

E. D. HAINES.
HANDLE CONSTRUCTION FOR PAPER BAGS OR THE LIKE.
APPLICATION FILED JULY 28, 1921.

1,410,404.

Patented Mar. 21, 1922.

2 SHEETS—SHEET 1.

Fig-1-

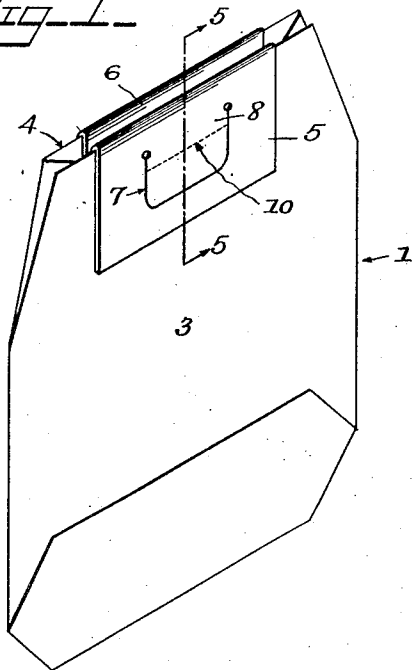


Fig-2-

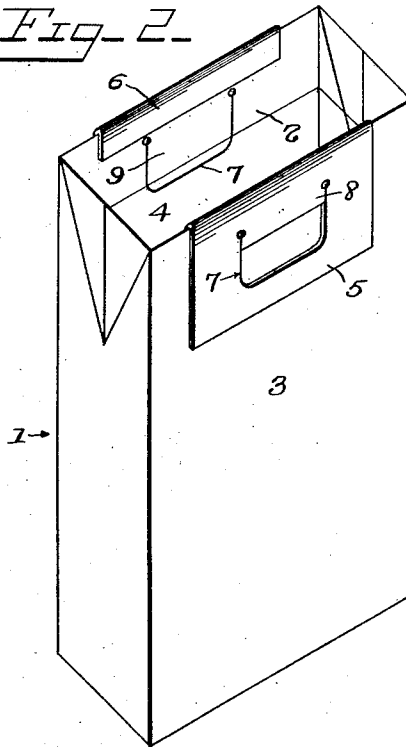


Fig-3-

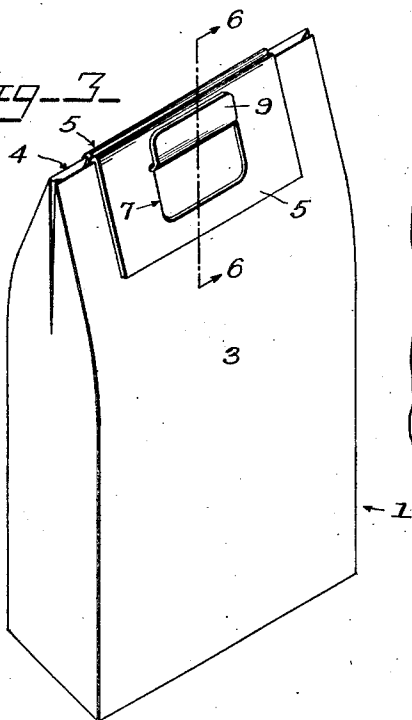
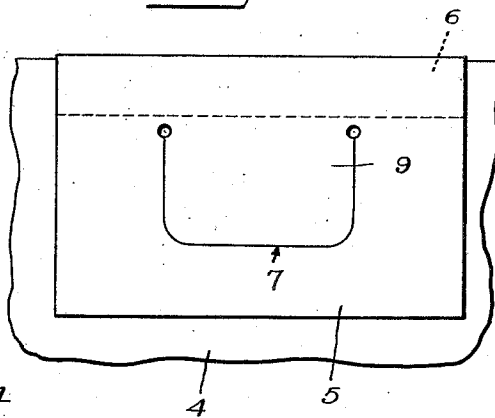


Fig-4-



Inventor

Edmund D. Haines,

E. D. HAINES,
HANDLE CONSTRUCTION FOR PAPER BAGS OR THE LIKE.
APPLICATION FILED JULY 28, 1921.

1,410,404.

Patented Mar. 21, 1922.

2 SHEETS—SHEET 2.

Fig-5-

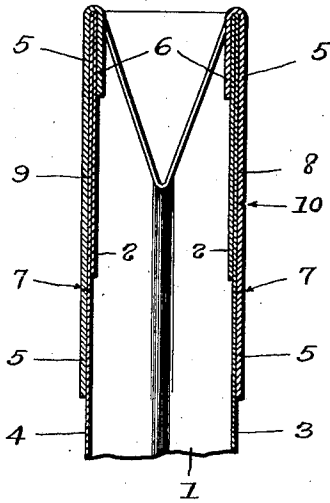


Fig-6-

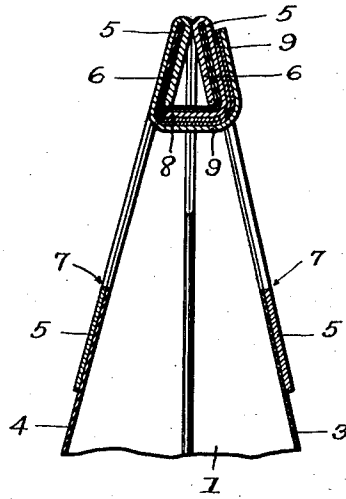


Fig-7-

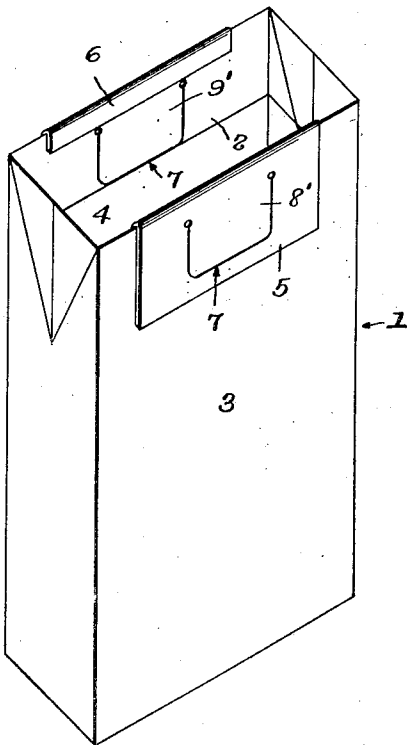
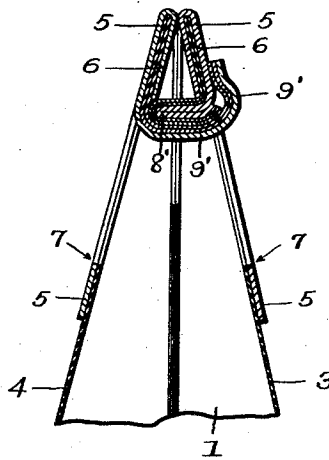


Fig-8-



Inventor

Edw. D. Haines.

UNITED STATES PATENT OFFICE.

ELVANS D. HAINES, OF WASHINGTON, DISTRICT OF COLUMBIA.

HANDLE CONSTRUCTION FOR PAPER BAGS OR THE LIKE.

1,410,404.

Specification of Letters Patent. Patented Mar. 21, 1922.

Application filed July 28, 1921. Serial No. 488,074.

To all whom it may concern:

Be it known that I, ELVANS D. HAINES, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Handle Constructions for Paper Bags or the like, of which the following is a specification.

This invention relates generally to paper bags commonly known as shopping bags, or to other kinds of receptacles, but particularly to an improved handle construction for such articles.

Heretofore, paper shopping bags have been cheaply made with cord or twine handles, which have either been stapled to the upper end portions of the opposing sides of the bag body, or else have been carried entirely around the bag body under the bottom of the same. Other bags have had the upper end portions of their opposing sides reinforced with cardboard sheets through which openings have been cut to form the handles. All of these types of bags have been very unsatisfactory because of the fact that their handles always cut the hands and also because the handles easily pull out or the bags easily tear while being carried when filled.

The public demands a type of paper shopping bag which has not only a strong handle construction but one which will not cut the hands and at the same time a cheap type of bag. The present invention has been designed in order to provide a bag which will overcome the objections made to the types of bags heretofore known and used, and therefore to meet the demands of the public. The improved type of bag has a strong and durable handle construction, one which will not pull out or easily tear the bag, and one which cannot cut the hands. At the same time, the improved type of bag may be very cheaply manufactured, since very cheap materials can be used and since the bag can be machine made.

The invention consists of the novel features of construction, and the combination and arrangement of parts hereinafter described and claimed, and shown in the accompanying drawings, wherein:—

Figure 1 is a perspective view of a paper shopping bag provided with a handle construction embodying the principles of the present invention, said view illustrating the bag as it may be manufactured and sold and as it appears when folded flat;

Figure 2 is a perspective view of the bag, illustrating the latter in opened position and the manner in which it is initially adapted for use by a proposed user;

Figure 3 is a similar view illustrating the position of the parts when the bag is filled and closed at the top and the handle construction is in carrying position;

Figure 4 is a face view of the upper end portion of one of the sides of the bag body, illustrating the manner in which the sides of the bag body and the reinforcing sheets secured thereto are slitted;

Figure 5 is a transverse sectional view taken substantially on the plane indicated by the line 5—5 of Fig. 1;

Figure 6 is a similar view taken substantially on the plane indicated by the line 6—6 of Fig. 3;

Figure 7 is a view similar to Fig. 2 illustrating a paper shopping bag having another form of handle construction embodying the principles of the present invention; and

Figure 8 is a view similar to Fig. 6, illustrating the modified form of handle construction.

Referring more particularly to the drawings in which similar reference numerals are used to designate corresponding parts throughout the several views, the numeral 1 designates as a whole the body of a paper shopping bag. The body 1 may be made of a cheap but tough grade of paper and it may be formed in any suitable manner, it being preferably formed so that it can be folded flat, as illustrated in Fig. 1. In order to reinforce the upper end or mouth of the bag, the upper end portions of the walls of the body 1 are folded inwardly and downwardly upon themselves as is indicated by the numeral 2. This folded portion or strip 2 being disposed on the inside of the bag body is preferably glued to the inner surfaces of the walls of the bag body.

Glued or otherwise suitably secured to the outer surfaces of the opposite or opposing sides 3 and 4 of the bag body 1 at the upper end portions of said sides are reinforcing sheets 5. These sheets 5 are preferably substantially rectangular in shape and are disposed midway of the side edges of the sides 3 and 4. They are preferably made from a cheap grade of cardboard, of course, of a thickness greater than the thickness of the paper out of which the bag body 1 is made. The upper portions of the sheets 5 are folded

inwardly and downwardly upon themselves around the upper edges of the sides 3 and 4 and then glued or otherwise suitably secured to the inner surfaces of the upper end portions of the latter to constitute comparatively narrow reinforcing strips 6.

The sheets 5 and the opposing sides 3 and 4 of the bag body are provided below these strips 6 with substantially U-shaped slits 7, the slit 7 in one side being preferably aligned with the slit 7 in the other side. These slits 7 form downwardly extending flaps 8 and 9 of substantially uniform width throughout out of portions of the sheets 5 and the opposing sides 3 and 4 of the bag body, the flap 8 being carried by the side 3 and the flap 9 being carried by the side 4. The flap 8 is weakened along a transverse line, preferably by being provided with a horizontal or transverse line or score 10, so as to make its lower portion readily severable from its upper portion.

The bag as it may be manufactured and as it preferably reaches the purchaser is in the flat form as shown by Fig. 1. To adapt it to use, the user must first tear the lower portion of the flap 8 off upon the line 10 so as to form the flap 8 into a relatively short flap. This relatively short flap 8 must then be folded inwardly under the strip 6 secured to the inner surface of the side 3. Then, after the bag is filled and it is desired to close and carry the same, the upper end portions of the two opposing sides should be brought together so that the short flap 8 will engage the inner surface of the side 4 beneath the shoulder formed by the lower edge of the strip 6 secured to the latter. When so engaged with the inner surface of the side 4, the flap 8 will serve in the capacity of a spacing member so that the upper end portions of the two sides 3 and 4 may be maintained in converging relation. After this has been done, the relatively long flap 9 should be folded inwardly under the short flap 8 through the opening or hand hole which is formed in the side 3 when the flap 8 is folded inwardly and then upwardly along the outer surface of the side 3. When the flap 9 is folded in this manner, an opening or hand hole is formed in the side 4 aligned with the opening or hand hole in the side 3, and the portion of the flap 9 which is disposed under the flap 8 bridges the substantial space which is effected between the upper edges of the aligned openings or hand holes.

The position of the parts when the flaps are folded inwardly and the bag is closed is shown in Figs. 3 and 6. From Fig. 6 it will be seen that a handle bar of substantially triangular shape in cross section is formed at the upper end of the bag body, and that by reason of the fact that this handle bar is relatively wide or broad at the bottom, it

will not cut the hand of a person carrying the bag even when the contents of the latter is comparatively heavy. Furthermore, it will be seen that the flap 8 acting as a spacing member between the upper end portions of the sides 3 and 4 substantially spaces the portions of said sides at the upper edges of the openings or hand holes so that said sides may be maintained in converging relation. It thus prevents the upper end portions of the sides from being easily squeezed together, bringing the strips 6 in substantially parallel relation. Moreover, since the flap 8 engages the lower edges of the strips 6, said flap cannot be easily torn at the points where it joins the side 3 of the bag body, and since the flap 9 bears against the flap 8, said flap 9 cannot be easily torn at the points where it joins the side 4 of the bag body. Hence, a very strong and durable handle construction has been provided.

In manufacturing the bag according to the present invention, the blank sheets 5 are first applied to the blank bag body 1. After that has been done and the bag body is in collapsed or flattened condition, it may be placed in a punch and the aligned slits 7 then punched through both sides 3 and 4 and the sheets 5 glued thereto in one operation. The die or anvil of the punch may be provided with a marking or scoring element which will not cut through the bag body but will only make a line or a score upon one flap designated in the drawings as the flap 8, so that its lower portion may be readily torn off.

The type of bag illustrated in Figs. 7 and 8 is the same as the type illustrated in Figs. 1 to 6 with the exception that the flap 8' is not provided with the line or score 10 illustrated in Fig. 1 and is not intended to have its lower portion severed from its upper portion. In the bag illustrated in Figs. 7 and 8, both flaps 8' and 9' are identical in shape and size, and they are intended to be folded in the same manner that the flaps shown in Figs. 1 to 6 are folded, except that one flap, designated as the flap 8' before being folded inwardly under the strip 6 carried by the side 3 should first be folded upon itself, as illustrated in Fig. 8. This forms the flap 8' into a relatively short flap of double thickness engageable with the inner surface of the side 4 so that the upper portions of the two opposing sides of the bag body may be maintained in converging relation with the upper edges of the hand holes or openings substantially spaced. In this form of bag the die or anvil of the punch used for cutting the slits does not have to be provided with a marking or scoring element.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that disclosure has been made of two practical ways of effectively

carrying out the object of the invention, as the improved handle constructions disclosed are not only strong and durable, but they cannot cut the hands, and besides they can be very easily and cheaply manufactured.

The invention in a broad aspect resides in providing a receptacle body having hand holes in its opposite sides with a means for spacing the portions of the sides of the body at the upper edges of the hand holes and for bridging that space between the upper edges of the hand holes when the mouth of the body is closed, so that the handle bar which is formed will be wide or broad enough at the bottom to prevent cutting of the hands. This spacing and bridging means may be such that the portions of the opposite sides of the receptacle body above the hand holes may be maintained in converging relation when the handle bar is gripped, and it preferably consists of a spacing means and a bridging means.

It is evident that the invention can be used in connection with receptacles other than paper bags, and that numerous changes in form, proportion and in the details of construction may be resorted to without departing from the spirit and the principle of the invention, and hence, it is to be understood that many uses and changes may be made within the meaning and scope of the appended claims.

What is claimed is:

1. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, and means for substantially spacing the portions of said sides at the upper edges of said holes and for bridging the space between the upper edges of said holes when the mouth of said body is closed.

2. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, means for substantially spacing the portions of said sides at the upper edges of said holes when the mouth of said body is closed, and means for bridging the space effected by the first named means between the upper edges of said holes.

3. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, and means whereby the portions of said sides above said holes may be maintained in converging relation with the upper edges of said holes spaced and whereby the space between the upper edges of said holes may be bridged when the mouth of said body is closed.

4. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, means whereby the portions of said sides above said holes may be maintained in converging relation with the upper edges of said holes spaced when the mouth of said body is closed, and means for

bridging the space effected by the first named means between the upper edges of said holes.

5. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a spacing member carried by one side and being engageable with the other side when the mouth of said body is closed so as to substantially space the portions of said sides at the upper edges of said holes, and a flap carried by one side and being extendible inwardly at the upper edge of the hand hole therein so as to bridge the space effected by said member between the upper edges of said holes.

6. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a spacing member carried by one side and being engageable with the other side when the mouth of said body is closed so as to substantially space the portions of said sides at the upper edges of said holes, and a flap carried by said other side and being extendible inwardly at the upper edge of the hand hole therein so as to bridge the space effected by said member between the upper edges of said holes.

7. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, and flaps carried by said sides at the upper edges of said holes and extending inwardly from their respective sides in opposite directions one under the other, so as to space the portions of said sides at the upper edges of said holes and to bridge the space between the upper edges of said holes when the mouth of said body is closed.

8. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a flap carried by one side and extending inwardly at the upper edge of the hand hole therein and engaging the other side when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said holes, and a flap carried by said other side and extending inwardly at the upper edge of the hand hole therein under and in the opposite direction from the first named flap so as to bridge the space effected by the first named flap between the upper edges of said holes.

9. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a spacing member carried by one side and engaging the other side when the mouth of said body is closed in such a manner that the portions of said sides above said holes may be maintained in converging relation with the upper edges of said holes spaced, and a flap carried by said other side and extending inwardly at the upper edge of the hand hole therein through the hand hole in the first side so as to bridge the space effected by said member between the upper edges of said holes.

10. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a flap carried by one side and being bent inwardly at the upper edge of the hand hole therein and engaging the other side when the mouth of said body is closed in such a manner that the portions of said sides above said holes may be maintained in converging relation with the upper edges of said holes spaced, and a flap carried by said other side and being bent inwardly at the upper edge of the hand hole therein under and in the opposite direction from the first named flap and extending through the hand hole in the first side so as to bridge the space effected by the first named flap between the upper edges of said holes.

11. In a handle construction, the combination of a receptacle body having its opposite sides provided with slits, the flaps formed by said slits being bent inwardly from their respective sides in opposite directions one under the other forming alined openings in said sides, so as to space the portions of said sides at the upper edges of said openings and to bridge the space between the upper edges of said openings when the mouth of said body is closed.

12. In a handle construction, the combination of a receptacle body having its opposite sides provided with slits, the flaps formed by said slits being bent inwardly from their respective sides in opposite directions forming alined openings in said sides, the flap carried by one side engaging the other side when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said openings, and the flap carried by said other side being disposed beneath the first named flap and extending through the opening in the first side so as to bridge the space effected by the first named flap between the upper edges of said openings.

13. In a handle construction, the combination of a receptacle body having opposing sides, reinforcing sheets secured to said sides at the upper end portions thereof, said sides and said sheets being provided with slits, the flaps formed by said slits being bent inwardly from their respective sides in opposite directions forming alined openings in said sides, the flap carried by one side engaging the other side when the mouth of said body is closed in such a manner that the portions of said sides above said openings may be maintained in converging relation with the upper edges of said openings spaced, and the flap carried by said other side being disposed beneath the first named flap and extending through the opening in the first side so as to bridge the space effected by the first named flap between the upper edges of said openings.

14. In a handle construction, the combination of a receptacle body having hand

holes in its opposite sides, a shoulder on the inner surface of one side adjacent the upper edge of the hand hole therein, and a flap carried by the other side and being extendible inwardly at the upper edge of the hand hole therein and being engageable with the first side under said shoulder when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said holes and to bridge the space between the upper edges of said holes.

15. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a shoulder on the inner surface of one side adjacent the upper edge of the hand hole therein, a flap carried by the other side and being extendible inwardly at the upper edge of the hand hole therein and being engageable with the first side under said shoulder when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said holes, and a flap carried by the first side and being extendible inwardly at the upper edge of the hand hole therein under the first named flap so as to bridge the space effected by the first named flap between the upper edges of said holes.

16. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, reinforcing strips secured to the inner surfaces of said sides above said holes, a flap carried by one side and being extendible inwardly at the upper edge of the hand hole therein and being engageable with the other side under the strip secured to the latter when the mouth of said body is closed so that the portions of said sides above said holes may be maintained in converging relation with the upper edges of said holes spaced, and a flap carried by said other side and being extendible inwardly at the upper edge of the hand hole therein under the first named flap so as to bridge the space effected by the first named flap between the upper edges of said holes.

17. In a handle construction, the combination of a receptacle body having opposing sides, reinforcing sheets secured to the outer surfaces of the upper end portions of said sides, reinforcing strips secured to the inner surfaces of the upper end portions of said sides, said sides and said sheets being provided below said strips with slits forming downwardly extending flaps, said flaps being foldable inwardly to form alined openings in said sides, the flap carried by one side being foldable inwardly under the strip secured to the latter and being engageable with the inner surface of the other side under the strip secured to said other side when the mouth of said body is closed so that the portions of said sides above said openings may be maintained in converging relation

with the upper edges of said openings spaced, and the flap carried by said other side being foldable inwardly under the first flap through the opening in the first side so as to bridge the space effected by the first flap between the upper edges of said openings.

18. In a handle construction, the combination of a receptacle body having its opposite sides provided with slits forming flaps of substantially uniform width throughout, said flaps being bent inwardly from their respective sides in opposite directions one under the other forming aligned openings in said sides, so as to space the portions of said sides at the upper edges of said openings and to bridge the space between the upper edges of said openings when the mouth of said body is closed.

19. In a handle construction, the combination of a receptacle body having opposing sides, reinforcing sheets secured to the outer surfaces of the upper end portions of said sides, reinforcing strips secured to the inner surfaces of the upper end portions of said sides, said sides and said sheets being provided below said strips with aligned slits forming downwardly extending flaps of substantially uniform width throughout, said flaps being foldable inwardly to form aligned openings in said sides, the flap carried by one side being foldable inwardly under the strip secured to the latter and being engageable with the inner surface of the other side under the strip secured to said other side when the mouth of said body is closed so that the portions of said sides above said openings may be maintained in converging relation with the upper edges of said openings spaced, and the flap carried by said other side being foldable inwardly under the first flap through the opening in the first side and then upwardly along the outer surface of the latter so as to bridge the space effected by the first flap between the upper edges of said openings.

20. In a handle construction, the combination of a receptacle body having opposing sides, reinforcing sheets secured to the outer surfaces of the upper end portions of said sides, the upper portions of said sheets being folded inwardly and downwardly around the upper edges of said sides and being secured to the inner surfaces of the upper end portions of the latter to constitute reinforcing strips, said sides and said sheets being provided below said strips with slits forming downwardly extending flaps, said flaps being foldable inwardly to form aligned openings in said sides, the flap carried by one side being foldable inwardly under the strip secured to the latter and being engageable with the inner surface of the other side under the strip secured to said other side when the mouth of said body is closed

so that the portions of said sides above said openings may be maintained in converging relation with the upper edges of said openings spaced, and the flap carried by said other side being foldable inwardly under the first flap so as to bridge the space effected by the first flap between the upper edges of said openings.

21. In a handle construction, the combination of a receptacle body having hand holes in its opposite sides, a relatively short flap carried by one side and being foldable inwardly at the upper edge of the hand hole therein and being engageable with the inner surface of the other side when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said holes, and a relatively long flap carried by said other side and being foldable inwardly at the upper edge of the hand hole therein under the first named flap through the hand hole in the first side so as to bridge the space effected by the first named flap between the upper edges of said holes.

22. In a handle construction, the combination of a receptacle body having its opposite sides provided with aligned slits forming downwardly extending flaps, said flaps being foldable inwardly to form aligned openings in said sides, the flap carried by one side having its lower portion readily severable, the upper portion of the last mentioned flap being foldable inwardly and being engageable with the inner surface of the other side when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said openings, and the flap carried by said other side being foldable inwardly under the first flap through the opening in the first side so as to bridge the space effected by the first flap between the upper edges of said openings.

23. In a handle construction, the combination of a receptacle body having its opposite sides provided with aligned slits forming downwardly extending flaps, said flaps being foldable inwardly to form aligned openings in said sides, the flap carried by one side being weakened along a transverse line so that its lower portion may be readily torn off, the upper portion of the last mentioned flap being foldable inwardly and being engageable with the inner surface of the other side when the mouth of said body is closed so as to space the portions of said sides at the upper edges of said openings, and the flap carried by said other side being foldable inwardly under the first flap through the opening in the first side so as to bridge the space effected by the first flap between the upper edges of said openings.

In testimony whereof I have affixed my signature.

ELVANS D. HAINES.