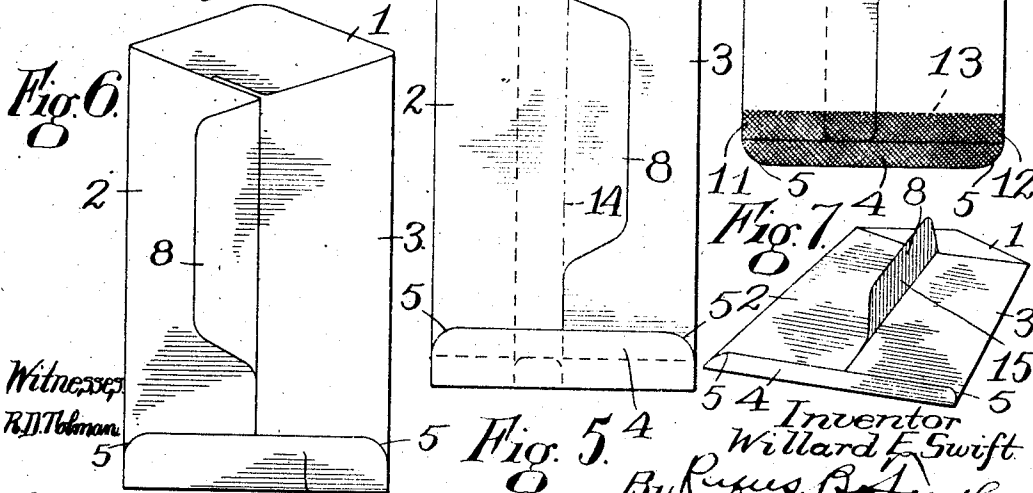
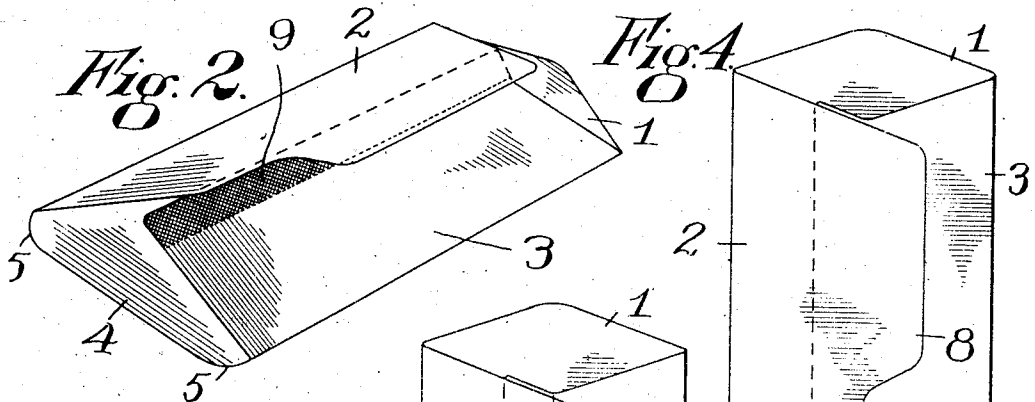
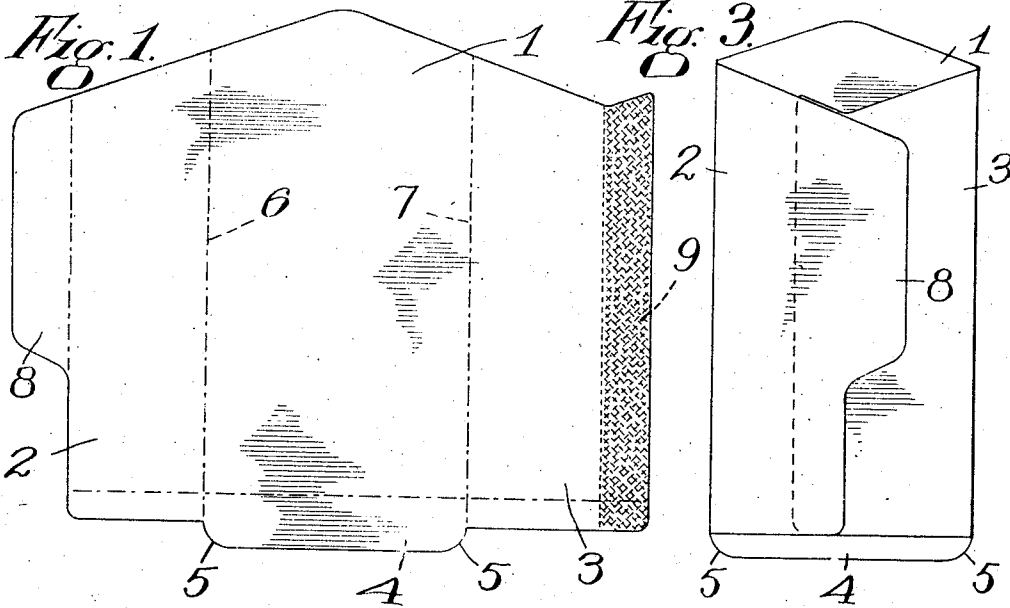


1,224,809.

Patented May 1, 1917.
2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2

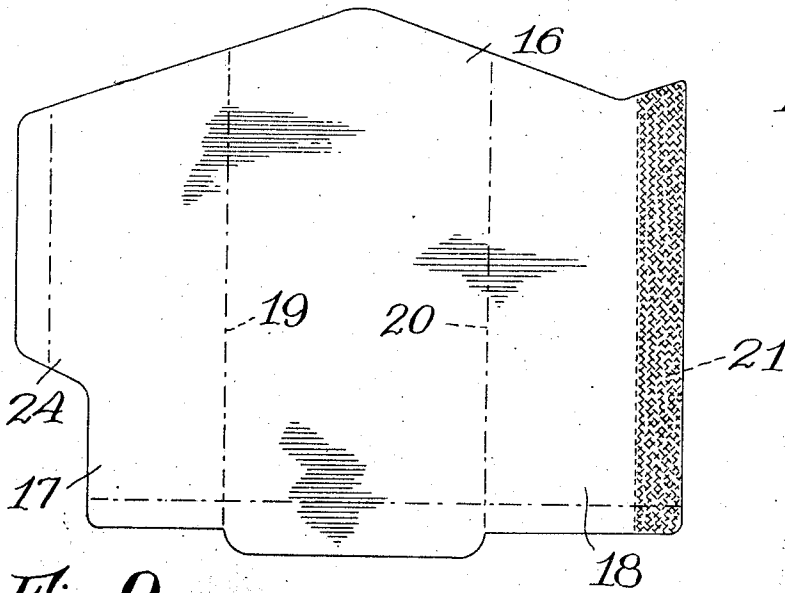


Fig. 8.

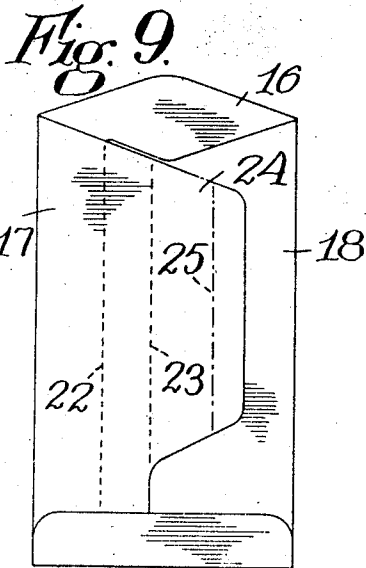


Fig. 9.

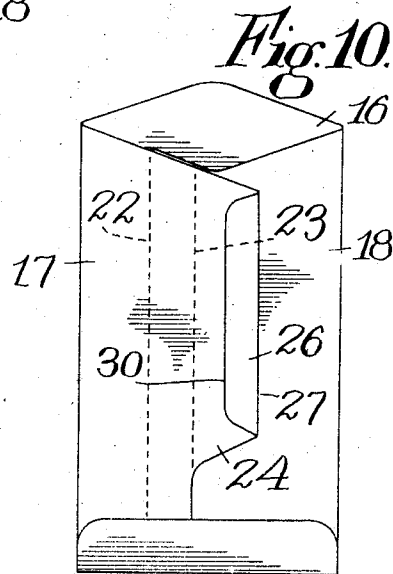


Fig. 10.

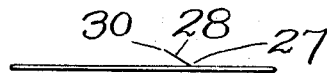


Fig. 11.

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UNITED STATES PATENT OFFICE.

WILLARD E. SWIFT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO UNITED STATES ENVELOPE COMPANY, OF SPRINGFIELD, MASSACHUSETTS, A CORPORATION OF MAINE.

PAPER DRINKING-CUP.

1,224,809.

Specification of Letters Patent.

Patented May 1, 1917.

Application filed March 9, 1912. Serial No. 682,796.

To all whom it may concern:

Be it known that I, WILLARD E. SWIFT, a citizen of the United States, residing at Worcester, in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Paper Drinking-Cups, of which the following is a specification, accompanied by drawings forming a part of the same.

My invention relates to a drinking cup made by folding a sheet of material, such as waterproof paper, and particularly to that type of cup which is provided on one of its sides with a projecting flap or fin formed by an extension of one of the side flaps of the cup, to afford a convenient means for holding the cup so that it may be opened by the force of the water as from a faucet, as well as while drinking therefrom.

The objects of my invention are to provide a flap or fin which is normally in proper position when the cup is held in a dispensing cabinet to be conveniently seized by the thumb and fingers, and also to reinforce the bottom of the cup in order to increase its strength and prevent leakage. The above objects I accomplish by means of the construction and arrangement of parts as shown in the accompanying drawings, and hereinafter described and pointed out in the annexed claim.

Referring to the drawings,

Figure 1 represents the blank from which my improved drinking cup is made.

Fig. 2 is a perspective view showing the method of folding one side flap of the blank over the other.

Fig. 3 is a side view showing the side flaps folded and their edges fastened together.

Fig. 4 is a side view, as shown in Fig. 3, but showing the gummed surfaces at the lower edges of the body portion and side flaps.

Fig. 5 is a side view, as shown in Fig. 4, but with the lower gummed edges of the body portion and side flaps folded over and attached to the outer surfaces of the side flaps.

Fig. 6 is a side view, as shown in Fig. 5, but with the projecting flap or fin folded back against the side flap of which it forms a part.

Fig. 7 is a perspective view of the completed drinking cup in a prone position,

showing the projecting flap or fin in its normal position at right angles to the drinking cup.

Figs. 8, 9, 10 and 11 illustrate a modified construction of the drinking cup.

Similar reference characters refer to similar parts in the different figures.

In Fig. 1 of the drawings, 1 represents the body portion of the blank from which my improved drinking cup is folded, and 2, 3, are the side flaps. The body portion 1 is extended below the side flaps 2 and 3 as at 4, and is preferably rounded at its lower corners 5, 5. The side flaps 2 and 3 are adapted to be folded over the body 1 on the broken lines 6 and 7, respectively. The side flap 2 is substantially half the width of the body 1 and is provided on its outer side with a lateral projection or fin 8. The side flap 3 is somewhat wider than the side flap 2 so as to allow the edges of the side flaps when folded to overlap and be fastened together near the center of the body 1, as hereinafter described. On the under side of the side flap 3 gum is applied to a surface 9 extending its entire length and parallel with its outer edge.

As shown in Fig. 2, the side flap 3 is first folded on the line 7 over the body 1, bringing the gummed surface 9 uppermost and the side flap 2 folded on the line 6 over the body 1, and its edge securely fastened to the gummed surface 9 of the side flap 3, leaving the flap or fin 8 lying in contact with the side flap 3, as shown in Fig. 3.

As shown in Fig. 4, gum is next applied to the extension 4 of the body portion 1, and also to the outer lower edges 11 and 12 of the side flaps 2 and 3. The gummed portions are then folded on the line 13 over and upon the side flaps and securely fastened thereto, as shown in Fig. 5.

In the process of folding, the gummed surfaces 11 and 12 are folded upon and securely attached to the outer surface of the side flaps 2 and 3. The gummed extension 4 of the body portion 1 extends above the edges of the side flaps and is attached directly to the outer surfaces of the side flaps. The drinking cup, therefore, has four thicknesses of material at the line 13 of fold. The line 13 of fold occurs at some distance above the lower ends of the side lines of folds 6 and 7, and the extension 4 of the body portion extends over the folded

ends of the two side flaps and securely closes the seam between the body portion and the side flaps of the drinking cup. No seam therefore occurs at the corners of the drinking cup, and the pressure of water in the cup is resisted by the strength of the material, there being no gummed joint at the corners.

The process of folding herein described folds the flap or fin 8 flat against the side flap 3, requiring it to be raised by hand into a position substantially at right angles to the drinking cup, in order that it may serve as a handle in filling the cup with water and in drinking from the cup. As the material from which the cup is made is stiff and unyielding, this operation requires that the cup should be firmly held while the free edge of the fin 8 is separated and the fin bent bodily back to bring it into a raised position. The elasticity of the material, however, is sufficient to restore the fin to its flat position as soon as released.

In certain dispensing cabinets now in use, the cups are presented broadside to the user and require to be forcibly pulled from the cabinet by seizing the fin 8. Under these conditions the fin 8 is inconvenient when in the flat position, as represented in Fig. 5. In order to maintain the fin 8 in a convenient position to be seized when the cup is withdrawn from the dispensing cabinet, and to serve as a handle when drinking from the cup, I fold the fin 8 back against the side flap 2 of which it forms a part, but without breaking or crushing the fibers of the material on the line 14 of fold, thereby allowing the elasticity of the material on its line 14 of fold to restore the fin to and maintain it normally in a raised position substantially at right angles to the drinking cup, as represented at 15, in Fig. 7.

In Figs. 8 to 11, inclusive, I have shown a slight modification in the construction of the cup which consists in increasing the width of the fin and folding it longitudinally upon itself, making the line of fold about one third the distance from the free edge of the fin, instead of folding the fin back upon the side flap of the cup, as shown in Fig. 6.

In the construction shown in Figs. 1 to 7, inclusive, the fin projects from the center of

the cup, whereas, in the construction shown in Figs. 8 to 11, the attached edge of the fin is at one side of the center line of the cup.

Referring to Fig. 8, I have shown an extended blank according to my modified form of construction, in which 16 represents the body portion of the drinking cup, and 17, 18 the two side flaps which are folded over upon the body portion of the drinking cup on the dash and dot lines 19 and 20. The under side of the side flap 18 is provided with gum, as shown at 21, Fig. 8. The side flap 18 is first folded upon the body of the drinking cup, and the side flap 17 is folded over to overlap the gummed edge of the side flap 18, as shown in Fig. 9, the attached surfaces of the two side flaps being included between the broken lines 22 and 23, Fig. 9. The side flap 17 is provided with a projecting fin 24 which, when the cup is folded, as shown in Fig. 9, lies flat against the side flap 18. The fin is then folded back upon itself upon the broken line 25, Fig. 9, as represented at 26, Fig. 10.

By avoiding the crushing or breaking of the fibers at the folded edge 27 the elasticity of the material will raise the folded edge 26, causing it to stand at an angle to the side of the cup, as represented at 28, Fig. 11. This method of folding the fin allows the fin to be raised either by the free edge 30 or by the folded edge 27, facilitating the withdrawal of the cup from a dispensing cabinet of the type now in use.

I claim,

As an article of manufacture, a drinking cup formed of flexible sheet material, having a body portion and two side flaps folded over said body portion and united at the overlapping edges, with one of said side flaps provided with an extension projecting over the other side flap, with a portion of said extension folded upon itself to form a doubled edge and allow the extension to be raised by either its free edge or by its folded edge.

Dated this seventh day of March 1912.
WILLARD E. SWIFT.

Witnesses:

PENELOPE COMBERBACH,
NELLIE WHALEN.