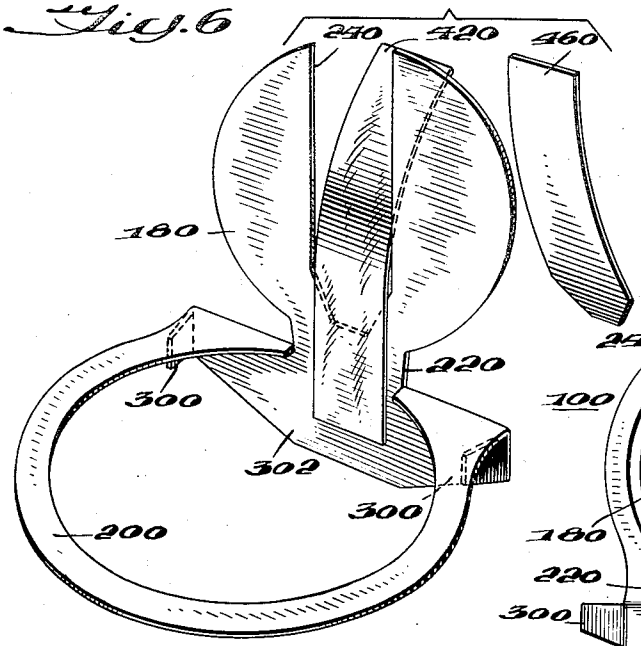


Fig. 9.

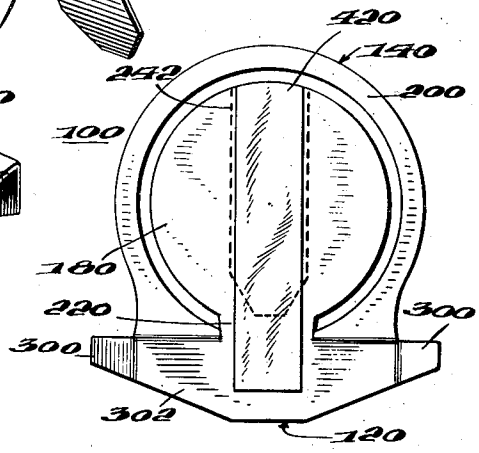


Fig. 7.

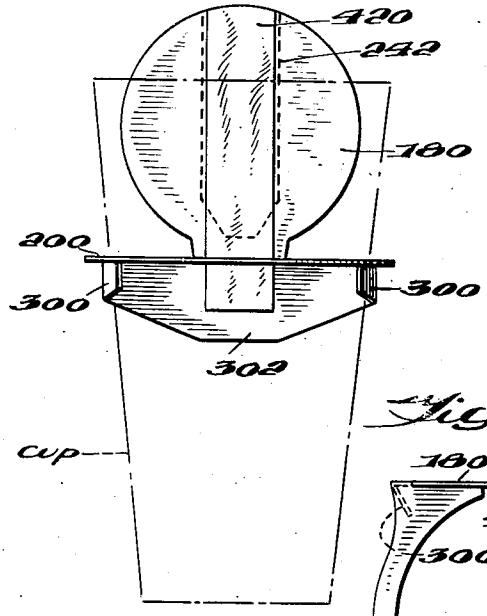


Fig. 10.

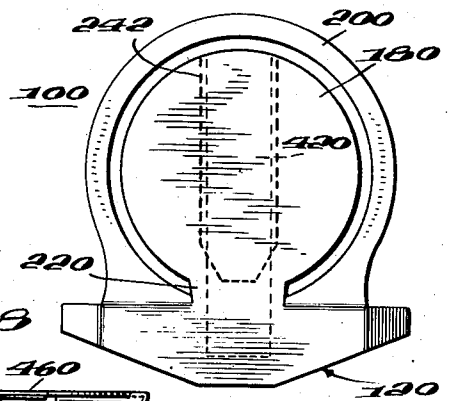
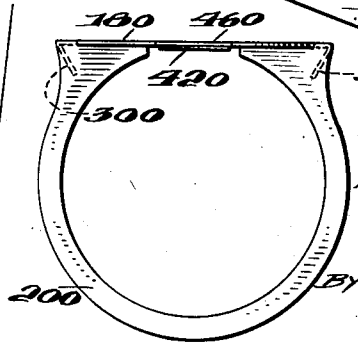


Fig. 8



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United States Patent Office 2,831,647 Patented Apr. 22, 1958

2,831,647

CUP HOLDER

Kenneth H. MacKay, Ocala, Fla.

Application July 31, 1953, Serial No. 371,565

3 Claims. (Cl. 248—205)

The present invention relates to a cup holder and, more particularly, to one of simple, inexpensive construction adapted to be hung for supporting a paper cup.

There are numerous instances where it is desirable to provide a support for a paper cup containing a beverage dispensed from a machine, or obtained from a store or sales stand, for consumption of the beverage in an automobile. Where a sandwich or other food is to be eaten at the same time, it is desirable to provide a safe support in which the beverage cup can be retained and removed at will.

The general object of this invention is to meet the problem by providing an economical form of cup holder of paperboard, sheet aluminum, or equivalent flexible, bendable material having the requisite stiffness, that may be detachably secured to the inside of the door, the dash, or other convenient part of an automobile for securely supporting a paper cup of the type commonly provided for soft drinks and other beverages.

A more specific object is to provide a cup holder or support of the kind indicated that can be cut out as a simple blank and assembled readily without tools and with a minimum of skill and effort.

An additional object is achieved in the provision of a unitary cup holder having an annular rim adapted to receive a cup, supports for the inner underside of the rim, and an upstanding mounting or hanging piece at the supported part of the rim.

It is a further specific object to provide a unitary cup holder of paper-like construction comprising, an annular rim portion, supporting members for the rim portion, a shaped cup engaging portion below the supporting members, and a hanging piece above the annular rim portion.

It is also a specific object to provide a modified unitary cup holder of paperboard or the like having an annular rim adapted to receive a cup, support portions for the inner underside of the rim, an upstanding tab piece adjacent the supported part of the rim, an adhesive-bearing mounting or hanging strip on the front face of the tab, and a tear piece in the tab for exposing the adhesive surface of the mounting strip.

Another object is to provide as articles of manufacture and sale novel blanks formed and cut to produce when assembled the cup holders set forth in the preceding objects.

These and other objects contributing to utility, simplicity, and economy of construction in a cup support will be more fully understood from the accompanying description of a preferred embodiment, taken with the accompanying drawings, in which:

Fig. 1 is a front perspective view of an assembled cup holder positioned for use;

Fig. 2 is a top plan view of a cup holder blank prior to assembly;

Fig. 3 is a bottom plan view of the blank of Fig. 2;

Fig. 4 is a front elevation of an assembled cup holder;

Fig. 5 is a top plan view of the cup holder of Fig. 4;

Fig. 6 is a front perspective view of the modified cup holder assembled and positioned for use;

Fig. 7 is a front view of the cup holder of Fig. 6;

Fig. 8 is a top plan view thereof;

Fig. 9 is a front elevation view of the blank for the cup holder of Fig. 6; and

Fig. 10 is a rear elevation view of the blank shown in Fig. 9.

As shown in Figs. 2 and 3, a cup holder blank **10**, preferably of paper board that has been stamped out or cut from a sheet is formed in outline and slit for assembly. The blank **10** comprises a rectangular body portion **12** and a truncated disc portion **14** resting on and having a diameter slightly less than the bottom.

The rectangular portion **12** is provided with inwardly and downwardly converging slits **16**, **16** extending from its upper side edge portions to spaced points in its central part.

A circular, partially cut out piece **18** of the disc portion **14** provides an annular rim portion **20** and a smaller, inner disc hingedly connected by a wide tongue or neck portion **22** to the top of the bottom portion **12**. In this cutting out a broad rectangular notch **24** (Fig. 3) is left in the top of piece **18**, leaving a wide, short tab **26** projecting inwardly of the opening of rim **20**. The effective length of the tab **26** is increased by a pair of slits **28**, **28** forming a continuation of notch **24**.

Upfolding of the lateral parts of the rectangular bottom **12** above the slits **16** along vertical lines running from points defining the truncating chord of disc **14** will provide shoulder support or arm portions **30**, **30** for the annular rim **20** when the latter is downfolded to the position of Fig. 4.

Such folding leaves a lower part of the rectangular bottom **12** that comprises a central panel **32** and adjacent outer wings **34**, **35**. Wing **34** is formed with a central downward and outwardly diverging slit or slot **36**, and wing **35** is formed with a pair of short slits **38**, **38** extending upwardly in converging relation from slit **16** and the lateral edge of said wing. The slits **38**, **38** are arranged and dimensioned for inter-locking engagement with slit **36** upon folding and overlapping of wings **34** and **35** as shown in Fig. 4. Such folding and interlocking produces a forwardly projecting conical portion beneath the rearward part of the annular rim **20**.

The cut out disc or tab **18** is used as the supporting means for the cup receiving rim **20** and the rest of the holder. Although thumbtacks or the like could be used for securing the disc **18** to a supporting member, for automobile and most contemplated uses of the cupholder it is practically necessary to use a non-marring, pressure sensitive adhesive. Greater flexibility for conformity to the shape of a dash or window sill of a car is provided by a plurality of transverse lines of scoring **40** on the back or rear surface of disc **18**. A preferred way of applying pressure sensitive adhesive is to mount an adhesive strip **42** vertically on the back of disc **18** by means of staples **44** at the inner or lower end thereof as shown in Fig. 1. A masking strip **46** may be applied over the adhesive face of strip **42** for ready detachment.

The manner of using the cup holder attachment of this invention will be apparent from Fig. 1. With the masking strip **46** removed the attachment will be supported from an automobile dash or similar surface by adhesive attachment of the strip **42**. The supporting shoulders **30** will maintain the rim **20** in a generally horizontal position when a cup of beverage is extending downwardly through the rim opening. The conical formation of panel **32** and wings **34** and **35** will add stability where the flat back thereof engages a fixed support. The front or forward part of the same conical portion will act in

cooperation with the tab 26 of the supporting rim 20 in self-adjustment of the attachment to use with cups of various sizes and in providing a mild frictional engagement of opposite sides of a cup for firmer retention.

The front face of the supporting disc 18 may be used for menus or advertising.

The modified cup holder illustrated in Figs. 6 to 10 represents a simplification of the previously described embodiment of this invention and provides a somewhat different mounting or hanging means which contributes materially to economy of manufacture.

One of the principal differences of the modification to be described in detail is the complete elimination of the forwardly projecting conical portion beneath the blank portion providing the supporting shoulders for the cup receiving annular rim.

In the drawings, Figs. 9 and 10 show a cup holder blank 100 of flexible, bendable sheet material such as paper-board, aluminum or the like. This blank 100 comprises an elongated bottom part 120 above which is a circular disc 140 broadened at the junction of the two parts. The disc 140 includes a circular cut out disc or tab 180 encircled in preferably spaced relation by an annular rim 200. The circular tab 180 is connected centrally to the upper part of the bottom portion 120 by a tongue or neck 220 to provide for its separate hinging.

When hung or in use the circular tab or hanging strip 180 is provided with a central notch 240 as shown in Fig. 6. This broad, deep notch which extends inwardly from a position opposite the hinged connection of the hanging tab 120 is produced by a tear line 242 of perforations, indentations, or the like terminating at the bottom above the hinged connection of the connecting neck 220 in a pointed or tapered portion. In completing the cup holder blank 100 as an article of manufacture and sale, an adhesive strip in the form of a narrow elongated rectangle 420 is applied to the exposed face of the circular tab 180, the connecting neck 220, and the upper adjacent portion of the elongated bottom portion 120 as shown best in Fig. 9. It will be noted that the long parallel parts of the tear line 242 are spaced outwardly of the lateral edges of the adhesive strip 420 and extend in parallel relation. The strip 420 has its adhesive surface engaging and secured to the contacted face of the portions of the blank 100. The adhesive used may be of the well-known pressure sensitive type.

To expose adhesive surface of the hanging or mounting strip 420 for attachment of the cup holder to the side door frame or dashboard of an automobile for example, it is necessary only to disengage the lower tapered end of the tear line 242 and strip it upwardly to separate a masking tear strip 460, which has been thus removed in Fig. 6 prior to hanging of the cup holder. The lower portion of the adhesive strip 420 beneath the notch 240 provides an adequate anchor, which may be supplemented by other anchoring means such as the staples 44 of Fig. 1 if greater strength is required.

It will now be fully understood that the sheet material of the cup holder blank itself, and particularly the circular cut out tab 180 provides the essential masking means for the adhesive strip by which the cup holder is secured in position for use.

The elongated bottom portion 120 of the blank functions as before in that a shoulder support portion 300 at each side end thereof is infolded toward a central part 302 to provide positive support for the underside of the annular cup receiving rim 200 when the latter has been folded down to the horizontal position of use shown in Figs. 7 and 8. Fig. 7 also indicates the manner in which a cup shown in broken lines is received and supported by the cup holder.

The simplicity and economical construction of these cup holder attachments satisfy the need for an expendible article for this purpose.

Since the invention herein disclosed may be varied in numerous ways without departing from the principles set forth, the scope thereof is to be limited only by the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. A cup holder blank of paperboard or the like comprising a rectangular bottom, a truncated disc above the rectangular bottom, a circular cutout in the truncated disc providing an annular rim having the diameter of the cutout, said annular rim being bendable about the adjacent side of the rectangular bottom, and a pair of inwardly and downwardly converging slits extending from the upper side edge of the rectangular bottom to spaced points in its central part, whereby to provide a pair of upper infolding shoulder supports for the annular rim, and a pair of lower overfoldable wings for forming a hollow conical portion.

2. A unitary cup holder formed of paperboard or the like and comprising a mounting disc; an annular rim portion having a hinge connection with the edge of the disc and having a circular opening of the diameter of the disc; and a rectangular bottom portion having an edge through which the mounting disc and the rim portion are hingedly connected, a central panel below the rim portion, and wing portions at opposite sides of the central panel folded over and secured at their adjacent edge portions to form a conical portion beneath the opening of the annular rim portion.

3. The combination of claim 2 including a mounting strip secured by one end only to the mounting disc adjacent the hingedly connected part and having an adhesive surface arranged in opposition to the rim portion side of said disc.

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