2 Sheets--Sheet 1.

L. C. CROWELL.

Paper Bags.

No. 146,435. Patented Jan. 13, 1874.

Fig. 1.

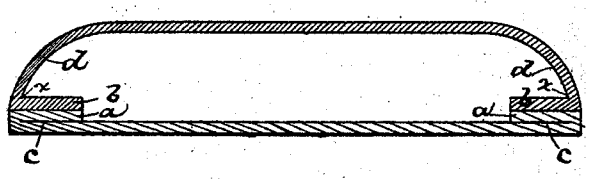
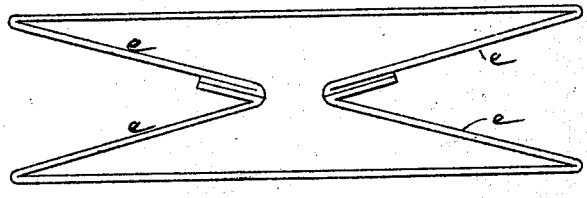


Fig. 2.



Witnesses:

M. M. Bothingham.
L. H. Latimer

Inventor:

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By his Attys.
Crosby & Gould.

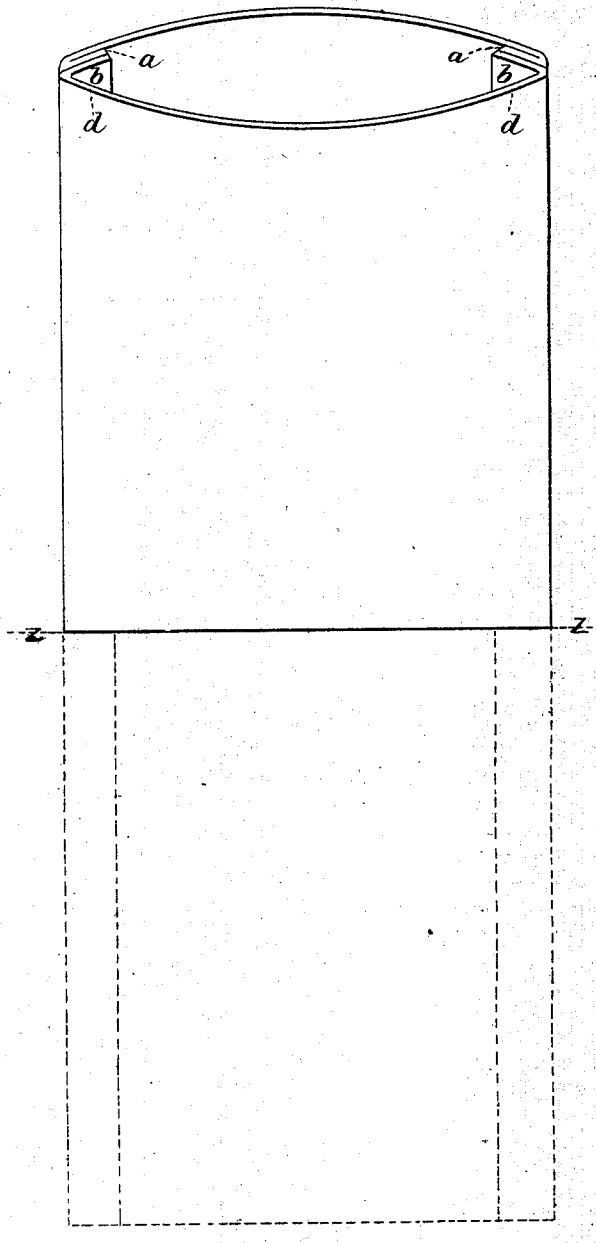
2 Sheets--Sheet 2.

L. C. CROWELL.

Paper Bags.

No. 146,435. Patented Jan. 13, 1874.

Fig. 3.



Witnesses:
M. W. Frothingham.
L. W. Latimer.

Inventors:
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UNITED STATES PATENT OFFICE.

LUTHER C. CROWELL, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PAPER BAGS.

Specification forming part of Letters Patent No. **146,435**, dated January 13, 1874; application filed December 11, 1873.

To all whom it may concern:

Be it known that I, LUTHER C. CROWELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Paper Bag; and I do hereby declare that the following, taken in connection with the drawings which accompany and form a part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

My invention relates to a new construction of a paper bag as an article of manufacture, in which construction I use for the bag a strip of paper of twice the length of the bag, at each of the opposite side edges of which paper is formed a narrow fold. The strip being folded at its center, one-half of the length of each of said side folds is folded against the other half, and by applying cement to one or both of the two surfaces thus coming together at the respective sides of the bag they adhere. If this were the only treatment the result would be an inwardly-extending and objectionable fin-like projection. To obviate this, one of the edge folds of the bag, or, rather, one-half of the edge fold of the strip, has paste applied to both sides of it, so that it adheres to the side of the bag, and as the other half of the edge fold, when brought into contact with the first, adheres to it the result is a bag formed with an unseamed bottom, and with seams at its opposite edges, each seam being formed by two inwardly-extending narrow folds connected together and to one side, and one side only, of the inner surface of the bag. To form a square-bottomed bag, the same construction is followed, but a wide fold is also made at each edge of the paper, the narrow fold being turned outward or reversely to the wide fold, the two narrow folds at each side (made two folds by doubling the paper at the center) being cemented face to face, and one fold at each side being also cemented to the adjacent surface of the paper, so that there is no salient projection.

My invention consists in a bag thus formed or a paper bag having an unseamed bottom and seamed side edges, each seam being formed by two narrow folds, one cemented to the surface of the paper against which it is folded, and the other cemented to said one and to it alone.

The disposition of the respective portions of the paper will be understood from the drawing, the thickness of the paper being exaggerated, the better to illustrate the invention.

Figure 1 shows a section of the plain bag.

The strip of paper for the first bag has at each edge a narrow fold, and the strip being folded at the center of its length the edge fold constitutes the two edge folds *a b*. Before the center fold is made half of the fold, or of the edge part to be folded, has paste applied to its inner surface, so that when folded at the center there are two folds, *a b*, one with and one without cement applied to its inner surface, so that the cement-applied fold *a* adheres to the surface *c*, against which it is folded, while the other fold *b* is free from the surface *d*. Cement being also applied to the surfaces of the two folds that are to meet, (or to either of such surfaces,) they also adhere, and the result is the united folds *a b* joined together, and together joined to the surface *c*, leaving an open bag from point *x* to point *x*, or from one extreme edge of the bag to the opposite one.

At Fig. 2 the wide folds *e* are made in addition to the narrow folds, the narrow folds then turning outwardly, and being cemented together, and also to one, and to one only, of the adjacent surfaces of the wide folds.

Fig. 3 shows the bag in side view, the paper, in forming the bag length embraced by the full and dotted lines, being folded on the center line *z z* to make the bottom.

I claim—

A paper bag which, having a bottom made by a central transverse fold of the paper, has its sides closed by edge folds, which, at each side of the paper, are cemented together and to one of the adjacent surfaces of the bag, substantially as described.

LUTHER C. CROWELL.

Witnesses:

FRANCIS GOULD,

M. W. FROTHINGHAM.