

(No Model.)

E. E. HICKOK.
SAFETY SEAL FOR ENVELOPES.

No. 532,958.

Patented Jan. 22, 1895.

Fig. 1

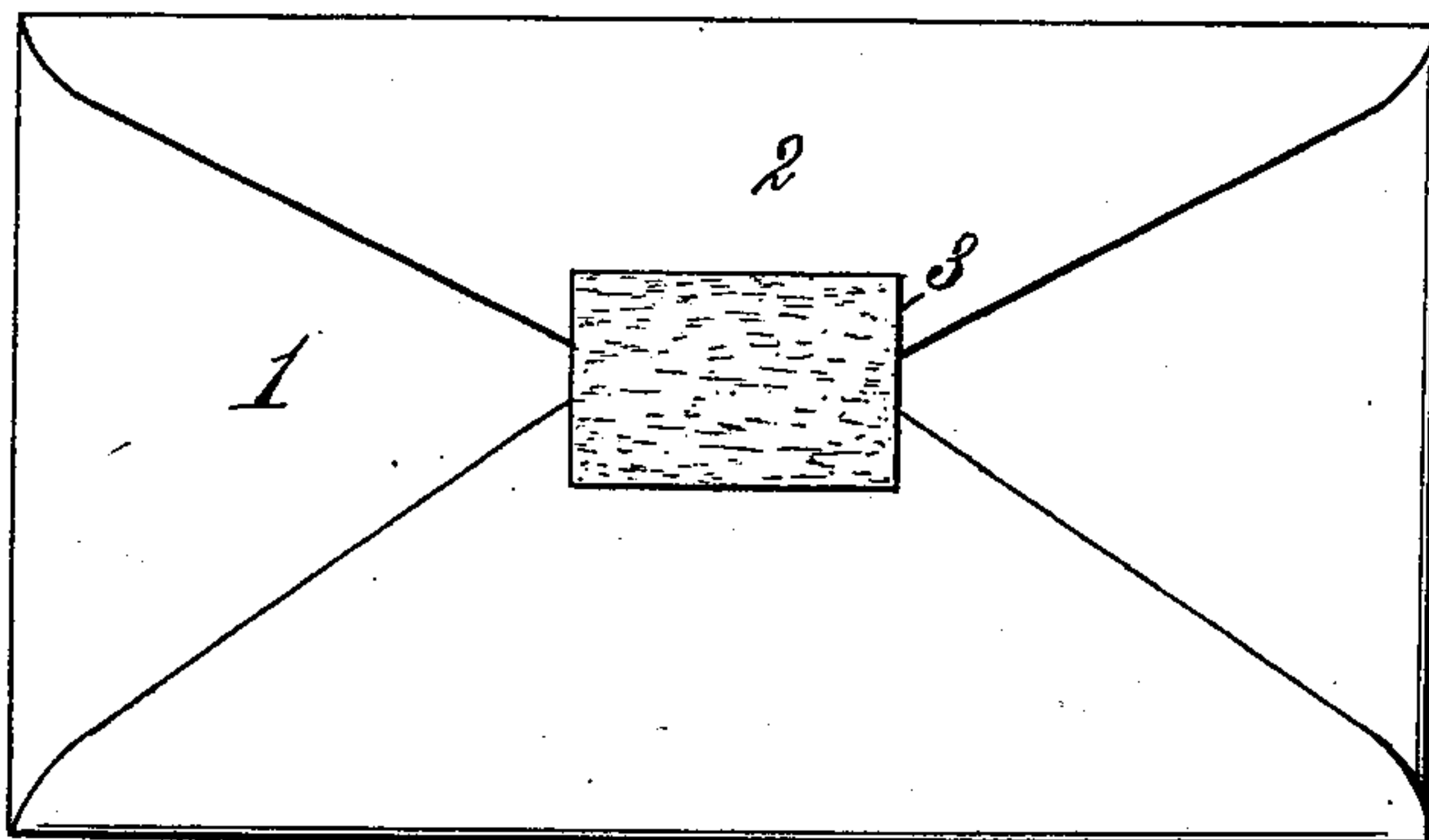
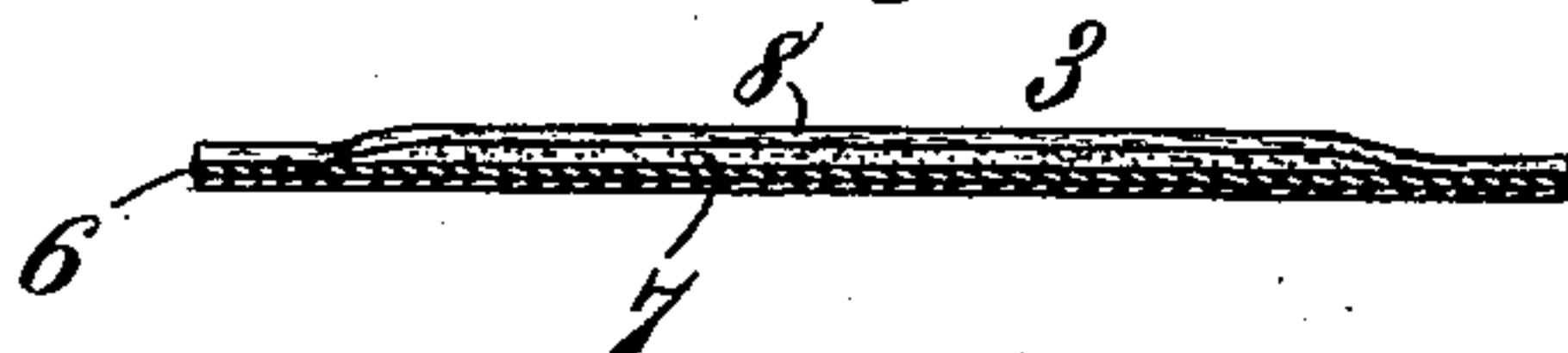


Fig. 2.



Fig. 3.



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SAFETY-SEAL FOR ENVELOPES.

SPECIFICATION forming part of Letters Patent No. 532,958, dated January 22, 1895.

Application filed October 1, 1894. Serial No. 524,621. (No model.)

To all whom it may concern:

Be it known that I, ELBERT E. HICKOK, a citizen of the United States, residing in the city of St. Louis, in the State of Missouri, have
5 invented new and useful Improvements in Safety-Seals for Envelopes, of which the following is a specification.

My invention relates to an improved safety seal for envelopes, and has for its object to
10 provide a seal adapted to be secured to the outside of an envelope or other wrapper and when so applied shall render it impossible to open the envelope without the fact being made apparent, and to this end my invention
15 consists in a seal formed of paper or similar material having incorporated therein beneath its outer surface a dry soluble coloring matter and provided upon its under side with an adhesive coating, substantially as hereinafter
20 fully described and afterward specifically defined in the claims following the description.

A common method of surreptitiously opening envelopes and other wrappers sealed by adhesives is to loosen the closure by moisture
25 when the envelope may be opened, the contents inspected or removed and the envelope again sealed up so that the fact that the envelope has been opened will not be indicated. Where seals are employed the same result is
30 accomplished by removing the seals by moisture or by skillfully separating the seal, by splitting and in other ways so as to permit the envelope being opened and then by the aid of an adhesive joining together the separated
35 or broken portions of the seals so that the fact that the seal has been tampered with will not be detected.

I have devised a seal by means of which it will be rendered impossible to open an envelope or wrapper to which it is applied by either
40 of the methods above described or any similar method, without the fact being immediately rendered conspicuously apparent and palpable, and I will now proceed to describe the manner in which my improved seal is made
45 and used, due reference being had to the accompanying drawings, forming a part of this specification, wherein—

Figure 1, is a rear view of an envelope with
50 one of my improved seals attached. Fig. 2, is an enlarged sectional view thereof, and Fig. 3, is a similar view of a modification.

Referring to the drawings the numeral 1 indicates an envelope of ordinary construction; 2, the flap thereof, and 3 one of my improved seals affixed thereto.

The seal is formed from a piece of bibulous paper formed from stock having a very short and loose fiber and consequently possessing but slight tensile strength. One side of this
60 paper is calendered and a coating of adhesive is applied thereto by means of which the seal may be affixed to the envelope. A colored powder consisting of any suitable soluble coloring matter is applied to the other side of the
65 paper and is forced into the fiber of the paper by pressure, this operation being facilitated by the porous nature of the paper owing to the loose fiber composing the same. The colored powder is then brushed from the surface
70 of the seal so that the seal cannot be distinguished from a plain seal of ordinary manufacture. Referring to Fig. 2 of the drawings 4 indicates the calendered side of the seal having applied thereto a coating of adhesive
75 material, and 5 the porous, bibulous body portion thereof in which the powdered coloring matter is embedded.

Instead of making the seal of a single thickness of bibulous paper it may be made of two
80 thicknesses of paper as shown in Fig. 3, the under sheet 6 being coated with adhesive material and the powdered coloring matter, as indicated at 7 in said figure, being inclosed
85 between said sheet and a superimposed sheet of bibulous paper 8, the two sheets around their entire peripheries or edges being united by adhesive material, or in any other suitable or preferred manner. When thus constructed the upper sheet 8 may be formed from bibulous
90 paper of a loose fiber possessing slight tensile strength, as before described, and the under sheet 6 may consist of ordinary paper, or both sheets may be formed from the same paper, as may be preferred.

In practice the flap of the envelope is gummed down upon the back in the usual manner and by moistening the back of the seal the same may be caused to adhere to the
95 flap and back of the envelope in the usual manner, the calendered under surface of the seal preventing the moisture from permeating the coloring matter. If it be attempted to remove the seal by moistening the same
100

the bibulous paper will readily absorb the moisture and the coloring matter incorporated therein will be dissolved or partially dissolved and will color the exterior of the seal so as to denote that the same has been tampered with; or, if the seal is split, broken, or otherwise separated so as to afford access to the envelope, and it be attempted to repair the same by adhesives the bibulous paper will absorb the moisture from the adhesive and color the seal in the manner before described. By making the paper from loose, short fibers, it is rendered very porous so that the coloring material in a powdered form may be readily forced into its interstices and the paper rendered highly bibulous. At the same time the paper possesses but slight tensile strength so that it will be very easily torn by any attempt to surreptitiously open the envelope by detaching the seal.

Any coloring matter soluble in water may be employed provided it be in a dry and powdered form, and the seals may be made in any form, ornamental, fanciful or arbitrary, that may be preferred.

The seals may be made separately or may be made in sheets and the seals cut therefrom, a convenient method being to make them in sheets, the seals being divided from each other by perforations, after the manner of postage stamps.

I have described my improved seal as being applied to an envelope, but it will be readily apparent that the same may be employed as a protection against the fraudulent opening

of parcels, boxes, packages, inclosures, and wrappers of all kinds adapted to be fastened by a seal.

Having described my invention, what I claim is—

1. A bibulous paper safety seal having embedded in the interstices of the paper a soluble colored powder, said powder being normally invisible upon the surface of the paper, substantially as described.

2. A safety seal composed of bibulous paper calendered upon one side and provided with an adhesive coating and a soluble colored powder embedded in the interstices of the paper, substantially as described, and for the purpose specified.

3. A safety seal composed of bibulous paper inclosing between its opposite surfaces a soluble coloring material, the under side of said seal being calendered and provided with an adhesive coating, substantially as described.

4. A safety seal composed of bibulous paper formed from loose, short fibers, calendered upon one side and provided with an adhesive coating and a soluble colored powder embedded in the interstices of the paper, substantially as described and for the purpose specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ELBERT E. HICKOK.

Witnesses:

G. R. SNEED,
MICH. HURST.