(No Model.)

C. H. BROWN.

SAFETY DEVICE FOR ENVELOPS.

No. 589,158. Patented Aug. 31, 1897.

FIG. 1.

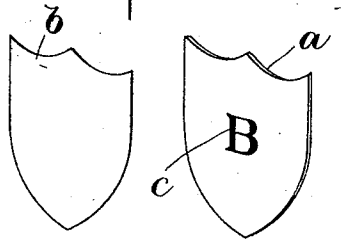


FIG. 2.

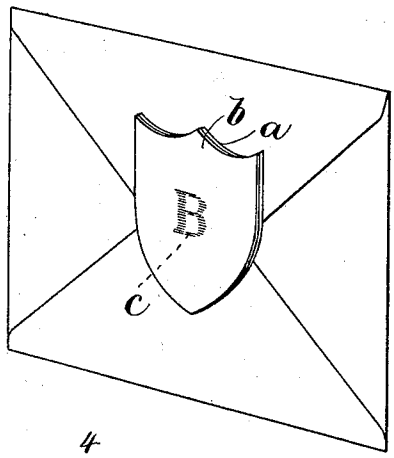


FIG. 3.

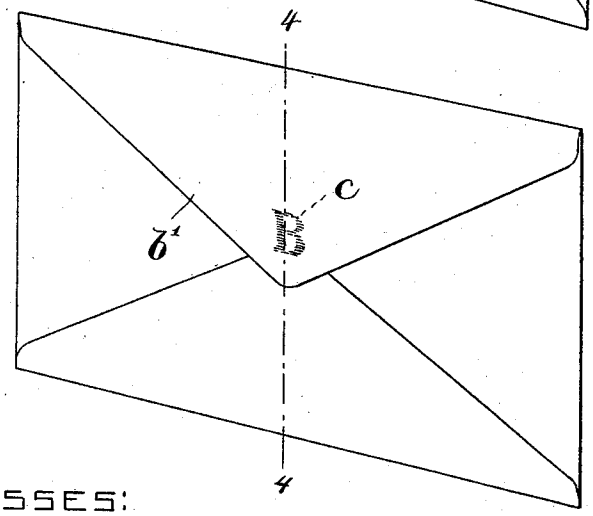
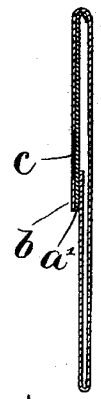


FIG. 4.



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UNITED STATES PATENT OFFICE.

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SAFETY DEVICE FOR ENVELOPS.

SPECIFICATION forming part of Letters Patent No. 589,158, dated August 31, 1897.

Application filed November 27, 1896. Serial No. 613,642. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HAZEN BROWN, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Safety Devices for Envelops, of which the following is a specification.

The invention has for its object to provide a safety device for envelops which shall accurately indicate any attempt to fraudulently open the envelop by moistening the sealed flap.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a perspective view showing the parts of one embodiment of my improved device separated. Fig. 2 represents a similar view showing said parts connected. Fig. 3 represents a perspective view showing another embodiment of my invention. Fig. 4 represents a section on line 4 4 of Fig. 3.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention I provide a backing sheet or layer, which may be of paper of any suitable thickness, and a facing sheet or layer of a suitable transparent or translucent material, such as thin linen paper, said sheet being adapted to absorb moisture. Between the two sheets is interposed soluble coloring-matter, such as anilin-ink, which is disposed to form a letter, monogram, or other design, and may be applied by the ordinary printing operation to the front side of the backing-sheet. The two sheets are cemented or otherwise secured together, so that the coloring-matter is interposed between the two layers and is visible through the facing-layer, although not exposed to contact with external objects. The said sheets or layers may be made to constitute a seal, as shown in Figs. 1 and 2, where *a* represents the backing-layer, *b* the facing-layer, and *c* the soluble color. The rear side of the backing-layer may be gummed and the whole secured as a seal to the back of an envelop, as shown in Fig. 2.

The coloring-matter is visible through the facing-sheet, but cannot be defaced by ordinary usage, because it is protected by the facing-layer. If, however, the back of the envelop be moistened, by steam or otherwise, in the attempt to fraudulently open it, the moisture will penetrate the facing-layer and attack the coloring-matter, giving it a blurred appearance, which is a conclusive proof that the envelop has been tampered with.

In Figs. 3 and 4 I show the backing and facing layers made to form the flap of an envelop, *a'* being the backing-layer and *b'* the facing-layer, the coloring-matter *c* being printed upon the backing-layer and visible through the facing-layer. The two layers are cemented together and the rear side of the back layer may be gummed, like the back of an ordinary envelop-flap.

I claim—

A safety device for envelops, comprising a backing sheet or layer, a facing sheet or layer of transparent or translucent material, and soluble coloring-matter between said sheets disposed in a printed design which is visible through the facing-sheet, the said facing-sheet being adapted to be penetrated by moisture and permit access of the same to the coloring-matter.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 21st day of November, A. D. 1896.

CHAS. H. BROWN.

Witnesses:
A. D. HARRISON,
P. W. PEZZETTI.