March 4, 1924. 1,486,043

I. SCHWARTZ

PAPER BAG

Filed May 26, 1922

Fig. 1.

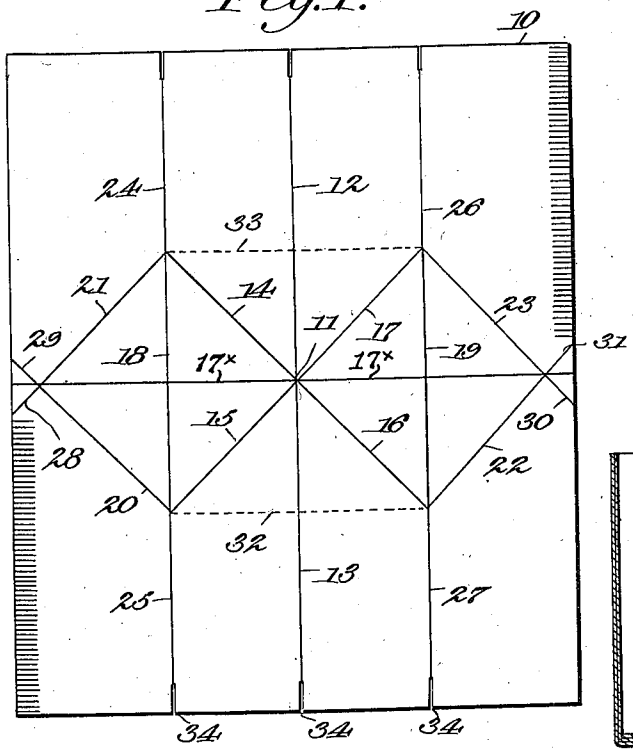


Fig. 2.

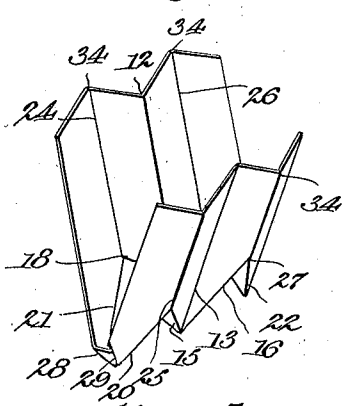


Fig. 5.

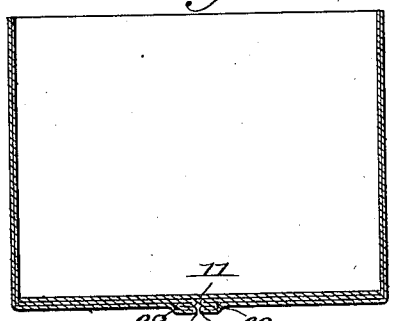
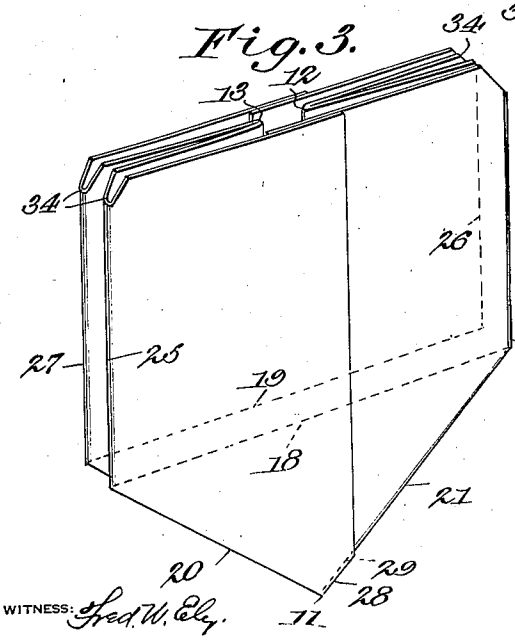


Fig. 3.



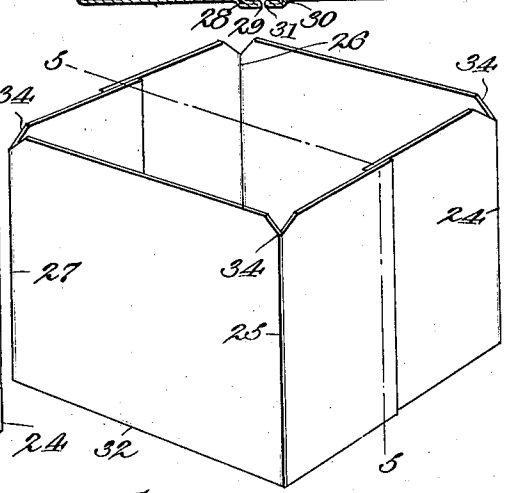


Fig. 4.

WITNESS: Fred W. Eby.

Isabela Schwartz. INVENTOR

BY Victor J. Evans

ATTORNEY

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UNITED STATES PATENT OFFICE.

ISABELA SCHWARTZ, OF NEW YORK, N. Y.

PAPER BAG.

Application filed May 26, 1922. Serial No. 563,899.

To all whom it may concern:

Be it known that I, ISABELA SCHWARTZ, a citizen of the United States, residing at New York city, in the county of New York and State of New York, have invented new and useful Improvements in Paper Bags, of which the following is a specification.

This invention relates to paper bags and particularly to such bags that when opened will form a square bottom container.

One object is to produce a device of this nature in which the bottom of the bag shall not be formed by meeting edges of the paper, but by the solid middle portion of the strip so that it may be more efficient as a lining for garbage pails and the like.

Another object is to produce the bag in a simple manner so that it may be readily manufactured by machines.

With these and other objects in view, the invention resides in the blank, the essential features of which are hereinafter fully described, are illustrated in the accompanying drawing, and are particularly pointed out in the appended claims.

In the drawings:—

Figure 1 is a flat view of a blank for forming the bag.

Figure 2 is a perspective showing the blank in partly folded condition.

Figure 3 is a perspective of the device in substantially folded condition.

Figure 4 shows the finished bag in open condition.

Figure 5 is a sectional view of the device as shown in Figure 4.

Like characters of reference refer to like parts in all views.

Referring to the drawing in detail, 10 represents an oblong blank of paper, the center of which is shown at 11. Radiating from the point 11 are fold lines 12, 13, 14, 15, 16 and 17 17^x. Lines 12 and 13 completely divide the blank 10 from end to end. Lines 14 and 15 are arranged at angles of 45° to the lines 12 and 13, respectively, and are themselves 90° apart. Lines 17 and 16 are similarly arranged on the opposite side of lines 12 and 13. Lines 14, 15, 16 and 17 are all of the same length, lines 14 and 15 being connected at their outer ends by a line 18 and lines 16 and 17 being connected by a similar line 19. From the extremities of the lines 18 and 19 are return lines 20, 21, 22 and 23.

Extending from the ends of lines 18 and 19, and parallel with lines 12 and 13 are lines 24, 25, 26 and 27, and beyond the intersection of lines 20 and 21 and of 22 and 23 are short lines 28, 29, 30 and 31 which extend to the edge of the blank.

In folding the blank, the parts are brought to the position shown in Figure 2, lines 18 and 19 moving up and lines 12 and 13 moving inwardly. Such movement naturally causes lines 24, 25, 26 and 27 to move outwardly, the edges folding along the short lines 28, 29, 30 and 31 to effect a lapping of the edges of the device, which edges are pasted together as indicated by the shading.

When completely folded as shown in Figure 3, the point 11 and the points of intersection of the lines 28 and 29 and lines 30 and 31, lie side by side and the bottom of the folded bag is pointed. Thus the square bounded by the lines 14, 15, 20 and 21 is folded on the diagonal line 18 and the two right triangles are positioned in contact. They are pasted in this position. In like manner the two triangles forming the square bounded by the lines 16, 17, 22 and 23 are brought together and pasted.

The folding of the blank will be better understood when it is stated that the blank is first folded on itself on the alined lines 17^x which extend throughout the width of the blank. The folded blank is then again folded on the lines 12 and 13. The folded blank is then folded on the lines 24 and 25, after which the corner portion of the folded blank is folded forwardly upon the major portion of the folded blank, the latter fold being on the lines 14 and 21 which are then in parallelism and close proximity. Subsequently to the said folding in the sequence indicated the folded blank is opened and paste is applied in the manner described for the completion of the bag.

When it is desired to open the bag to receive goods, it will be seen that the lines 18 and 19 will form two of the boundaries of the bottom, and that the other two boundaries will be determined by lines connecting the extremities of lines 18 and 19 with each other as indicated by the broken fold lines at 32 and 33. Thus there is produced a square bottomed bag without a seam across the bottom.

When the bag is to be used as a lining for garbage pails and the like, the upper edges

are slotted as at 34 so as to permit of folding the top of the bag over the edge of the pail and then tying a string about it.

I have shown and described a square bottomed bag, but it is obvious that if more suited to the purpose, an oblong bottomed bag could be constructed by merely varying the proportions; and while I have described what I deem to be the most desirable embodiment of my invention, it is obvious that many of the details may be varied without in any way departing from the spirit of my invention, and I therefore do not limit myself to the exact details of construction herein set forth nor to anything less than the whole of my invention limited only by the appended claims.

What is claimed as new is:—

1. An oblong blank of paper for forming a paper bag, characterized by an uneven number of longitudinal fold lines extending substantially throughout its length, and by an even number of medial fold lines, the latter constituting two squares with their inner corners together in coincidence with the intermediate longitudinal fold line and whose walls are foldable with respect to each other, and by fold lines spaced apart and disposed at right angles to the longitudinal fold lines and extending between square corners in coincidence with the outer longitudinal fold lines.

2. An oblong blank of paper for forming a paper bag, characterized by an uneven number of longitudinal fold lines extending substantially throughout its length, and by an even number of medial fold lines, the latter constituting two squares with their inner corners together in coincidence with the intermediate longitudinal fold line and whose walls are foldable with respect to each other, and by fold lines spaced apart and disposed at right angles to the longitudinal fold lines and extending between square corners in coincidence with the outer longitudinal fold lines; the said blank being also provided with slots at the ends of the longitudinal fold lines.

3. An oblong blank of paper for forming a paper bag, characterized by an uneven number of longitudinal fold lines extending substantially throughout its length, and by an even number of medial fold lines, the latter constituting two squares with their inner corners together in coincidence with the intermediate longitudinal fold line and whose walls are foldable with respect to each other.

4. An oblong blank of paper for forming a paper bag characterized by an uneven number of longitudinal fold lines extending substantially throughout its length, and by an even number of medial fold lines, the latter constituting two squares with their inner corners together in coincidence with the intermediate longitudinal fold line and whose walls are foldable with respect to each other; the said blank being also provided with slots at the ends of the longitudinal fold lines.

In testimony whereof I have affixed my signature.

ISABELA SCHWARTZ.