

(No Model.)

2 Sheets—Sheet 1.

L. D. BENNER.

PAPER BAG.

No. 304,403.

Patented Sept. 2, 1884.

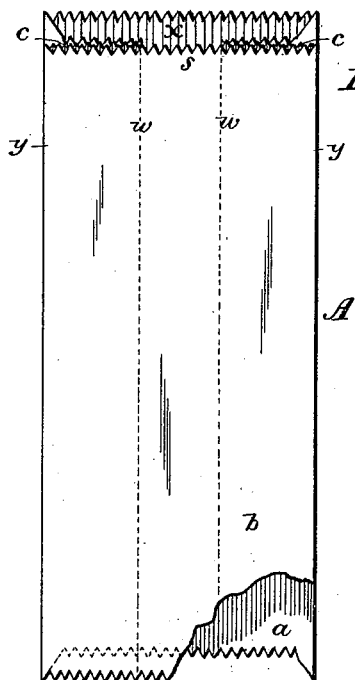


Fig. 1.

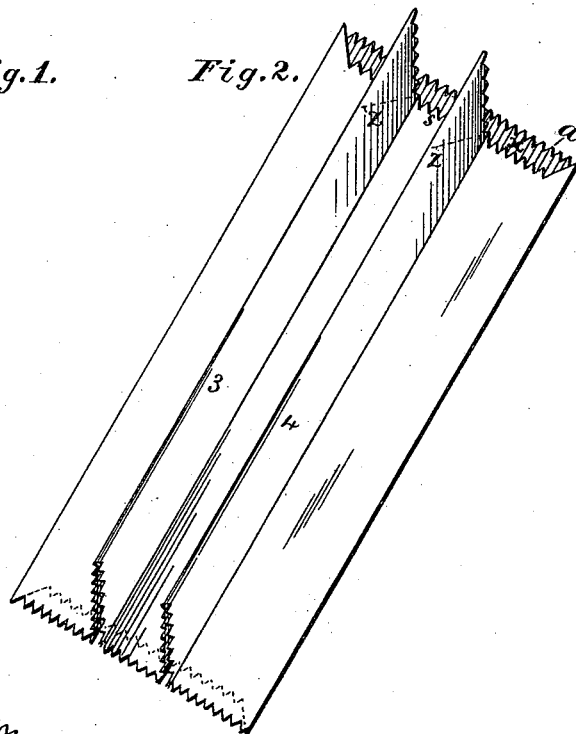


Fig. 2.

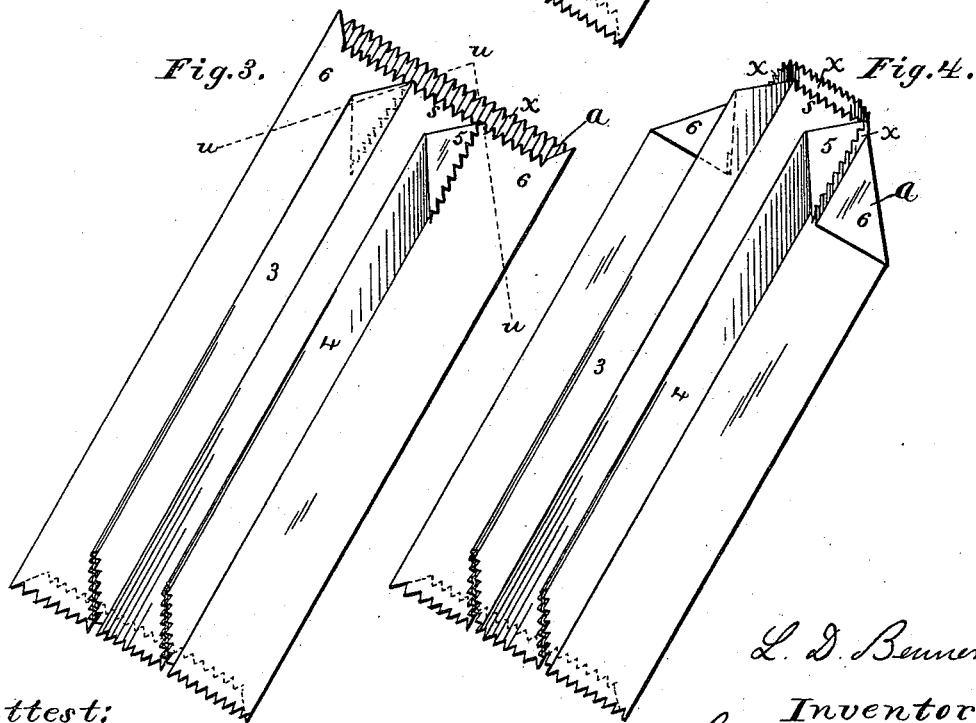


Fig. 3.

Fig. 4.

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L. D. Benner  
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(No Model.)

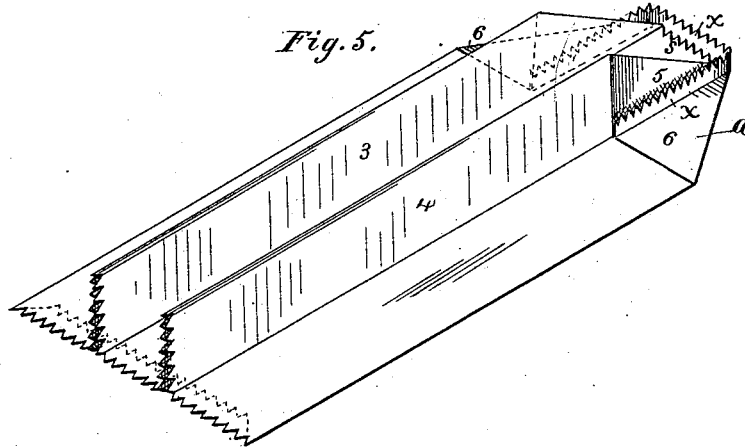
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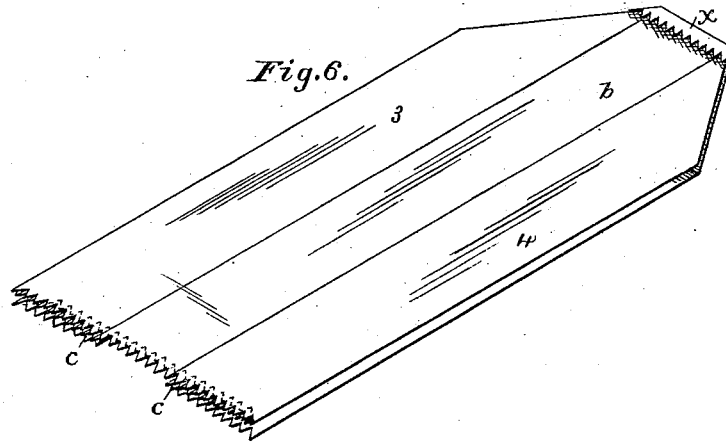
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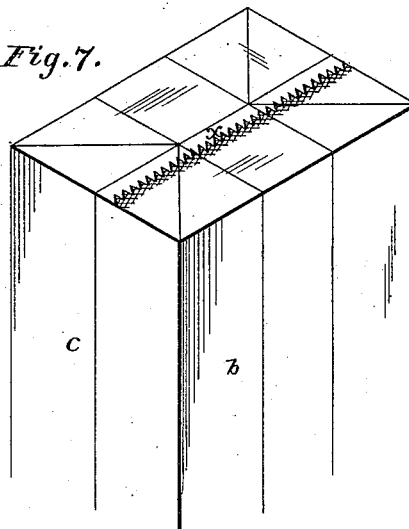
*Fig. 5.*



*Fig. 6.*



*Fig. 7.*



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# UNITED STATES PATENT OFFICE.

LORENZO D. BENNER, OF PEORIA, ASSIGNOR TO LUCIUS G. FISHER, JR.,  
OF CHICAGO, ILLINOIS.

## PAPER BAG.

SPECIFICATION forming part of Letters Patent No. 304,403, dated September 2, 1884.

Application filed June 8, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, LORENZO D. BENNER, of Peoria, Peoria county, Illinois, have invented certain Improvements in Paper Bags, of which the following is a specification.

My invention is a paper bag constructed as fully described hereinafter.

In the drawings, Figure 1 is a section of a continuous tube, showing the manner in which the sides are folded, and the construction of the end portion. Figs. 2, 3, 4, 5, and 6 illustrate the successive foldings of the end, inclosing and sealing the same. Fig. 7 is a perspective inverted view of the completed bag.

The bag is made from a continuous tube, A, cut into sections in the process of manufacture, and infolded at the opposite side to form the plicated or bellows sides of the bag. In the process of manufacture, each section is severed from the tube in such manner that the under layer or portion, *a*, separated from the upper layer or portion, *b*, by the intervening folded sides, *c*, shall project beyond said upper layer, forming a transverse lip or tongue, *x*, extending between the edges *y y* the full width of the sections *a b*, and the gum or cement by which the bottom of the bag is sealed is applied to this projecting lip. The upper layer of the bag, with the side fold beneath it, is then turned upward at each side upon the line *w*, to a position at right angles to the body, as shown in Fig. 2, forming two vertical parallel webs, 3 4. The outer corner of each web is then folded outward upon the diagonal line *z*, Fig. 2, and the triangular tongues 5, thus formed are turned flat upon the webs, as shown in Fig. 3. The outer corners of the layer *a* of the bag, with the side folds above it, are now folded upon the diagonal lines *u u*, and the triangular tongues 6 are brought closely down upon the body portion, the lip *x* at each side being thereby brought against the lower edge of the adjacent vertical tongue 5, to which it is caused to adhere by the gum applied, as before described. Each web 3 4 is now turned outward and flat down upon the side fold beneath it, which will cause the lip *x* to bend down

upon the face of the upper section, *b*, as shown in Fig. 6, to which it will adhere after pressure thereon, when the bag will be complete. By this series of operations the straight projecting edge or lip *x*, extending completely across one side of the bag parallel to the edge *s* of the part *b*, is folded down upon a straight line and cemented to the edge of the opposite shorter side of the bag, while the corners or ends are infolded, forming a square or satchel bottom. The forward edges of the infolded portions *c* may extend beyond the edge *s* of the portion *b* of the bag, as shown in Fig. 1, or they may be cut away to coincide with this edge *s*. In either case the subsequent folding operations, as described, will result in a seam across the width of the bag when the edges or sides are folded in, as set forth.

I claim—

1. The improvement herein described in the manufacture of paper bags, the same consisting in folding in the edges of a tube, cutting the latter to form a lip, *x*, with a straight edge extending across the folded tube, bending up the upper folded portion at each side at an angle to the body, and then turning inwardly toward the side folds the corners of the vertical portions and the corners of the horizontal portions, and then folding down the vertical portions to their first position, substantially as set forth.

2. A paper bag having plicated sides and satchel bottom, one portion of the bottom having a lip, *x*, extending transversely across the same, said lip being folded on a line even with the edge of the opposite portion of the bottom and projecting over and cemented to such portion, and having the corners turned inwardly between the plications, substantially as described.

Intestimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

LORENZO D. BENNER.

Witnesses:

GEO. M. GIBBONS,  
L. W. JAMES.