

No. 888,653.

PATENTED MAY 26, 1908.

H. J. POTTER.  
COLLAPSIBLE RECEPTACLE.  
APPLICATION FILED AUG. 10, 1907.

2 SHEETS—SHEET 1.

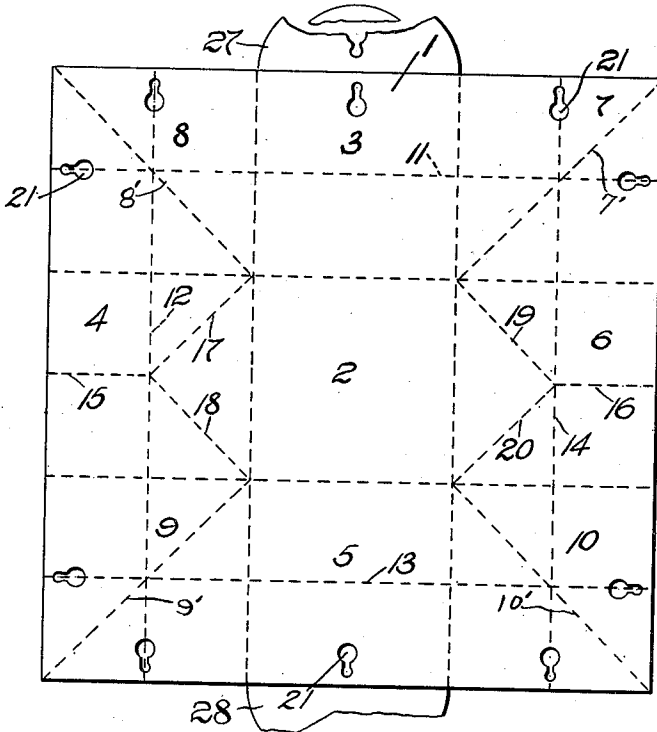
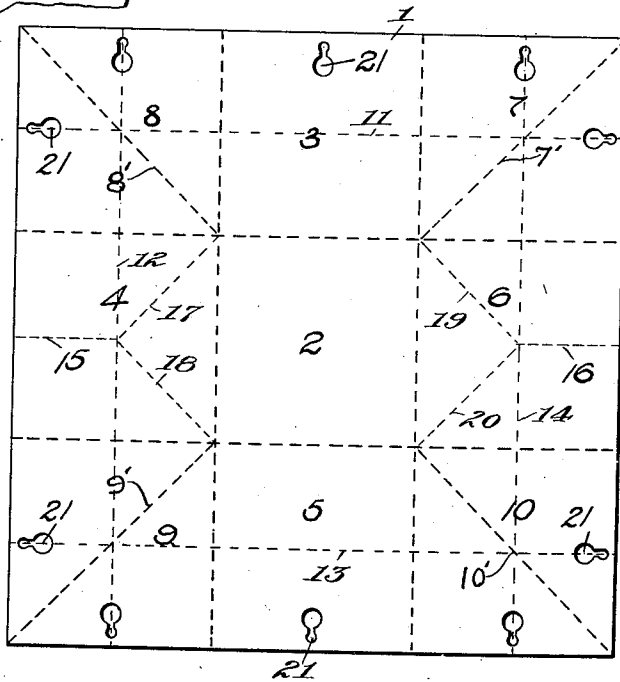


Fig. 2.

Fig. 1.



Witnesses:

Robert H. Hammler.

Horace A. Crossman

Inventor:

Harry J. Potter.

by Emory and Booth  
Attys

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2 SHEETS—SHEET 2.

Fig. 3.

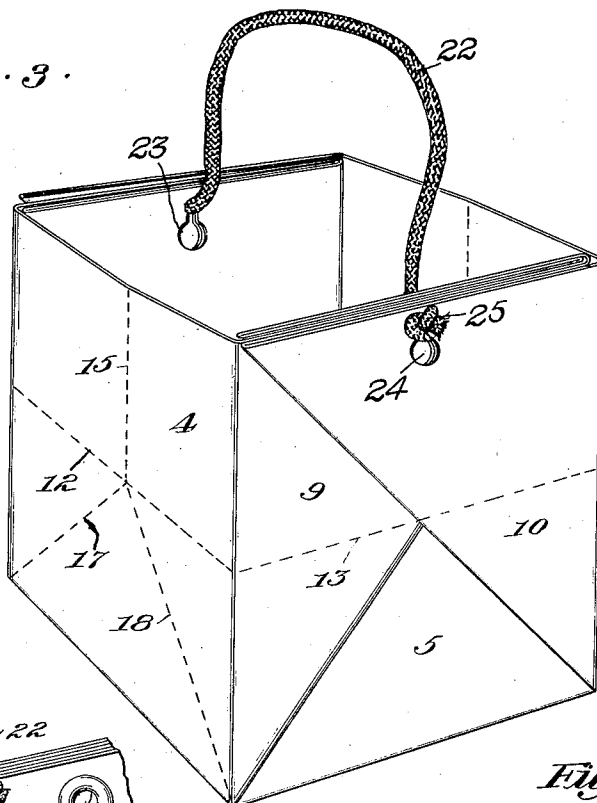


Fig. 6.

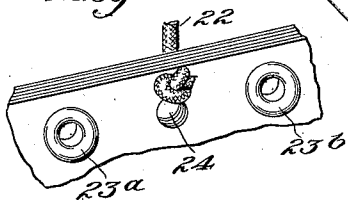


Fig. 5.

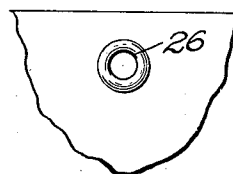
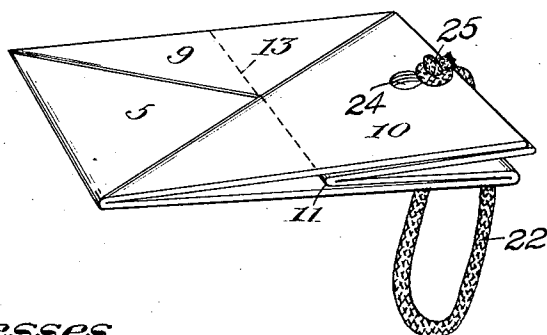


Fig. 4.



Witnesses.

Robert H. Kammler.  
Horace A. Crossman

Inventor:  
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# UNITED STATES PATENT OFFICE.

HARRY J. POTTER, OF CAMBRIDGE, MASSACHUSETTS, ASSIGNOR TO BURNITOL MFG. CO., OF CAMBRIDGE, MASSACHUSETTS, A CORPORATION OF MAINE.

## COLLAPSIBLE RECEPTACLE.

No. 888,653.

Specification of Letters Patent.

Patented May 26, 1908.

Application filed August 10, 1907. Serial No. 387,984.

*To all whom it may concern:*

Be it known that I, HARRY J. POTTER, a citizen of the United States, residing at Cambridge, in the county of Middlesex, Commonwealth of Massachusetts, have invented an Improvement in Collapsible Receptacles, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to collapsible receptacles more particularly intended for use as pails or buckets for conveying water or other liquid.

In order that the principles of the invention may be clearly understood, I have illustrated a single type or embodiment thereof in the accompanying drawings, wherein,—

Figure 1 is a plan view of the sheet of paper or the like from which the receptacle may be folded or formed, the paper being represented as scored to facilitate folding of the receptacle into position for use and also for folding into the form shown in Fig. 4. Fig. 2 is a plan view of a similar sheet correspondingly scored and also provided with lateral flaps. Fig. 3 is a perspective view of the receptacle in condition for use, the flaps being omitted; Fig. 4 is a perspective view of the receptacle after the same has been shaped for use and then folded into position for shipment; Fig. 5 is a detail representing a modification of the means for securing the bail in position and Fig. 6 is a detail view of a further modification.

Referring more specifically to the single type of the invention herein illustrated the sheet of paper, cloth or the like from which the receptacle is formed is indicated at 1 in each of the figures. If paper be employed it may be superficially treated to render it waterproof by the use of paraffin or the like or the material from which the paper is made may be impregnated or otherwise treated with suitable material during the process of manufacture. If cloth such as muslin or other material be employed, the same may be treated in similar manner. The sheet shown in Figs. 1 and 2 is scored to provide a rectangular and preferably square base portion 2, the sheet being suitably scored to provide the sides 3, 4, 5 and 6, and corner portions 7, 8, 9 and 10. Each of the corner portions is diagonally scored, as represented at 7', 8', 9' and 10' and four lines of scoring 11,

12, 13 and 14 are provided parallel with the edges of the base 2 and the edges of the sheet and extending from edge to edge of the latter, such lines of scoring being herein represented as situated at equal distances from the edges of said base portion and the edges of the sheet. Moreover, each of the side portions 4 and 6 is provided with lines of scoring 15, 16, which meet diagonally disposed scoring lines 17, 18, 19, 20, extending from the corners of the base portion 2 to such lines of scoring.

Preferably I provide a bail for the receptacle and may employ any suitable means for attaching the same thereto. In the type of the invention illustrated in Figs. 1 and 2, I have represented openings 21, having preferably an enlarged circular portion and a narrow portion extending therefrom. Preferably such openings are provided upon the sides 3 and 5 and upon each of the corner portions 7, 8, 9 and 10, a pair of such openings being provided as shown upon each of such corner portions.

In folding the receptacle into position for use, the corner portions 7 and 8, are folded upon their diagonal lines of scoring and superimposed flatwise against the outer surface of the side 3, the corners 9 and 10 being similarly folded and superimposed against the outer surface of the side 5. In this position of the parts the five openings 21 represented upon the upper portion of Figs. 1 or 2 meet to provide a single reinforced opening for the attachment of the bail 22, as illustrated at 23 in Fig. 3, while the corresponding openings at the lower end of Figs. 1 and 2, similarly meet as indicated at 24 in Fig. 3 to permit the attachment of the other end of the bail 22. Preferably the bail is knotted at opposite ends, as indicated at 25, the knot being passed through the enlarged portion of the opening, whereupon the bail is drawn into the upper reduced portion thereof, as clearly indicated in said Fig. 3. If desired, I may employ a metallic or other eyelet 26 in connection with circular or other openings preferably provided at the points indicated in Figs. 1 and 2, such eyelets preferably being placed in each set of meeting openings after folding the receptacle into position for use, one eyelet being preferably employed for each set of such openings. With such construction the ends of the bail may be passed through such openings and

knotted thereafter to prevent drawing of the bail through the opening when the receptacle is in use.

The sheets 1 may be shipped flatwise, as represented in Figs. 1 and 2 and superimposed. If desired, the receptacle may be assembled before shipment, as indicated in Fig. 3 and thereafter folded for shipment, or, as is usually the case, after the receptacle has been used, it may be desirable to fold or collapse the same into compact form in order to save space. In order to collapse the receptacle after the same is folded into condition for use, I may fold the same, as indicated in Fig. 4, along either the line 11 or 13 represented in Figs. 1 and 2, in which case one of the sides to which the bail is attached is transversely folded and the opposite side is preferably superimposed flatwise thereupon, as indicated in said figure. If the assembled receptacle be folded along the line 11 into the form shown in Fig. 4, it will be apparent that since the corner portion 8 is positioned against the side 3, that portion of the scoring 12 embraced between its intersection with the scoring 11 and the scoring at the base of the side 3 and cover 8, will coincide with a portion of the scoring 11 where the same crosses the side 3, and hence the material of the receptacle will be folded along said coinciding scoring. The material of the receptacle will also be folded along that portion of the scoring 12 that is upon the wall 4, since the folding of the receptacle along the scoring 11, compels the folding thereof along the diagonal lines 17 and 18, and hence along the adjacent portion of the scoring 12. What is here stated is correspondingly true of the scoring 14. It is apparent that if the receptacle be folded along the scoring 13 instead of the scoring 11, the material of the receptacle will be folded along that portion of the scorings 12 and 14 that is between the scoring 13 and the scoring at the base of the side 5 and the corners 9 and 10. In order to ship the sheets they may be folded as if to use the receptacles and then be further folded into the condition shown in Fig. 4, with or without attaching the bail thereto, or the sheets shown in Figs. 1 and 2 may be folded along two parallel lines, such as those separating the base 2 from the sides 4 and 6, considering such lines as extending from edge to edge of the sheet, as shown, after which the opposite ends of such folded sheet may be folded upon the base portion 2, so that the folded sheet occupies no greater area than the base 2.

The lines of scoring 15, 16 are provided, not only to permit the folding of the receptacle into the position represented in Fig. 4, but to afford opposite pouring lips, the sides 4 and 6 being distended or bowed outward by the contents of the receptacle along the lines

15 and 16. The obliquely disposed lines 17, 18, 19 and 20 are provided mainly to permit the folding of the receptacle into the position shown in Fig. 4.

It will be apparent that by the use of the bail 22, the members comprising the two walls to which the same are attached are held in close engagement with each other.

It will be apparent that the folding of the walls of the receptacle in the manner indicated bring all free edges of the material to the upper end of the pail or receptacle, and that therefore no leakage of the material may occur between the walls 3 and 5 and the corner walls superimposed thereagainst. The bail 22 holds such superimposed corners closely in contact with the walls 3 and 8.

If desired, openings of any suitable type may be provided as at opposite sides of the openings 23 and 24 shown in Fig. 3, said openings being provided in the several members of the folding side walls which meet in the manner described. If desired, eyelets may be passed through and secured in such meeting openings in the manner described with respect to the modification shown in Fig. 5 and as illustrated at 23<sup>a</sup>, 23<sup>b</sup> (Fig. 6).

Preferably, as shown in Fig. 2, I provide the walls 3 and 5 with suitable flaps, 27 and 28, to be provided with openings corresponding to the openings 21 upon such sides. Such flaps when the receptacle is folded into shape for use, overlie the upper edges of the sides whereto the bail is attached and present their openings in line with the openings 23 and 24, so that the bail may be passed therethrough. If desired, such flaps may be provided with additional openings corresponding to the additional openings that may be provided upon said sides. It will be apparent that by such construction the upper edge of each of the walls to which the bail is attached will be securely bound together.

Having thus described one type or embodiment of my invention, I desire it to be understood that although I have employed specific terms they are used in a descriptive or generic sense, the scope of the invention being set forth in the following claims.

#### Claims.

1. A collapsible receptacle made from a single blank folded to present a base and four upstanding sides, each corner of the blank being adapted to be diagonally folded, and a pair of such folded corners adapted to be superimposed against each member of a pair of opposite side walls, whereby all free edges of the receptacle are brought to the top thereof, at least one member of such pair of opposite side walls being scored transversely thereof and the corners folded thereagainst being correspondingly scored to permit the folding of such member and corners upon themselves.

2. A collapsible receptacle folded for pack-

ing, comprising a sheet of material having a base portion, four side walls, four corners diagonally folded and superposed in pairs against an opposite pair of such side walls, 5 one of the walls of said opposite pair of walls being folded along a line extending transversely thereof and the corners superimposed thereagainst being folded therewith and the other wall of such pair of walls and 10 the corner superposed against it lying flat upon said transversely folded portions.

3. A collapsible receptacle made from a single blank folded to present a base and four 15 upstanding sides, each corner of the blank being adapted to be diagonally folded, and a pair of such folded corners adapted to be superimposed against each member of a pair of opposite side walls, whereby all free edges 20 of the side walls are brought to the top thereof, at least one member of such pair of opposite side walls being scored transversely thereof and the corners folded thereagainst being correspondingly scored to permit the 25 folding of such member and corners upon themselves, and the other pair of side walls being transversely scored to correspond to the transverse scoring upon the first mentioned pair of side walls, and also having 30 diagonal and vertical scoring to permit the collapsing of such other pair of side walls, whereby the receptacle may be folded upon itself for storage or shipment.

4. A collapsible receptacle made from a 35 single blank folded to present a base and four upstanding sides, each corner of the blank being adapted to be diagonally folded, and a pair of such folded corners adapted to be superimposed against each member of a pair

of opposite side walls, whereby all free edges 40 of the side walls are brought to the top thereof, at least one member of such pair of opposite side walls being scored transversely thereof and the corners folded thereagainst being correspondingly scored to permit the 45 folding of such member and corners upon themselves, and the other pair of side walls being scored to permit the collapsing thereof, whereby the walls of the receptacle may be superimposed flatwise upon the unfolded bot- 50 tom.

5. A collapsible receptacle made from a single blank folded to present a base and four 55 upstanding sides, each corner of the blank being adapted to be diagonally folded, and a pair of such folded corners adapted to be superimposed against each member of a pair of opposite side walls, whereby all free edges 60 of the receptacle are brought to the top thereof, at least one member of such pair of opposite side walls being scored transversely thereof and the corners folded thereagainst being correspondingly scored to permit the folding 65 of such member and corners upon themselves in combination with a flexible handle attached to a pair of opposite side walls and the folded corners superimposed thereagainst; the collapsed receptacle being capable of transportation or storage with the flexible handle attached.

In testimony whereof, I have signed my 70 name to this specification, in the presence of two subscribing witnesses.

HARRY J. POTTER.

Witnesses:

FREDERIC GILBERT BAUER,  
IRVING U. TOWNSEND.