

C. E. SAWYER.
Paper-Bag.

No. 198,218.

Patented Dec. 18, 1877.

Fig. 1.

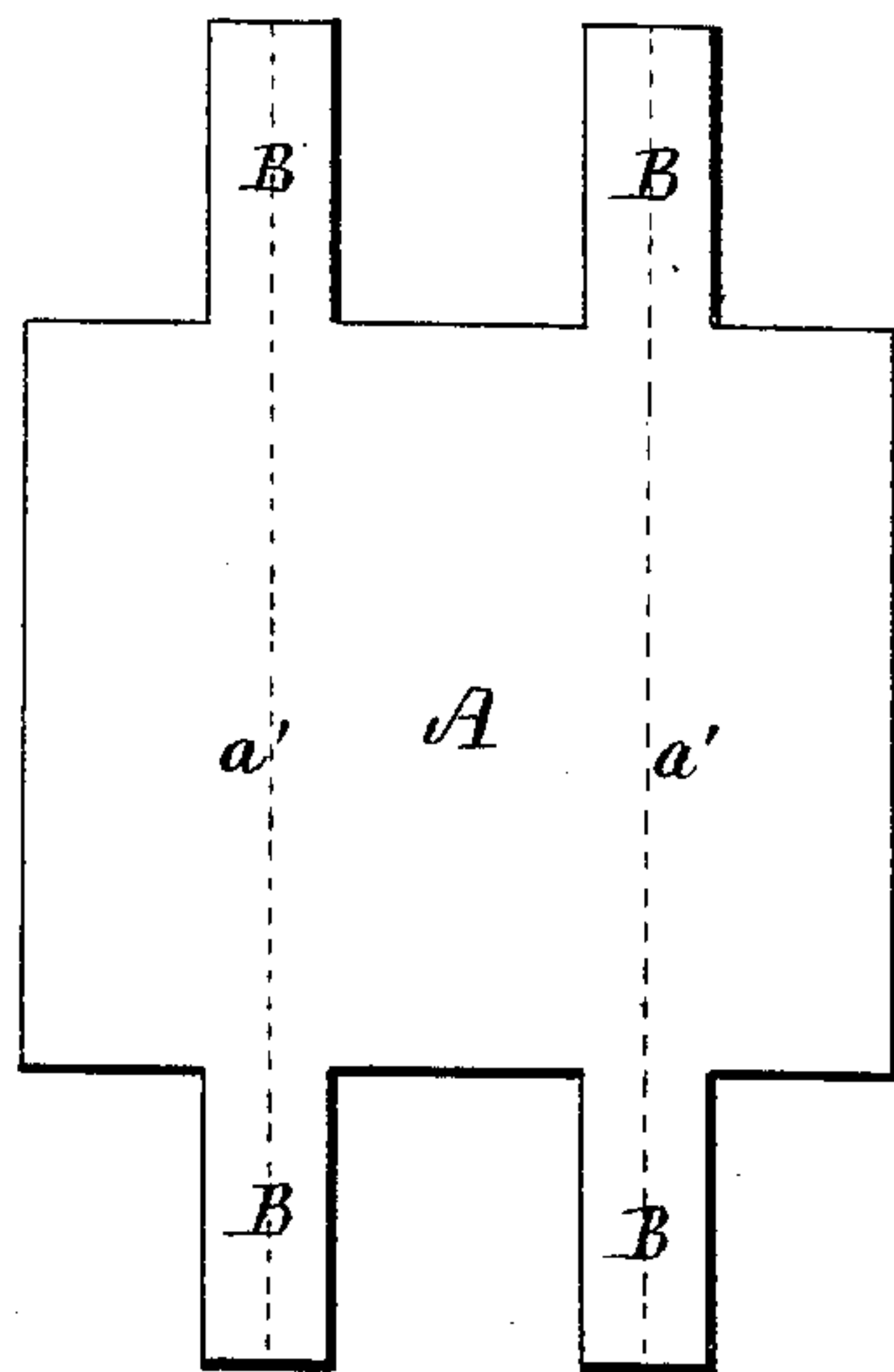


Fig. 2.

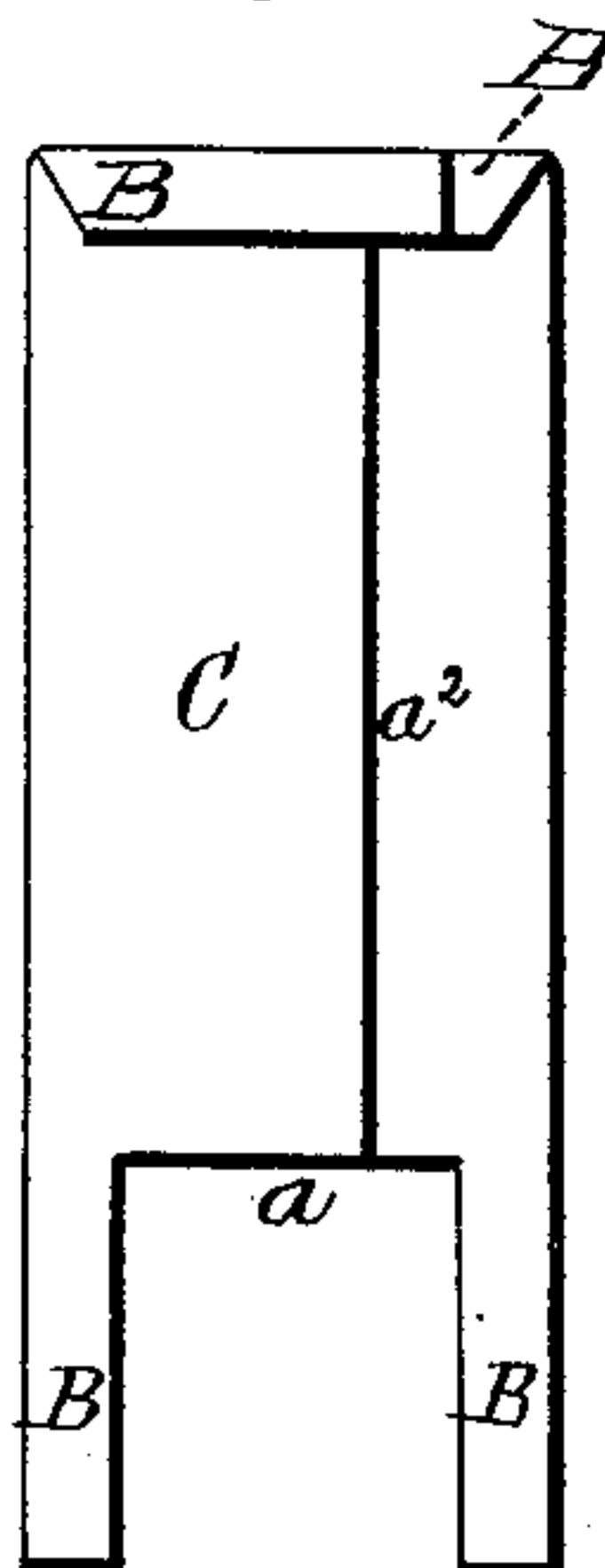


Fig. 3.

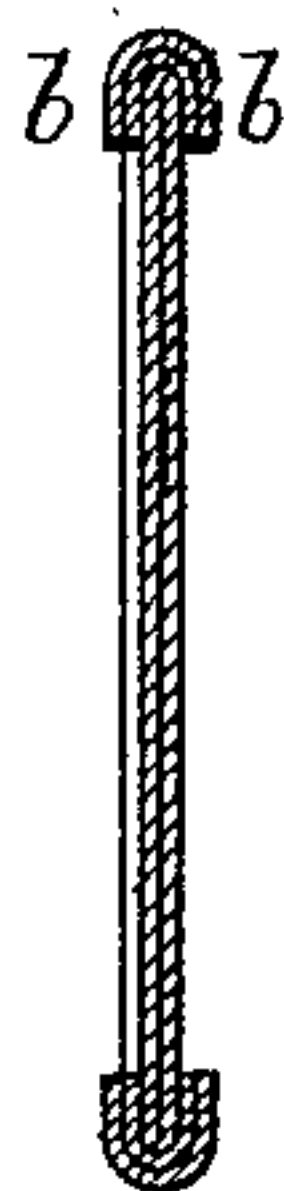
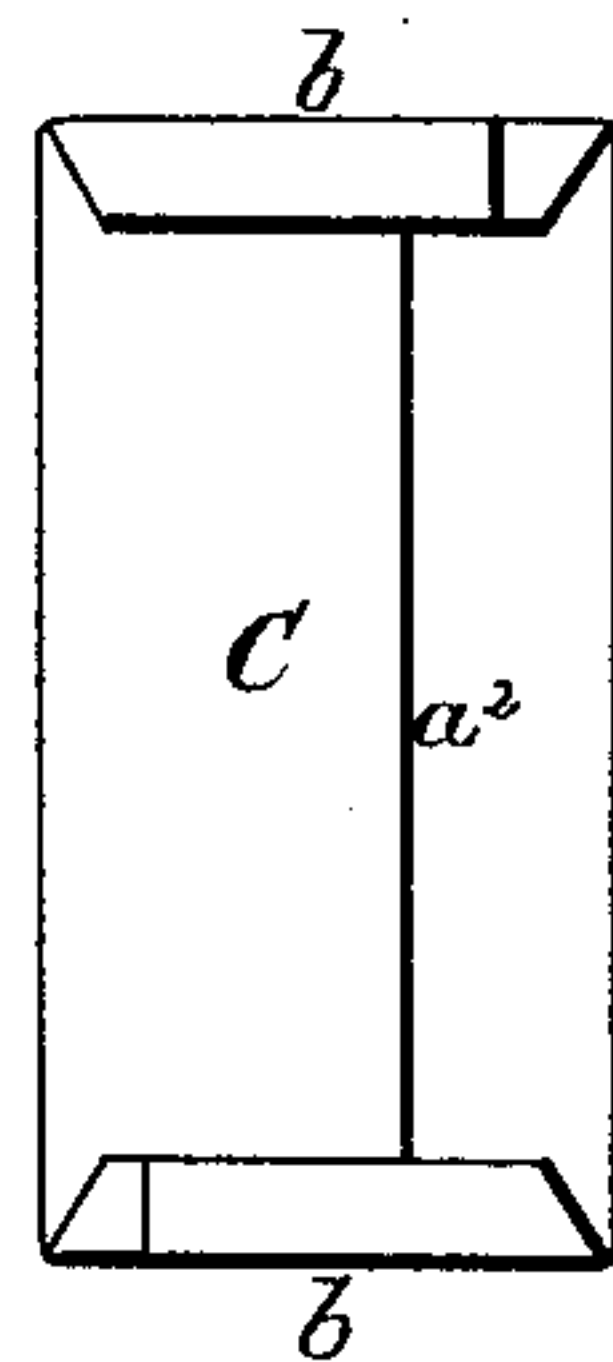


Fig. 4.



Witnesses.
H. H. H. H. H.
L. A. Curtis.

Inventor.
C. E. Sawyer.
V. Curtis. Atty.

UNITED STATES PATENT OFFICE.

CHARLES E. SAWYER, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN PAPER BAGS.

Specification forming part of Letters Patent No. **198,218**, dated December 18, 1877; application filed August 30, 1877.

To all whom it may concern:

Be it known that I, CHARLES E. SAWYER, of Boston, Suffolk county, Massachusetts, have made an Improvement in Paper or Cloth Bags, of which the following is a specification:

This invention relates mainly to bags designed for the transportation of seeds or samples by mail; and consists in the manner of constructing the bag, whereby the material at the corner is left intact and a continuous fold extends from the side around the corner, and across the bottom, in contradistinction to the usual method, in which the material is cut or slit entirely to the corner, and a weak place left at the latter unless re-enforced by an additional piece of material.

The drawing accompanying this specification represents, in Figure 1, a diagram of a sheet of paper or other material cut into the requisite form to produce my bag, while Fig. 2 represents the latter as folded into a tube. Fig. 3 is a longitudinal section of the bag, taken through the double-lapped corner, to be hereinafter explained; while Fig. 4 is a view of the completed bag.

In carrying my present invention into practice, I provide a sheet, A, of paper or other material, of a width to form the complete bag, and of a length somewhat greater than that of the bag, and I cut this sheet of paper into the form substantially as shown in Fig. 1 of the drawing—that is to say, I cut away one or both ends in such manner as to leave two strips or flaps, B B, extending longitudinally from each end of the main portion A, and in such position, with respect to A, that when the bag is folded at the sides the fold shall be in the center, or practically in the center, of each strip, as shown in Fig. 2 of the accompanying drawing. I now fold the sheet A longitudinally at *a'*, and paste its lapping edges, by which I form a tube, as shown at C in Figs. 2 and 4, the flaps B B being folded in the center and disposed at opposite corners of the tube, the lines of fold, which constitute the side limit of the bag, being shown by dotted lines in Fig. 1. I now turn one flap, B, down over the bottom edge *a*, Fig. 2, of the bag, in such manner that the flap shall embrace or lap both sides of such bag, as shown at *b b*, Figs. 3 and 4. I now turn the opposite flap

B in like manner down upon or over the first, thus inclosing both the latter and the end of the bag, and producing a very strong joint, for the reason that it provides a flap of two thicknesses of material upon each side.

It will be seen that I continue the material of the bag in the original piece intact beyond the point at which the corner is to be folded; consequently, when such corner is folded, no hole or slit is left to be subsequently closed by a single flap, as in the ordinary manufacture of bags of this class; therefore the contents of the bag cannot escape at the corners, as at present, as a double fold exists at this point in my bag.

I do not confine myself to the precise form or size of the flaps B, or the precise method of cutting the sheet A, as shown in the drawing, to produce these flaps, as it is evident that the way may be varied to some extent without departing from the essential element of my invention, which I consider embraces such a form of the sheets A that, when folded into the form of a bag, the corner is protected by a continuous fold extended from the side around the corner and across the end to a greater or less extent.

I prefer that the length and width of each wing or flap B shall be such that when the bag is folded into final shape the end of each flap shall about meet the termination of the double corner fold, as in this manner a double flap extends entirely across both sides of the end of the bag.

In supplying the market with these bags, each end is to be of like form, and one end is to be folded and permanently secured by paste, while the other is left with the flaps unfolded, as shown in Fig. 2, and when the bag has received its contents these flaps are to be folded down and pasted, when the bag will present the appearance shown in Fig. 4. I prefer that these last-named flaps should be provided with a coat of gum upon the inside, after the manner of letter-envelopes, to enable the final sealing or closing of the bag to be accomplished easily and expeditiously.

In the bags now supplied to the market for seeds and samples, and made from a single piece of material, a small hole remains in many cases at one or both corners, through

which the contents of the bag escape, while at best the opening at the end of the bag is protected only by a single flap on one side, and so that oftentimes the treatment of the bag in transportation soon wears a hole at each corner.

In my bag, the corners and ends which are the most subject to exposure are the strongest parts, and hence I am enabled to provide a very strong and durable article.

I claim—

1. A bag composed of a single folded piece of material, protected at one or both of its ends by a continuous flap that extends from the side and overlaps the end, as set forth.

2. A bag composed of a single piece of material, having a double flap extending partly or wholly across the end and overlapping both sides, substantially as and for purposes stated.

3. In the manufacture of paper bags, a sheet of material cut into the preparatory form herebefore described—that is, as composed of the sheet A, with the flaps B B extending from it at one or both ends, substantially as and for purposes stated.

CHAS. E. SAWYER.

Witnesses:

L. A. CURTIS,
F. CURTIS.