

T. W. GRINTER.
Paper Bags.

No. 155,610.

Patented Oct. 6, 1874.

Fig 1.

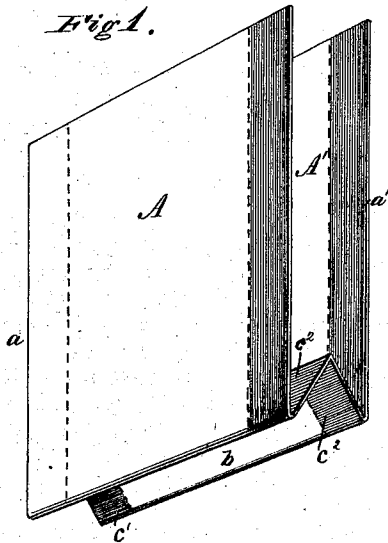


Fig 2.

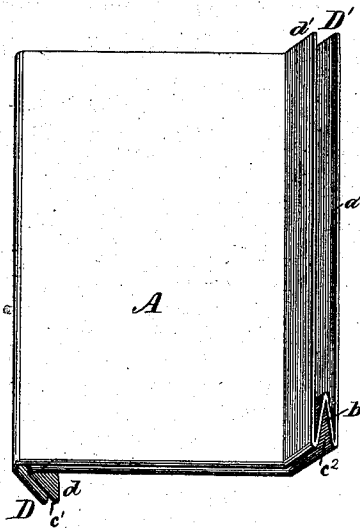


Fig 4.

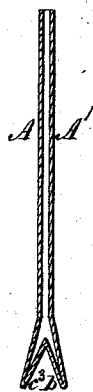
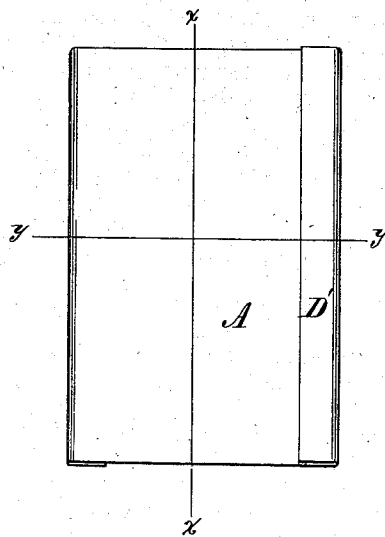


Fig 3.



Witnesses.

Harry King.

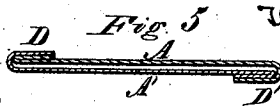
B. H. Morse

Inventor.

Thomas W. Grinter

by his attorney

W. D. Baldwin



UNITED STATES PATENT OFFICE.

THOMAS W. GRINTER, OF CINCINNATI, OHIO, ASSIGNOR TO HIMSELF AND
JOSEPH F. JEWETT, OF SAME PLACE.

IMPROVEMENT IN PAPER BAGS.

Specification forming part of Letters Patent No. **155,610**, dated October 6, 1874; application filed
February 23, 1874.

CASE B.

To all whom it may concern:

Be it known that I, THOMAS W. GRINTER, of Cincinnati, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Paper Bags, of which the following is a specification:

My invention contemplates the production of a satchel-bottomed paper bag, (having a bellows fold at bottom,) without bottom or central seams, but with a seam on each side. To this end I have devised a novel method of forming a satchel-bottomed paper bag from a rectangular strip of paper, of a length equal to that of the depth of both its sides and of that of the bottom folds, and of a width equal to that of the finished bag, including that of the side folds. The blank is first pasted along so much of both edges of one of its sides as afterward constitutes one side of the bag and of the bottom folds. That portion which forms the bottom fold is then pasted on the opposite side and folded, thus pasting the two edges of the sides together throughout the length of the bag, and also securing the inner sides of the bottom folds together at their edges, where the side folds are afterward formed. Paste is then applied to one side of the bag, which is folded over upon the main body, thus forming a side flap. The opposite edge is similarly pasted and folded, and the bag is complete. The order in which these manipulations are performed obviously may be varied without altering the characteristics of the finished bags.

The bags may be made either automatically or by hand. I have devised mechanism for making such bags, which will hereafter constitute the subject-matter of a separate application for Letters Patent of the United States; consequently no claim is here made to such mechanism.

The accompanying drawings show my improved bag in various stages of formation.

Figure 1 shows a view in perspective of a blank pasted and partially folded. Fig. 2 shows the next step, the side folds being partially formed. Fig. 3 represents the completed bag. Fig. 4 is a section therethrough on the line *x x* of Fig. 3, and Fig. 5 a similar one on the line *y y* of said figure.

The blank *A A'* is first pasted on both edges of that side which afterward forms the interior of the bag, on the parts *a a'*. The first bottom fold, *b*, may then be formed, and turned back upon the lower portion *A'* of the blank, to the pasted part of which it, of course, adheres. The opposite or outer side of the blank is now pasted on the parts *c' c''*; the second fold, *c'*, is formed, and its edges pasted together at the bottom. One edge of the blank is then pasted on the line *d*, and the side flap *D* formed. The opposite flap, *D'*, is then formed, and pasted in a similar manner. I prefer to paste one side flap on that side of the blank which is opposite the one previously formed, and to fold it on that side, thus producing the result shown in Figs. 2, 3, and 5. The bottom corners of the bag, if desired, may then be turned in and pasted.

I thus produce a strong bag with uniform side seams from a single strip of paper, cheaply and expeditiously, and without waste of material.

I claim as of my own invention—

A satchel-bottomed paper bag, constructed substantially as hereinbefore set forth, with a bellows fold at bottom, and with a seam at each side only.

In testimony whereof I have hereunto subscribed my name.

THOMAS W. GRINTER.

Witnesses:

GEORGE E. JEWETT,
JAMES M. KELLEY.