B. F. BROWN.

PAPER DRINKING CUP.

APPLICATION FILED AUG. 29, 1911.

1,110,286.

Patented Sept. 8, 1914.

2 SHEETS—SHEET 1.

Fig. 1.

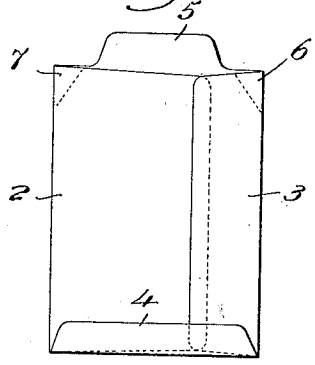


Fig. 2.

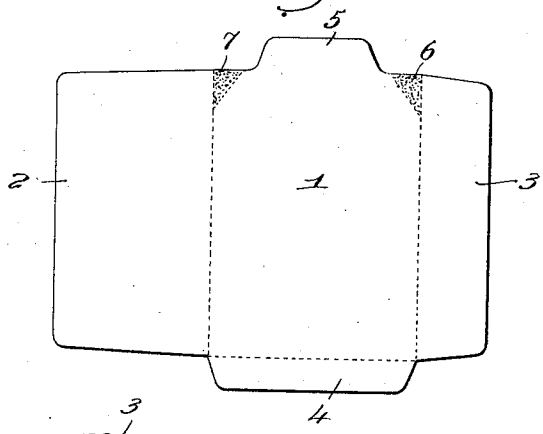


Fig. 3.

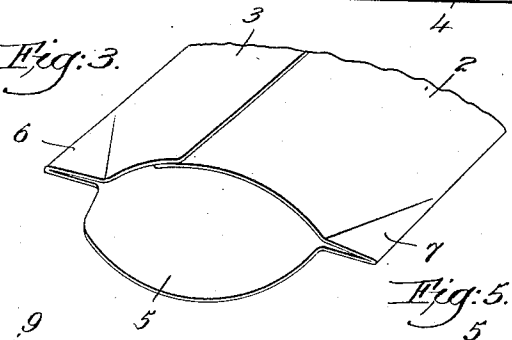


Fig. 4.

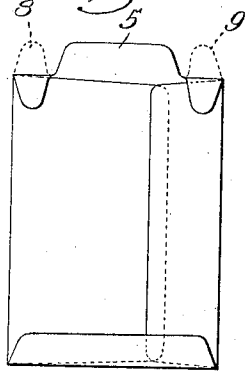
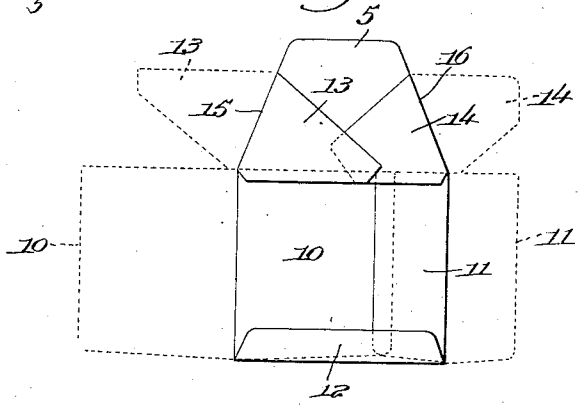


Fig. 5.



Witnesses,
Edward H. Allen.
Thomas J. Drummond

Inventor,
Benjamin F. Brown,
by Edwards, Heard & Smith
Atty's.

B. F. BROWN.

PAPER DRINKING CUP.

APPLICATION FILED AUG. 29, 1911.

1,110,286.

Patented Sept. 8, 1914.

2 SHEETS—SHEET 2.

Fig: 6.

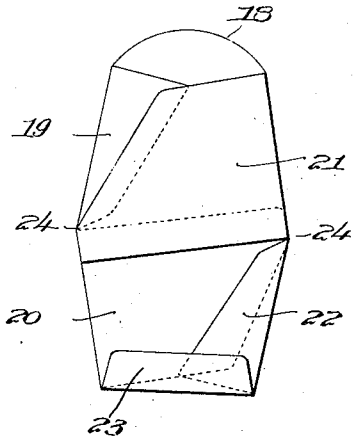


Fig: 7.

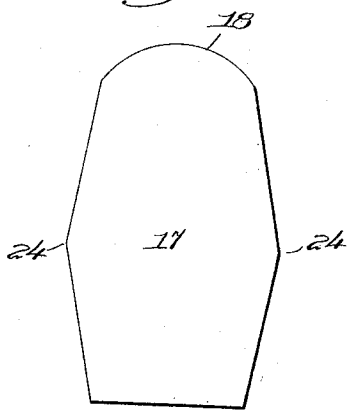
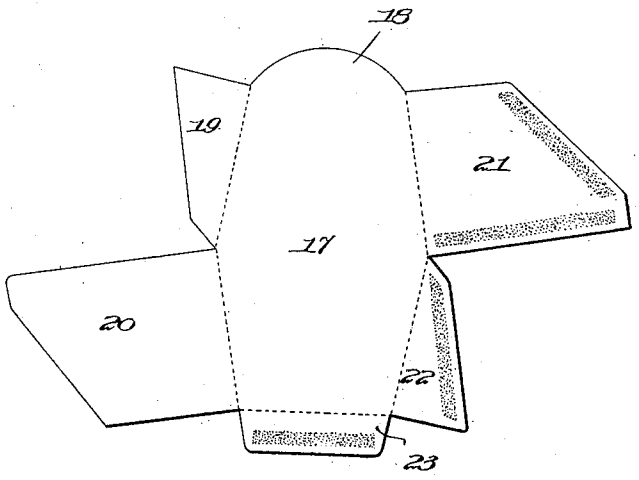


Fig: 8.



Witnesses,
Edward G. Allen.
Thomas J. Drummond.

Inventor:
Benjamin F. Brown
by Edwards Heard & Smith
Attys.

UNITED STATES PATENT OFFICE.

BENJAMIN F. BROWN, OF FITCHBURG, MASSACHUSETTS, ASSIGNOR TO THE BROWN BAG FILLING MACHINE COMPANY, OF FITCHBURG, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

PAPER DRINKING-CUP.

1,110,286. Specification of Letters Patent. Patented Sept. 8, 1914.

Application filed August 23, 1911. Serial No. 646,652.

To all whom it may concern:

Be it known that I, BENJAMIN F. BROWN, a citizen of the United States, residing at Fitchburg, county of Worcester, State of Massachusetts, have invented an Improvement in Paper Drinking-Cups, of which the following description, in connection with the accompanying drawing, is a specification, like characters on the drawing representing like parts.

The object of this invention is to provide a cheap and satisfactory paper drinking cup. The main portion of the drinking cup embodying this invention is constructed in the same general way as a flat paper bag, and this invention is directed to constructing the mouth end of such a bag so as to render it capable of directing the liquid into the mouth of the drinker without spilling the liquid out at the sides or corners.

The essential feature of the invention resides in providing means for closing the bag mouth at the side edges so as to cause the mouth opening to be materially narrower than the width of the main portion of the bag.

While not essential to the invention in its broadest form, yet in the preferred form the bag is provided with a projecting lip at the central portion of the edge of one ply at the mouth of the bag and this is an important feature.

The nature of the invention will appear more fully from the accompanying description and drawings, and will be particularly pointed out in the claims.

The drawings illustrate different forms of drinking cup which the invention may take.

In the drawings Figure 1 is a view of the back or folded side of a flat paper drinking cup embodying the invention. Fig. 2 is a development of said cup. Fig. 3 is a perspective view looking into the mouth end of the cup. Fig. 4 is a view similar to Fig. 1 of a different form of cup embodying the invention. Fig. 5 is a similar view of a third form of cup embodying the invention, with the development indicated in dotted lines. Fig. 6 is a rear view of a fourth form of cup embodying the invention. Fig. 7 is a front view thereof, and Fig. 8 is a development thereof.

The ordinary flat paper bag is formed from a generally rectangular sheet of paper provided with flaps. This sheet is folded over upon itself to form the two plies of the bag, and a flap is folded up to close the bottom and the parts are pasted together. These folds are made in different ways, but in all cases the flat blank from which the bag is formed is readily cut out with a die and is readily folded and pasted by well known forms of machines. The drinking cup of the present invention is designed to be cut and folded by similar means as that employed in the making of such flat paper bags. The drinking cup of this invention is therefore adapted to be made expeditiously and in large quantities at a minimum cost. It is essential, however, that a paper drinking cup which lies flat when not in use shall be capable of being opened up to receive a substantial quantity of liquid, and that when the liquid is poured from the bag or runs into the mouth of the drinker that it shall not run out at the sides or corners. The proper results are obtained in this invention by either of the constructions illustrated in the drawings, and these constructions show that the invention is not to be limited other than is set forth in the appended claims.

In the construction shown in Fig. 1 one ply of the bag is constituted as the general rectangular portion 1, while the other ply is formed from the flaps 2, 3 and 4 which are folded and pasted in position as shown in Fig. 1. The ply 1 at the mouth or open end of the bag has projecting from the central portion of its edge a lip 5 which should be of such a size and width as to fit within the mouth of the person drinking from the cup. The bag is closed at the mouth end between this projecting lip and the side edges of the bag so as to cause the mouth opening to be materially narrower than the bag by sealing the corners 6 and 7 with a suitable adhesive. It will thus be seen, especially from the perspective view in Fig. 3 that when the bag is filled with liquid so that the mouth opening is distended, the liquid will run over the lip 5, which is curved, and will be prevented from running out at the sides or corners of the bag, and thus will be entirely directed into the mouth of the drinker.

The same idea is carried out in a slightly different way in the construction shown in Fig. 4, where the bag is constructed as in Figs. 1, 2 and 3, except that between the lip 5 and the side edges of the bag small tabs 8

and 9 are formed integral with and projecting from one ply of the bag and are bent over and secured by an adhesive to the opposite ply of the bag, closing the bag at the mouth end between the projecting lip 5 and the side edges of the bag and causing the mouth opening to be materially narrower than the bag.

The same result is also shown by the construction shown in Fig. 5 only in a somewhat more elaborate way. The blank from which the bag is formed is indicated in its outlines by dotted lines, and the flaps 10, 11 and 12 are folded over and pasted in the usual manner and then the flaps or tabs 13 and 14 are folded about the diagonal lines 15 and 16 and secured in position. The diagonal lines of fold 15 and 16 extend from the ends of the lip 5 to the side edges of the bag so that the bag is closed at its mouth and between the projecting lip 5 and the side edges of the bag to cause the mouth opening to be materially narrower than the bag.

Still another form which this invention may take is illustrated in Figs. 6, 7 and 8, wherein the lower portion of the bag forming the cup is of a trapezoidal shape rather than of the rectangular shape illustrated in the forms already described, and wherein also the upper portion is of about the same size as the lower portion rather than smaller as in the form shown in Fig. 5. The blank from which this form of the cup is made is illustrated in Fig. 8. One ply of the bag 17 is formed from the plain blank, as shown in Fig. 7, and has projecting from the central portion of its edge a lip 18, while the other ply of the bag is formed as shown more fully in Fig. 6, by the flaps or tabs 19, 20, 21, 22 and 23, folded over as indicated, and pasted in the usual manner. In the form shown the flaps are so arranged that they may be readily folded over by the usual type of machines employed in paper bags, the flaps 19 and 20 being folded over first simultaneously, then the flaps 21 and 22 being folded over simultaneously and pasted down, then the flap 23 being folded over and pasted down. The bag thus formed presents at its lower portion a general trapezoidal shape, while at its upper portion the lines formed by the folds of the flaps 19 and 21 taper from the extreme side edges of the bag to the ends of the central projecting lip 18, so that the bag is closed at its mouth end between this projecting lip 18 and the side edges of the bag to cause the mouth opening to be materially narrower than the width of the bag. In using this form of cup, if it be grasped by the extreme side edges at the corners 24 it is readily opened to receive the liquid.

It will thus be seen that the invention may be embodied in a variety of different forms of which those illustrated are examples, and that in all instances the mouth opening is materially narrower than the bag, whereby the liquid in the bag may run into the mouth of the drinker without spilling at the sides.

The invention having been described, what is claimed as new and desired to be secured by Letters Patent, is:

A drinking cup comprising a flat paper bag presenting a front ply and a back ply with an unobstructed space between, a lip projecting from the central portion of the edge of one ply outwardly from the mouth of the bag, said lip and last mentioned ply having an even continuous surface, and means for directly connecting and closing the said two plies at the mouth end between said projecting lip and the side edges of the bag to cause the mouth opening to be materially narrower than the bag, whereby liquid in the bag may run over the outwardly projecting bag lip without spilling at the sides.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

BENJAMIN F. BROWN.

Witnesses:
CHARLOTTE M. SUMNER,
THOMAS J. DRUMMOND.