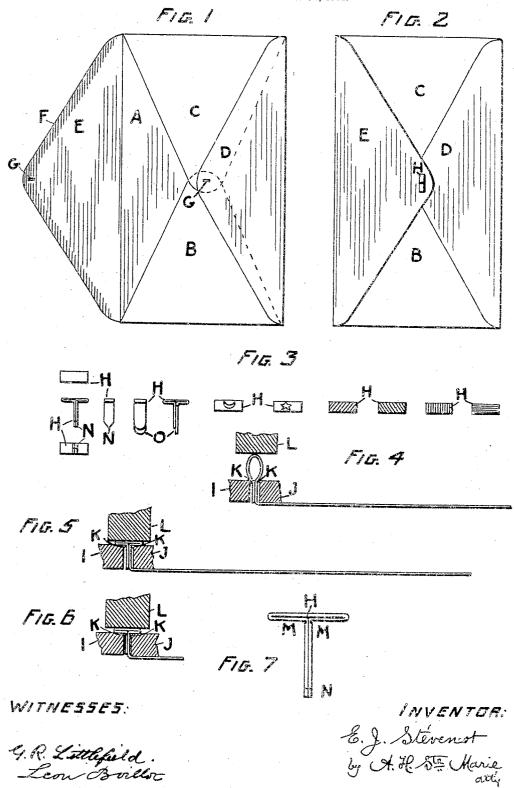
## E. J. STÉVENOT. ENVELOP FASTENER.

APPLICATION FILED JAN. 5, 1904.



## United States Patent Office.

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## ENVELOP-FASTENER.

SPECIFICATION forming part of Letters Patent No. 786,692, dated April 4, 1905.

Application filed January 5, 1904. Serial No. 187,839.

To all whom it may concern:

Be it known that I, EUGÈNE JOSEPH STÉVE-NOT, a citizen of Belgium, residing at Davisville, in the county of Yolo and State of Cali-5 fornia, have invented a new and useful Envelop-Fastener, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to the sealing of en-10 velops or such cases or wrappers as are ordinarily made of paper and used for inclosing letters, documents, and other matter of greater or less intrinsic value and relative importance.

It is familiarly known that letter-envelops, 15 for instance, are for the most part sealed simply by gumming or sticking together the flaps with which they are formed. This affords but little protection, as a clever operator who has an opportunity and the desire to 20 do so will steam the sealing-gum, and after opening the envelop and reading or abstracting its contents he can easily restore it to its closed, apparently normal, condition with the aid of a little paste or mucilage without the 25 slightest fear of detection. Wax and other seals of course are sometimes used instead of or in addition to the gum; but these seals are objectionable in that they are more or less expensive, inconvenient to apply, and not proof 30 against imitation and substitution.

The main object of this invention therefore is to provide an improved sealing or fastening means for envelops, &c., that will not have the defects above noted, but which, on the con-35 trary, is simple, economical, easily applied, and absolutely secure to the extent that it cannot fail to indicate any attempt to meddle with it.

In the accompanying drawings, Figure 1 40 shows a convenient form of envelop for the application of this improved fastener. The envelop is there seen in an inverted position that is to say, with the under side uppermost and open, the sealing-flap being outwardly ex-45 tended. Fig. 2 is a view similar to the preceding, but shows the envelop closed with the fastener thereto applied. Fig. 3 represents a group of fasteners of special manufacture and design in which the invention is embodied, 50 the several fasteners being shown in plan, edge

view, bottom view, and side elevation. Figs. 4, 5, and 6 illustrate one method of manufacturing the fastener. Fig. 7 is an enlarged view of a finished fastener made according to this method.

Like letters of reference, wherever they occur, designate like parts throughout the draw-

ings and specification.

The envelop may be made of any suitable quality of paper and of any required size from 60 the smallest to the largest. It may also be fashioned according to any of the several modes or processes of manufacture commonly followed in producing paper envelops. A convenient method to employ, however, is to 65 make the envelop as illustrated in Figs. 1 and 2, wherein it is shown as consisting of a main body portion (marked A) and four integral flaps B, C, D, and E, respectively formed at the ends and sides thereof. This allows the 7° envelop to be made of a single blank or paper sheet and facilitates its folding preparatory to incasing or wrapping the object which it is designed to contain. The edges of the aforesaid flaps may or may not be gummed, as pre- 75 ferred. However, it is useful to secure them to one another by mucilage or some similar adhesive substance in the usual manner, the same being applied, as at F in Fig. 1, so that the flap D will overlap and firmly hold the two flaps 80 B and C adjoining it, and the flap E can be turned down and pasted upon all three of them in the position indicated at Fig. 2. When their edges are not gummed, the several flaps are simply held together by means of the fas- 85 tener hereinafter described. Through each one of the flaps B, C, D, and E is made a small slit, as G, at such a point in each that when the four flaps are folded and brought together the four slits therein will coincide or register, 90 so as to constitute a continuous aperture for the passage of the stem of a T-shaped fastener H, which fastener is detailed in Figs. 3 and 7 and consists of a strip of thin sheet metal doubled upon itself. This fastener it is un- 95 derstood is inserted and secured in place by introducing it under the three combined lower flaps B C D, with its head turned toward the side A of the envelop, then passing its stem or prongs through the slits of all four flaps, 100

and finally spreading apart the prongs upon the outside of the top flap E, as illustrated in Fig. 2. The aforesaid fastener is made frangible to the extent that one or both of its prongs 5 will bear bending once, but will not withstand a second flexure. Thus the fastener can have its two prongs turned down on opposite sides to close the envelop; but when that has been done the prongs, or one of them, will break at 10 the second bending if an attempt is made to reseal. It would be plainly evident in any such case that some one had tampered with the envelop, as the fact could not be concealed. In order to afford an additional safeguard, the 5 fastener may be made in different colors, used singly or in combination, as may be desired. Fig. 3 exhibits several such fasteners, the conventional shading whereof respectively represents purple, green, red, and blue; but all col-20 ors, plain or blended, can likewise be employed. By adopting a colored fastener of this type distinct from what may be chosen by others a person carrying on correspondence of a confidential nature will thus be better en-25 abled to guard against substitution. To further insure safe sealing, this invention contemplates also the use of identifying characters, of which the crescent and star (shown in Fig. 3) are but suggestive examples, and which 30 characters, previously selected and agreed on between correspondents, can be impressed or formed on any suitable part of the fastener-for instance, upon its head—which goes inside the envelop when scaling. These characters, 35 particularly when formed by hand and judiciously located, will afford as much protection against the fraudulent replacing of the fastener as any private mark on a check, draft, or money-order affords against forgery.

The desired frangibility of the fastener can be had in two ways—either chemically, by making the fastener of a suitable alloy, or mechanically, by making a slight incision in the side of one prong or both prongs thereof, in the manner presently to be described. The latter way of rendering the fastener suitably frangible or breakable is preferred. Any

metal that bends may be used.

One method of forming the fastener and in-5° cising it for the purpose stated is illustrated in Figs. 4 to 6. The method contemplates the making of a number of fasteners—say one bundred or a gross or other desired quantityfrom a continuous bar or strip of the chosen 55 metal or combination of metals. The first step in carrying out the said method or process of manufacture, which of course implies pulling, pushing, or conveying and leading the metal strip by any approved means, con-60 sists in taking from the strip and doubling up the metal needed to make the required size of fastener, which is conveniently accomplished by looping the strip at or near one end with a pair of jaws I J, as indicated in Fig. 4. As 65 shown in this figure, the jaws are provided on

their opposite upper edges with sharp narrow blades K, one to each, which blades bear each on one side of the doubled end of the strip and grasp a sufficient length or section thereof between them, respectively, to form the 7° head and prongs of the fastener, the metal above the blades making a loop which upon being pressed down will produce the head and the two thicknesses of metal below the same being held more or less close together 75 between the jaws and destined to constitute the prongs after full compression one upon the other and separation from the strip. The jaws I J operate directly under a hammer L, which may aid in forming the loop. The sec- 80 ond step (illustrated in Fig. 5) involves the crushing of the loop to convert it into the fastener-head, which is very simply effected by driving or forcing down the hammer L upon the looped metal while it is held by and be- 85 tween the jaws I J and their blades K. Fig. 3 illustrates the third step, consisting in the incision of the fastener just below the head, preferably on both sides thereof—that is to say, in the outer side of each prong at the 90 point where the same joins the head. It is sufficient to incise slightly either prong to cause its breakage at a second bending or upon its being restraightened after the first bending, provided the incision be made squarely 95 in the side of the prong, as indicated at M, Fig. 7. Both prongs are thus shown cut into or incised in the last-named figure, as it is deemed to be the preferable way of practicing the invention, although one incision in 100 either prong may answer. No limitation of the invention, therefore, is intended in that respect. The incisions are made, as shown in Fig. 7, by bringing the jaws and blades a little closer together than they appear in the 105 preceding views, advancing either blade or both blades to cut to the requisite depth while the prongs are held or pressed together, and the fastener as a whole is maintained in correct position. The metal used in forming the 110 fastener may be severed from the strip at any suitable time and by any suitable means, either before, while, or after the incisions are made. As to the trimming of the prongs, they may be pointed, as represented at N in Figs. 3 and 115 7, or rounded, as at O in Fig. 3, or otherwise shaped. As also shown, the prongs may be of equal length or made one slightly longer than the other to facilitate the parting thereof in sealing an envelop, as may be preferred. 120

It is understood that the illustration of the tools or mechanism employed for the performance of the several steps in the production of the fastener as above described is purely diagrammatical and not given as an exact representation of anything that is made use of in practice. Such tools or mechanism can be varied indefinitely, and there is no desire to restrict this invention to the employment of any particular form thereof. The 13°C

subjoined claims, therefore, are made without reference to any tool or set of tools, mechanism or mechanisms, but rather are intended to cover the fastener *per se* as an improved article of manufacture.

What I claim, and desire to secure by Let-

ters Patent of the United States, is-

1. A fastener comprising a head, a prong, and a breakable bending portion, whereby the prong may be bent into a position parallel to the head and adapted to break at a subsequent bending.

2. A fastener comprising a head, a prong, and a weakened bending portion, permitting

15 bending of the prong once only.

3. A fastener comprising a head, a prong, and a transverse weakened bending portion, permitting bending of the prong once only.

4. A fastener comprising a head and a prong, and a weakened connection between the two, permitting bending of the prong once only.

5. A fastener comprising a head, a prong and a weakened connection between the two, permitting bending of the prong into paral-25 lelism with the head once only.

6. A fastener comprising a head and a prong, and a transverse weakened connection between the two permitting bending of the prong once only.

7. A fastener comprising a head and a prong normally projecting at substantially right an-

gles relative thereto, and a relatively weakened portion in the crotch between the members.

8. A fastener comprising a head and a prong 35 having an incision in one of its surfaces permitting bending of the prong once only.

9. A fastener comprising a head and an elongated flat-surface prong having an incision in one of its surfaces permitting bending of the 40 prong once only.

10. A breakable fastener comprising a head, and a prong normally arranged at substantially right angles relative thereto and adapted to be bent into a position parallel to the head, and a portion of the same arranged to snap off should an attempt be made to rebend the same to its normal position.

11. A metallic fastener comprising a head and a prong normally projecting at substantially right angles relative thereto and adapted to be bent into a position substantially parallel to the head, said prong having an incision extending from side to side of one of its surfaces whereby the same will break at a subsequent bending.

In testimony whereof I affix my signature in

presence of two witnesses.

EUG. J. STÉVENOT. [L. s.]

Witnesses:

Louis Kœner, J. Etienne.