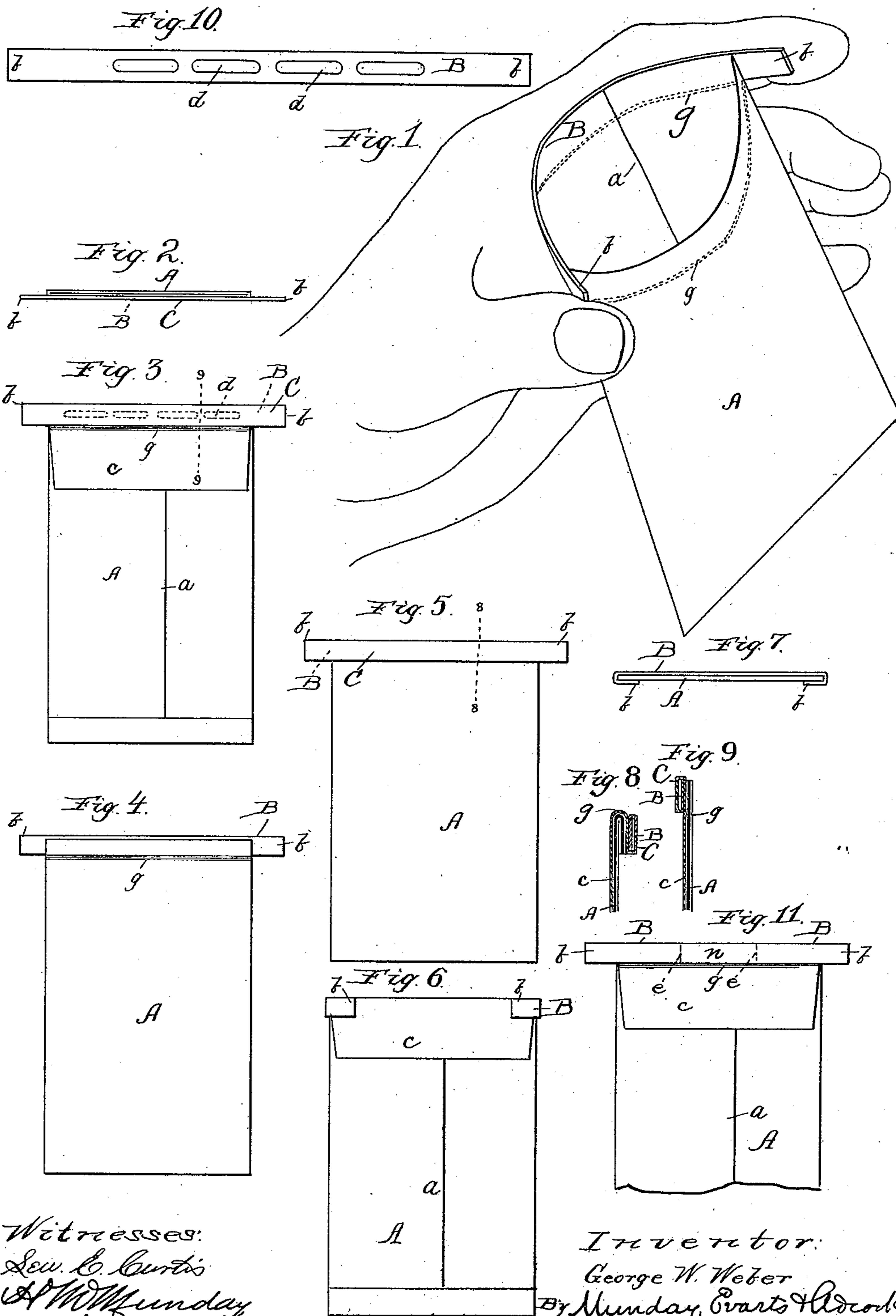


(No Model.)

G. W. WEBER.  
PAPER BAG OR ENVELOPE.

No. 488,783.

Patented Dec. 27, 1892.



Witnesses:  
Lew. C. Curtis  
A. W. Munday

Inventor:  
George W. Weber  
By Munday, Curtis & Hadcock  
His Attorneys.

# UNITED STATES PATENT OFFICE.

GEORGE W. WEBER, OF CHICAGO, ILLINOIS, ASSIGNOR TO WILLIAM A. VAWTER, OF SAME PLACE.

## PAPER BAG OR ENVELOPE.

SPECIFICATION forming part of Letters Patent No. 488,783, dated December 27, 1892.

Application filed January 21, 1891. Serial No. 378,561. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE W. WEBER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Paper Bags or Envelopes, of which the following is a specification.

This invention relates to improvements in paper bags, envelopes or analogous articles of that class in which a metallic strip is secured along one side of the mouth of the bag or other article with the ends of the metallic strip projecting somewhat beyond the edge of the bag on either side, whereby by folding the metallic strip over the mouth of the bag and then bending the ends or projecting portions of said strip transversely to the first fold the mouth of said envelope or bag will be securely closed and the fold removably retained in its position.

The invention relates more particularly to the novel arrangement of the metallic strip, one object being to provide a retaining strip that can be easily and securely fastened to the envelope or other article, that can be easily bent to open the mouth of the bag and which at the same time shall possess sufficient rigidity or stiffness in its end portions to securely lock the mouth of the envelope or bag against accidental displacement. One objection to this class of articles as heretofore constructed has been that the strip of metal if made sufficiently stiff to serve the purposes for which it was designed would not bend readily when the mouth of the bag was opened so that the bag could be filled; and it follows that when attempts were made to open the mouth of such a bag the edges thereof would be oftentimes torn in the act of filling the bag and thus render the latter unfit for use.

One object of the present invention is to obviate this difficulty and to provide the bag with a metal strip which shall possess the desired rigidity when folded but which also shall possess a desirable yielding quality whereby the mouth of the bag may be readily opened.

Another object of my invention is to overcome the difficulty in readily folding the edges of the mouth over upon the bag in closing. This has been a difficult operation by

reason of the large number of thicknesses of paper which must be doubled in the fold and the stiffness caused thereby. It is desirable that this fold should take place along the lower edge of the metal locking strip in order that the package may be securely closed and to render the fold a neat and symmetrical one. As heretofore constructed the tendency, unless great care is exercised, has been to fold upon an irregular line at some distance below the lower edge of the metal strip, and this is objectionable not only because it is less sightly but because it does not close the package as securely, small articles such as seed being able to work their way out. To render the folding at this point easy and prevent its taking place at any other point lower down on the bag, I form a transverse crease in the bag immediately below the metal strip, whereby the fold in closing the bag is naturally made in the proper manner and the free side of the mouth is left upon the inside of the metal strip, so that it cannot gap.

The above stated objections may be overcome in several ways as hereinafter described, and to this end my invention consists in a bag or pouch provided at its mouth with a flexible metallic strip possessing less pliability at its end portions than in its central portion.

In the accompanying drawings, which form a part of this specification, and in which similar letters of reference indicate like parts, Figure 1 is a perspective of one of my bags held open in the hand ready for filling; Fig. 2 is a top view of the same in the flat; Figs. 3 and 4 are opposite sides of the same; Fig. 5 is a view of the same side shown at Fig. 4 after the folding down at the mouth has taken place; Fig. 6 shows the side shown at Fig. 3 after the bag has been completely closed; Fig. 7 is a top view of the closed bag; Fig. 8 is a detail section on the line 8—8 of Fig. 5; Fig. 9 is a like section on the line 9—9 of Fig. 3; Fig. 10 is an enlarged view of one form of the metal locking strip; and Fig. 11 is a view similar to Fig. 3 of the modified construction.

In said drawings A represents the body of the bag, *a* being the side seam or fold.

B is the metal locking strip, which is secured to one side of the mouth of the bag, as shown. It is wrapped in a piece of Manila

or other suitable paper C, such wrapper forming a means whereby it may be pasted to the body of the bag. In order that this strip may readily yield to pressure exerted upon the ends *b* and bend so that the bag will open, that portion of the strip lying between the ends *b* may be cut away in part, as shown at *d*, Fig. 10, and in broken lines at Fig. 3. Or the same object may be accomplished by making the strip in parts and a portion of the center may be entirely omitted, for instance that portion *n* between the broken lines *e* in Fig. 11, enough of the metal being retained to securely hold the ends *b* in the wrapper C. With the locking strip thus weakened at the center so that it will readily bend there is no danger of tearing the bag or envelope in opening it.

Including the wrapper C, the portion *c* whereof is extended down upon the bag and the parts lapped at the joint *a*, there are at least four thicknesses of paper, which must be bent in folding over the mouth of the bag, and as these bags are usually made of heavy paper there is a very considerable degree of stiffness to be overcome. This stiffness not only renders the making of the fold difficult but tends to render any fold which may be made imperfect. It is overcome and the formation of the fold at the proper point is insured by creasing the paper upon a line transverse of the bag and immediately below the metal strip, as indicated by the broken lines *g* in Fig. 1. This may be done by passing the bag between rollers, one of which is grooved and the other of which flanged, or by subjecting the bag to the impact of a knife-edged instrument, or in any other well known way.

I do not desire to be limited to the precise constructions illustrated and described inasmuch as other forms of metallic strip having a pliable or yielding central portion and relatively rigid end portions will readily suggest themselves without being further illustrated or described herein. For example, the cut-away portions *d* illustrated in Fig. 10 of the

drawings are shown as extending lengthwise of the strip, but it is perfectly obvious that the shape of said openings is immaterial and that a greater or less number may be employed, as desired. It will further be understood that in that class of paper bags wherein one side of the bag is extended beyond the mouth thereof to form a tongue the metallic strip B may be secured to said tongue instead of being secured as shown adjacent to the mouth opening of the bag, inasmuch as when said tongue is folded over the mouth the said strip will be adjacent to the mouth thereof and may be folded in the manner hereinbefore described. It is not thought desirable to illustrate this change of form in view of the illustration hereinbefore referred to and the obviousness of the modification.

I claim:

1. The paper bag or envelope having a locking metal strip made yielding at the center and rigid at its ends, substantially as specified.
2. A bag having at its mouth a locking metal strip made pliable at its center and less pliable at its ends, substantially as specified.
3. A bag provided at its mouth with a metallic strip projecting beyond the sides or edges of the bag, said projecting end portions of said strip being more rigid than the central portion thereof, substantially as described.
4. A bag or pouch having a tongue at its mouth and a flexible strip folded upon itself and upon said tongue, substantially as described.
5. A bag or pouch having a tongue at its mouth extending across the width of the bag and a metallic strip applied to said tongue adjacent to the mouth of the bag, provided with end portions *b* projecting beyond the edge of the bag, said projecting end portions being less rigid than the main portion of said strip, substantially as described.

GEORGE W. WEBER.

Witnesses:

H. M. MUNDAY,  
EDW. S. EVARTS.