April 9, 1940. V. E. HEYWOOD 2,196,461

DRY-SEALING ENVELOPE

Filed May 20, 1936 2 Sheets-Sheet 1

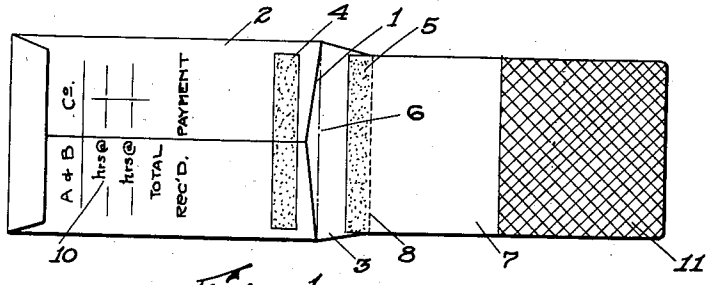


Fig. 1.

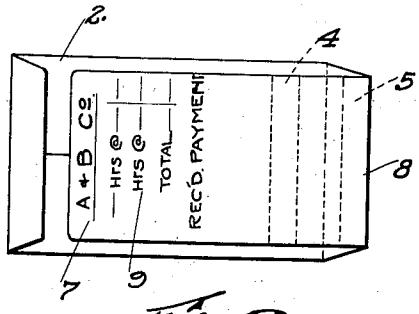


Fig. 2.

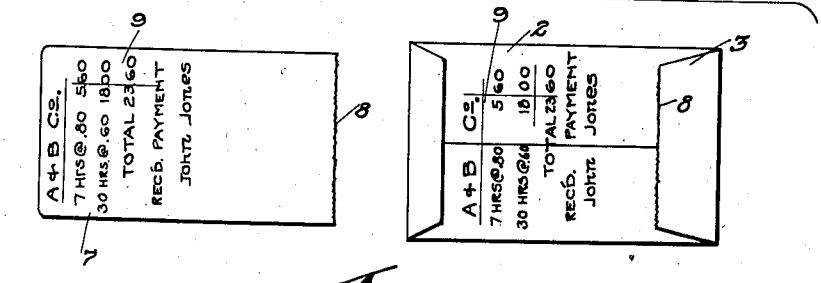


Fig. 3.

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DRY-SEALING ENVELOPE

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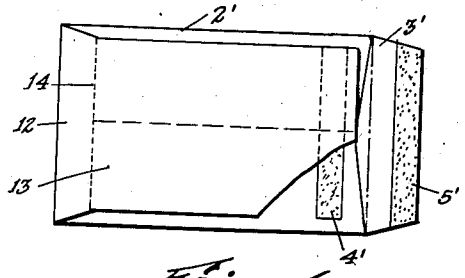


Fig. 4.

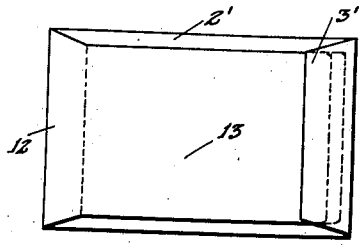


Fig. 5.

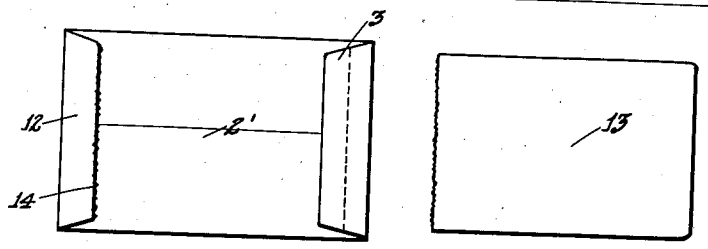


Fig. 6.

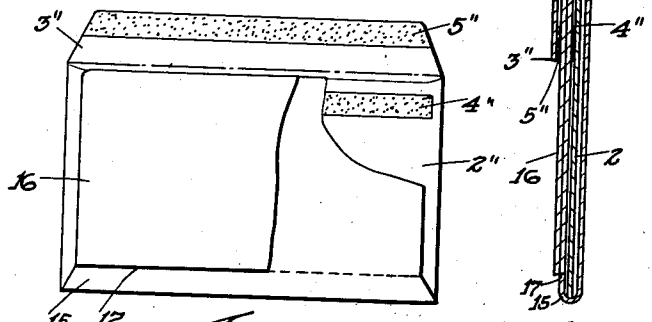


Fig. 7.

Fig. 8.

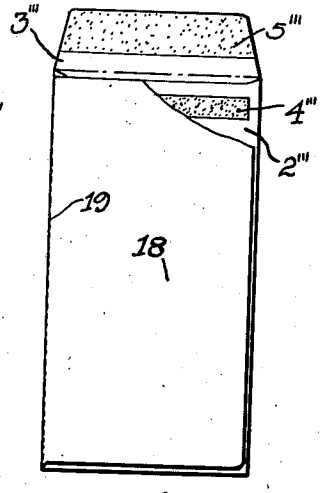


Fig. 9.

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UNITED STATES PATENT OFFICE

2,196,461

DRY-SEALING ENVELOPE

Vincent E. Heywood, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a corporation of Maine

Application May 20, 1936, Serial No. 80,820

13 Claims. (Cl. 229—70)

The present invention relates to dry-sealing envelopes or containers, i. e., envelopes that are adapted to be sealed by bringing areas coated with dry-sealing adhesive into non-moistened contact.

Dry-sealing envelopes are characterized by the provision of correspondingly shaped areas of dry-sealing adhesive on different parts of each envelope, and special precautions have to be taken in packing and handling such envelopes, in order to prevent accidental engagement between these adhesive areas, prior to the loading and sealing of the envelopes. According to the present invention, the above requirements as to handling and packing are met by providing each envelope with a detachable portion which, in the unsealed condition of the envelope, prevents accidental engagement between the adhesive areas. Removal of the detachable portion places the envelope in condition for loading and sealing, and the detachable portion itself may be utilized to receive memoranda concerning the contents of the envelope, or to serve as an enclosure. The above and other advantageous features of the invention will hereinafter more fully appear from the following description, considered in connection with the accompanying drawings, in which:

Fig. 1 is a plan view of a dry-sealing envelope embodying the invention.

Fig. 2 shows the envelope of Fig. 1 in unsealed condition, preparatory to packing.

Fig. 3 shows the envelope in sealed condition, with its detachable portion removed.

Fig. 4 is a plan view of a modified form of envelope.

Figs. 5 and 6 show the envelope of Fig. 4, in condition for packing and sealing, respectively.

Fig. 7 shows a further modification of the envelope.

Fig. 8 is a sectional view, on an enlarged scale, showing the envelope of Fig. 7, in condition for packing.

Fig. 9 shows a further modification of the envelope.

Like reference characters refer to like parts in the different figures.

Referring to Fig. 1, the envelope comprises front and rear walls 1 and 2, with a sealing flap 3 extending from the front wall 1. The rear wall 2 and the flap 3 are provided with correspondingly shaped areas of dry-sealing adhesive 4 and 5 that are symmetrically disposed, with reference to the fold line 6, between the sealing flap 3 and front wall 1. By the term "dry-sealing adhesive" is meant any adhesive which, in a dry condition, has the property of adhering to itself, upon non-moistened contact, although it will not so adhere to uncoated areas of the materials commonly employed in the manufacture of envelopes or other containers.

The seal flap 3 provides an extension 7 beyond a line of perforations 8, so that the extension 7 can be folded over to cover both dry-sealing adhesive areas 4 and 5, as shown in Fig. 2. Envelopes in this condition may be readily packed and handled, without any possibility of the dry-sealing adhesive areas coming into accidental contact, and with the dry-sealing adhesive always protected from dust, so that it will not deteriorate. When it is desired to load and seal the envelope, the flap extension 7 is turned back, as shown in Fig. 1, and after loading, the flap 3 is folded along the line 6 to bring the dry-sealing adhesive areas 4 and 5 into contact. Sealing is then accomplished by the application of pressure to that part of the folded-over flap 3 which lies inwardly of the line of perforations 8.

The envelope of Fig. 1 is particularly adapted for use as a pay envelope, with the flap extension 7 serving as a detachable coupon, which may be signed by the person receiving the pay, and thereby serves as a receipt for the transaction. To this end, the side of the extension 7, which is uppermost in Fig. 2, may be provided with suitable printing 9, for indicating the contents of the envelope. This printing 9 may register with printing 10 on the rear wall 2 when the flap 3 is folded over for sealing, and the under side of the coupon 7 may be provided with transfer material 11, so that entries on the extension 7 will be duplicated on the rear wall 2.

In Fig. 4, a modified form of the envelope is shown, wherein the rear wall 2' is formed in substantially the same manner as the rear wall 2 in Figs. 1, 2 and 3; said rear wall 2' and the seal flap 3' provide dry-sealing adhesive areas 4' and 5', in substantially the same relation as in the envelope of Fig. 1. The bottom flap 12 forming part of said rear wall 2' (i. e. the usual bottom closure by adhesion to the rear wall flap or flaps) provides a free extension 13 beyond a line of perforations 14, and this extension 13, when it overlies and practically covers as shown in Figs. 4 and 5, the wall 2', is long enough to cover the adhesive area 4'. The seal flap 3' may thus be folded over for packing the envelope, with the end portion of the extension 13 keeping the adhesive areas 4' and 5' out of contact, as shown in Fig. 5.

In order to load the envelope, the flap 3' is

turned back, as shown in Fig. 4, and then the extension 13 is turned back and torn off along the line of perforations 14, before or after making the necessary entries on said extension. After loading, the envelope is sealed by folding over the flap 3' to engage the dry-sealing adhesive areas 4' and 5', as shown in Fig. 6, it being apparent that this envelope, unlike the form shown in Fig. 1, has the same over-all length in both its unsealed and its sealed condition.

In Fig. 7, an envelope of a form usually employed for mailing purposes, provides dry-sealing adhesive areas 4'' and 5'', the former on the rear wall 2'' (corresponding substantially to the rear wall 2 of Fig. 1) and the latter on a seal flap 3''. The bottom flap 15, forming part of the rear wall and the bottom closure of the envelope, by adhesion to the overlying rear wall flap or flaps, provides a free extension 16, in the form of a folded letter sheet, joined to the flap 15 along a line of perforations 17. In packing the envelope, the flap 3'' is folded over to engage the folded end of the letter sheet 16, as shown in Fig. 8, thereby maintaining the dry-sealing adhesive areas 4'' and 5'' out of contact.

In using the envelope, the flap 3'' is turned back and the letter sheet 16 written upon, either before or after the removal of the sheet by tearing along the perforations 17. The sheet 16 is then inserted in the envelope pocket, and sealing effected by folding over the flap 3'' to engage the dry-sealing adhesive areas, with the application of pressure.

In the form of envelope shown in Fig. 9, a similar free extension 18 from one of the flaps of rear wall 2''' overlies said rear wall 2''' and is detachable from said wall's longitudinal edge by perforations 19, and in packing, the upper edge of extension 18 is disposed between the adhesive areas 4''' on the rear wall 2''' and 5''' on the seal flap 3'''. In order to seal the envelope, the flap 3''' is turned back, as shown, and the extension 18 torn off before loading.

From the foregoing, it is apparent that by the present invention there is provided a dry-sealing envelope, characterized by the provision of a detachable portion provided as an extension of one of the flaps of the envelope, which portion serves to maintain the dry-sealing adhesive areas out of contact, when packing and handling the envelope. The detachable portion is also adapted to serve as a coupon for receiving memoranda, to be retained by the user of the envelope, or as an enclosure sheet with which the envelope is loaded.

I claim:

1. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a detachable portion extending from said flap adapted to cover both of said adhesive areas, for packing the envelope.

2. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a detachable portion extending from said flap adapted to cover both of said adhesive areas for packing the envelope, with said detachable portion also covering the envelope body.

3. An envelope having its body and a free flap at one end provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a detachable portion extending from the opposite end of the envelope for separating said adhesive areas, prior to the use of such envelope.

4. An envelope having its body and a free flap at one end provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a detachable portion extending from the opposite end of the envelope in overlying relation to the envelope body, for separating said adhesive areas, prior to the use of such envelope.

5. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a letter sheet detachably secured to the envelope body for separating said adhesive areas, prior to the use of such envelope.

6. An envelope having its body and a flap at one end provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a letter sheet detachably secured to the opposite end of said envelope, said letter sheet being folded and disposed between the adhesive areas, for packing the envelope.

7. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive registerable with each other when said flap is folded downwardly, and a detachable portion extending from said flap and foldable into engagement with the envelope body and said adhesive areas, with printing on said detachable portion in register with printing on the envelope body.

8. In an envelope of the class described, a front wall, a closure flap, and a plurality of other flaps folded over and adhesively secured to provide the envelope's back wall, said back wall and said closure flap being provided with complemental areas of dry-sealing adhesive adapted to register with each other when said closure flap is folded downwardly, and one of the aforesaid flaps having a free detachable extension adapted, in the packing and handling of such envelopes prior to their use, to prevent accidental contact between said two areas of dry-sealing adhesive.

9. In an envelope of the class described, a front wall, a closure flap, and a plurality of other flaps folded over and adhesively secured to provide the envelope's back wall, said back wall and said closure flap being provided with complemental areas of dry-sealing adhesive adapted to register with each other when said closure flap is folded downwardly, and one of the aforesaid flaps having a free detachable extension adapted, prior to the use of such envelope, to overlie said back wall and thereby to prevent accidental contact between said two areas of dry-sealing adhesive in the packing and handling of such envelopes.

10. An envelope of the class described, comprising a front wall, a closure flap, side and bottom flaps extending from said front wall and folded over and adhesively secured to provide said envelope's back wall, said back wall and said closure flap having complemental areas of dry-sealing adhesive adapted to register with one another when said closure flap is folded downwardly, with said bottom flap having a free detachable extension overlying said back wall and normally interposed between said two areas of dry-sealing adhesive when said closure flap, in the packing and handling of such envelopes

prior to their use, is folded over said back wall.

11. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive, registerable with each other when said flap is folded downwardly, said envelope further providing a second free flap foldable into engagement with the envelope body and said adhesive areas prior to the use of such envelope, to prevent accidental contact between said dry-sealing adhesive areas in the packing and handling of such envelopes.

12. An envelope having its body and a free flap provided with complemental areas of dry-sealing adhesive, registerable with each other when said flap is folded downwardly, said envelope further providing a second free flap foldable to overlie said body and to be normally interposed between said dry-sealing adhesive areas when said first-named flap, in the packing and handling of such envelopes prior to their use, is folded over said body.

13. An envelope of the self-sealing type comprising in combination, a front wall, side flaps extending inwardly from opposite sides of said front wall and overlying the back face thereof, a back wall member extending upwardly from the lower marginal edge of said front wall and overlying the outside of said side flaps, a sealing flap hinged to the upper marginal edge of said front wall and foldable downwardly to the upper part of said back wall member, adhesive areas on said sealing flap and one of said side flaps arranged to register with one another when said flap is folded downwardly, the adhesive on said sealing flap being adapted to adhere to the adhesive on said side flap upon contact therewith and the said adhesive area on the side flap being normally covered by a certain portion of the back wall member so as to prevent contact of the adhesive areas, and a line of perforations extending through said back wall member to facilitate removal of said certain portion thereof, all adapted and arranged whereby said certain portion of the back wall member may be removed so as to uncover the adhesive area on the side flap and said sealing flap may be folded downwardly so that its adhesive area contacts the adhesive area on the side flap and adheres thereto for sealing said envelope.

VINCENT E. HEYWOOD.