Dec. 15, 1925. 1,565,306

S. BERGMAN ET AL

HOLDER FOR INDIVIDUAL DRINKING CUPS

Filed Jan. 18, 1921

Fig. 1.

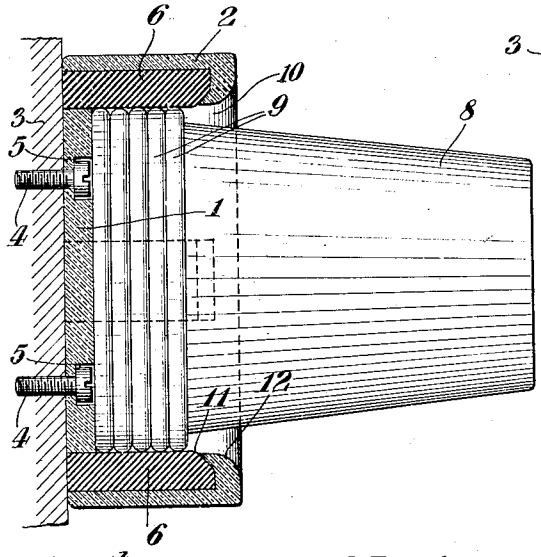


Fig. 2.

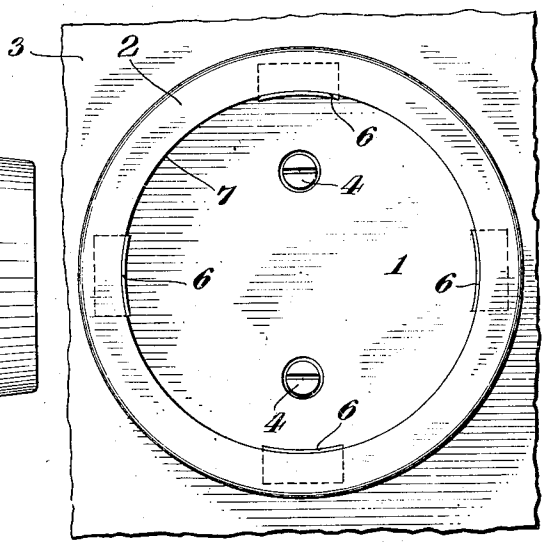


Fig. 4.

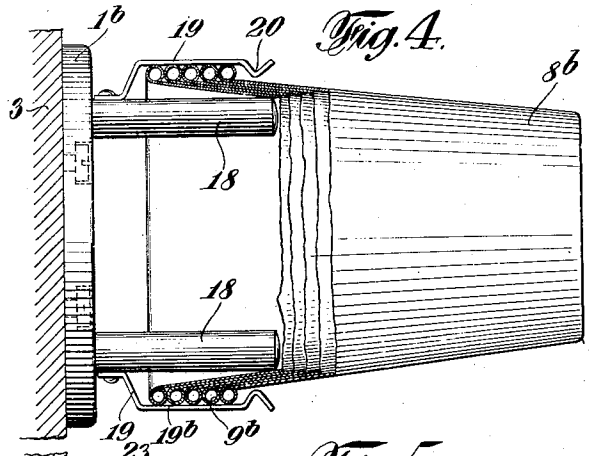


Fig. 3.

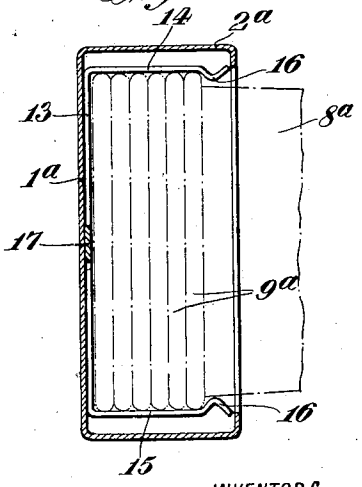
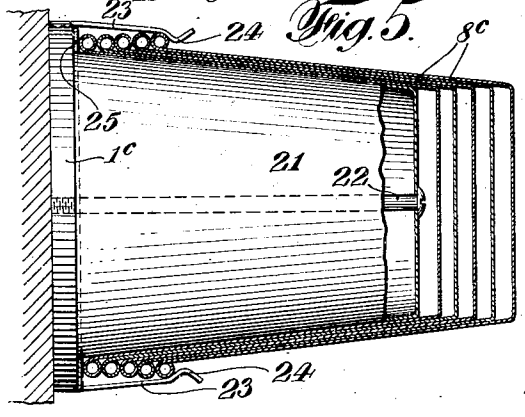


Fig. 5.



INVENTORS

Simon Bergman and

James H. Reisenyder

BY

A. Mortimer Ward Jr.

ATTORNEY

Patented Dec. 15, 1925. 1,565,306

UNITED STATES PATENT OFFICE.

SIMON BERGMAN, OF NEW YORK, N. Y., AND JAMES D. REIFSNYDER, OF WEEHAWKEN, NEW JERSEY, ASSIGNORS, BY MESNE ASSIGNMENTS, TO TULIP CUP CORPORATION, OF NEW YORK, N. Y., A CORPORATION OF DELAWARE.

HOLDER FOR INDIVIDUAL DRINKING CUPS.

Application filed January 18, 1921. Serial No. 438,104.

To all whom it may concern:

Be it known that we, SIMON BERGMAN and JAMES D. REIFSNYDER, both citizens of the United States, and residents, respectively, of New York, county and State of New York, and Weehawken, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Holders for Individual Drinking Cups, of which the following is a specification.

The invention relates to holders for individual drinking cups and more particularly to devices of this character adapted to retain a series of nested paper cups and to permit the withdrawal of the same one at a time.

The principal objects of the invention are to provide a device of the general character referred to which will be simple, durable and efficient, and inexpensive to manufacture and install; and to produce a cup holding and dispensing device which is particularly adapted to be used in the guest rooms of hotels or the like, so arranged as to present a few sanitary drinking cups for the use of a temporary occupant of the room.

In the preferred embodiment of the device a cup holder is mounted in a generally horizontal position against a wall with a portion of the outermost cup of a nested series extending outwardly therefrom in position conveniently to be grasped and withdrawn by the occupant of the room. With such an arrangement the nested series of cups, or at least the rim ends of some of the cups must be inserted into the holder through the same opening from which they are withdrawn one at a time.

In the use of the invention in a guest room of a hotel a set of eight or nine cups for example would be inserted by an attendant every morning into the holder, the supply to be renewed every day or at suitable intervals.

It will be noted that the arrangement of the device referred to, which extends out from a wall or similar surface entails various features, namely, that the nested cups must be inserted through the same opening by which they are separately withdrawn, that they must be retained in position to be readily withdrawn, singly, by the user, that the holder should be such that the innermost cup shall project sufficiently out therefrom to be grasped and pulled out, and that suitable retaining means must be employed such that as each cup is withdrawn for use the remaining cups of the series will be retained in proper position in the holder.

The invention consists in the novel features of arrangement and construction of parts hereinafter described in accordance with the preferred form thereof and certain modifications, and the invention will be more particularly pointed out in the appended claims.

Further objects and advantages of the invention will more fully appear from the following description taken in connection with the accompanying drawings illustrating by way of example, certain embodiments of the invention.

In the drawings Fig. 1 represents a vertical section through the preferred form of device embodying the invention, a nested series of cups being shown as contained therein. Fig. 2 is a front elevation of the device shown in Fig. 1 with the set of cups removed therefrom. Fig. 3 is a vertical section taken through another form of device embodying the invention. Fig. 4 is a side elevation of another form of device embodying the invention, the nested cups held thereby being partly shown in cross section, and Fig. 5 is a vertical section taken through another modified form of the invention.

Referring to the drawings, we have illustrated in Figs. 1 and 2 a form of holder embodying a base member 1 from which extends at right angles thereto a cylindrical flange 2. The base member and the flange may be and preferably are formed integral and may be formed of any desired material such as metal or porcelain for example. The base member 1 may be secured to a supporting surface such as the vertical wall 3 in any desired manner. As illustrated the base member 1 is secured to the wall by means of screws 4, the heads of which may be contained within suitable recesses 5 in the base member when the screws have been tightened, or the device may be simply cemented to the wall.

Frictional retaining means are mounted within the cylindrical flange 2 in position to frictionally engage and retain the nested cups. The retaining means may comprise a series of strips 6 of resilient "feed" rub-

ber or the like which are secured in position in suitable pockets or grooves within the holder as is illustrated in Figs. 1 and 2. As is there shown the inner surfaces of the strips 6 are spaced inwardly of flange 2 in radial directions slight distances from the inner cylinderical surface 7 of flange 2. The strips 6 preferably extend lengthwise of flange 2 for a distance which may be equal to the length of the flange, the strips 6 being positioned at a suitable number of points around the inner surface of the flange 2, preferably at four equidistant points as shown in Fig. 2.

A series of nested cups 8 is illustrated as held within the holder in Fig. 1. These cups may be the usual tapered paper cups which are adapted to be inserted one within another. The form of cup illustrated is provided with a beaded rim 9 at its open end. A set comprising a suitable number of cups, eight cups for example, is made up and the rim ends of the cups, or of most of them, are pushed through the delivery opening 10 of the holder into the position shown in Fig. 1.

When so positioned the rim portions 9 of the nested cups will be closely adjacent to each other and will all, or most of them, be contained within the holder, the retaining strips 6 frictionally engaging the peripheral surfaces of the beads 9 and the beaded rim of the innermost cup, indicated at 9, being pressed against the base member 1. It will be noted that in this form of the invention the base member 1 serves as an abutment against which the open end of the innermost cup engages to aid in properly alining the cups in horizontal position and to aid in preventing the entrance of dust into the interior of the nested cups.

The diameter of the circle touching the inner surfaces of the strip 6 is slightly less than the normal outer diameter of the beaded rims 9 of the cups 8. Accordingly when the nested cups are pushed into position within the holder the strips 6 or the beaded rims 9 or both must yield somewhat. In actual practice with the usual paper cups both the strips 6 and the beaded rims 9 will yield sufficiently to permit the rims 9 to move into position. Preferably the outer ends of the strips 6 are bevelled or rounded slightly as is shown at 11, the outer edge of flange 2 at the delivery opening 10 also preferably being rounded or bevelled as shown at 12 to aid in the insertion of the cups.

When the cups are so positioned in the embodiment of the invention shown in Figs. 1 and 2, all of the beaded rims 9 of the series of cups within the holder will be frictionally engaged by the resilient retaining means 6. The greater part of the body portion of the outermost cup 8 extends horizontally beyond the delivery opening of the holder so that it may conveniently be grasped by the hand and withdrawn by a simply horizontal pull. The frictional contact of strips 6 with the beaded rims 9 of the remaining cups will be sufficient to retain the same in position when the outermost cup is withdrawn, so that each cup may be withdrawn in turn as occasion arises.

It will be noted that the retaining means should engage the rim portions thereof to retain the cups in proper position regardless of the unsupported weight of the body portions of the cups which extend outwardly from the delivery opening of the holder.

In the form of device illustrated in Fig. 3 the base portion 1^a of the holder has an integral cylindrical flange 2^a extending outwardly therefrom, the base 1^a being adapted to be secured to a vertical surface. The retaining means for the cups in this form of the invention take the form of one or more spring members. As shown in the drawing a spring member is used having a vertical portion 13 which is secured to the base member 1^a. The vertical strip 13 is bent at right angles outwardly at its upper and lower ends as shown at 14 and 15, flanges 14 and 15 preferably having their outer end portions bent slightly inwardly and then outwardly of the opening as is indicated at 16. A spring retaining member in all respects similar to member 13, 14, 15 may be used to extend at right angles thereto, the base portion of this member extending horizontally across the base portion 13 of the spring strip previously described as is indicated at 17. These strips may conveniently be made of a thin spring steel or other suitable resilient metal. A greater number of the strips than two may, of course, be used if desired, suitably spaced.

When the nested cups 8^a are pushed into position within the holder, in this form of the invention, the inwardly extending beads 16 of the spring strips will, of course, be pushed radially outwardly to permit the rim portions 9^a of the cups to pass the same, after which the beads 16 of the spring strips will move inwardly again into position. When the cups are so inserted the beaded rims 9^a of the same will be frictionally engaged by the inner surfaces of the spring strips such as 14 and 15 in the same manner that the rims 9 of the cups 8 are resiliently engaged by the strips 6 in the form of my invention as first described.

Another form of the invention is illustrated in Fig. 4 in which the base member 1^b is secured to the wall 3 in the same manner as previously described. In this form of invention a plurality of posts 18, 18 extend outwardly from the base member 1^b. As shown a pair of posts at diametrically opposite points may be employed or of

course a greater number of posts may be used. These posts are so positioned as to enter within the open ends of the nested cups 8^b when the same are pressed over the posts toward the base member 1^b.

Spring members 19, 19 are secured to posts 18 to extend outwardly from the base member on the outer sides of the posts radially of the opening. These members are preferably formed of resilient metal and preferably have their outer ends beaded or bent inwardly, that is, toward the posts 18 as is indicated at 20. When the nested cups 8^b are pushed over the posts 18 the inwardly bent portions 20 of the spring strips will be pressed outwardly until the beaded rim portions of the cups have passed by the same. The spring strips 19 are provided with portions which frictionally engage against the peripheral surfaces of some of the rim portions 9^b of the cups. Preferably the spring strips are provided with straight portions 19^b which press against the peripheral surfaces of all of the rims 9^b of the cups. Whether the spring strips thus engage the beaded rims of all of the cups of the series or not it is desirable that the spring strips should thus engage the rim portions of a plurality of the cups sufficiently spaced apart from each other so that the nested cups will be held in horizontal alignment. With this form of device the nested cups will be pushed inwardly into the delivery opening of the holder and toward the base 1^b, until the decreasing diameter of the cups prevents further entrance of the posts 18 within the same. In this form of the invention the cups will be effectively prevented from being tilted from the horizontal position.

Another form of device included within the invention is shown in Fig. 5 in which the base member 1^c has a hollow mandrel 21 secured to the same to extend outwardly at right angles thereto. This mandrel may take the form of the nested cups, may be formed of thin metal or other suitable material and may be secured to the base 1^c in any suitable manner as by means of the bolt indicated at 22. The nested cups 8^c are pushed into position over the mandrel 21 and will fit thereon sufficiently snugly to be held in proper alignment thereby. Spring strips 23 are secured to the base member 1^c to extend outwardly over the beaded rims 9^c of the cups. The strips 23 may be provided with curved portions 24 at their outer ends, these portions being curved inwardly in the radial direction so as to frictionally engage the beaded rim of the outermost cup. In this form of device it will not be necessary to provide engagement between spring strips 23 and any of the beaded rims 9^c of the cups except the rim of the outermost cup of the series. Since the alignment of the cups will be provided by their engagement with mandrel 21, the spring strips 23 being only provided to frictionally hold the outermost cup on the mandrel until it is withdrawn. With this construction an annular strip 25 of felt or the like may be secured against the outer face of the base member 1^c in a position to be engaged by the rim portion of the innermost cup of the series so as more effectively to prevent the entrance of dust within the nested cups in case no enclosing casing or circumferential flange is used.

While we have described the invention with particularity in connection with the various embodiments thereof illustrated herein, it will be obvious to those skilled in the art, after understanding the invention, that various changes and modifications may be made in the arrangement and construction of the parts without departing from the spirit and scope of the invention and we aim in the appended claims to cover all such changes and modifications.

It will be noted that "horizontal", in the specification and claims, is to be understood as indicating a generally horizontal direction.

Having thus described the invention, what we claim as new and desire to secure by Letters Patent, is—

1. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface, and fixedly secured retaining means projecting out therefrom and having a delivery opening facing out therefrom, said means comprising resilient rubber and being adapted and constructed to permit the insertion through said opening of the open ends of a plurality of nested cups and the withdrawal of the cups from said opening one at a time, and to frictionally support and retain the nested cups substantially fixedly in horizontal position at all times as they project out from the vertical surface, said retaining means being comparatively short, so that the greater portion of the length of the nested cups extends unsupported.

2. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface, and fixedly secured retaining means extending horizontally therefrom and having a delivery opening, said means being adapted and constructed to permit the insertion through said opening of the open ends of a plurality of nested cups and the withdrawal of the cups from said opening one at a time, and to frictionally engage a plurality of the cups of a nested series, adjacent the rims thereof, in such manner as to support the series firmly in horizontal position and to retain the remaining cups substantially unmoved in position as the cups are withdrawn one at a time, said retaining means being mounted

and constructed to exert resilient pressure upon the cups held therein, in a direction transverse to the axis of said cups.

3. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface, a cylindrical flange extending out therefrom and having a delivery opening at its outer end, and fixedly secured retaining means, yieldable transversely to the axis of said flange, mounted within said flange and extending lengthwise thereof and adapted to permit the insertion within said flange of the open ends of a number of nested cups, and to frictionally engage a plurality of rims of said cups inserted therein, in such manner as to support the series of cups in horizontal position, in axial alignment with the holder, as they project out therefrom.

4. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface, and fixedly secured retaining means extending horizontally therefrom, having a delivery opening at the outer end thereof and adapted to permit the insertion through said opening of the adjacent rim portions of a plurality of nested cups and the withdrawal of the cups through said opening one at a time, and to frictionally support and retain the nested cups in horizontal position, at all times, and to support the remaining cups substantially unmoved in position when one is being withdrawn, said retaining means being mounted and constructed to exert resilient pressure upon the cups held therein in a direction transverse to the axis of the cups.

5. In a holder for drinking cups, the combination of a casing comprising a base adapted to be secured to a vertical surface and a short cylindrical flange extending horizontally out therefrom and resilient retaining means within said flange, adapted to frictionally engage the rims of some of the cups of a nested series inserted therein in such manner as to maintain the series in axial alignment with said casing, said flange and means being adapted to permit the insertion through the open end thereof of the rim ends of the nested cups, and being of such length that a considerable portion of the innermost cup extends from the outer end thereof when the cup is in its innermost position in the holder.

6. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface and adapted to serve as an abutment against which the inner end of the innermost cup of a nested series may engage, and frictional retaining means comprising resilient rubber and extending at right angles from said base member for a distance less than the length of a single cup, said means being adapted to permit the insertion through the open end thereof of the rim ends of the nested cups, and being arranged to engage the rims of a plurality of the cups of the series in such manner as to maintain the series in axial alignment with said retaining means.

7. In a holder for drinking cups, the combination of a base member adapted to be secured to a vertical surface, and retaining means projecting out therefrom and having a delivery opening facing out therefrom, said means being adapted and constructed to permit the insertion through said opening of the open ends of a plurality of nested cups and the withdrawal of the cups from said opening one at a time, and to frictionally support and retain the nested cups as they project out from the vertical surface, in horizontal position, the length of that portion of the holder adapted to have the cups inserted therein being sufficiently less than the length of a single cup, such that the innermost cup will be held firmly in position where it can be grasped and withdrawn.

In testimony whereof, we have signed our names to this specification.

SIMON BERGMAN.
JAMES D. REIFSNYDER.