

Dec. 13, 1938.

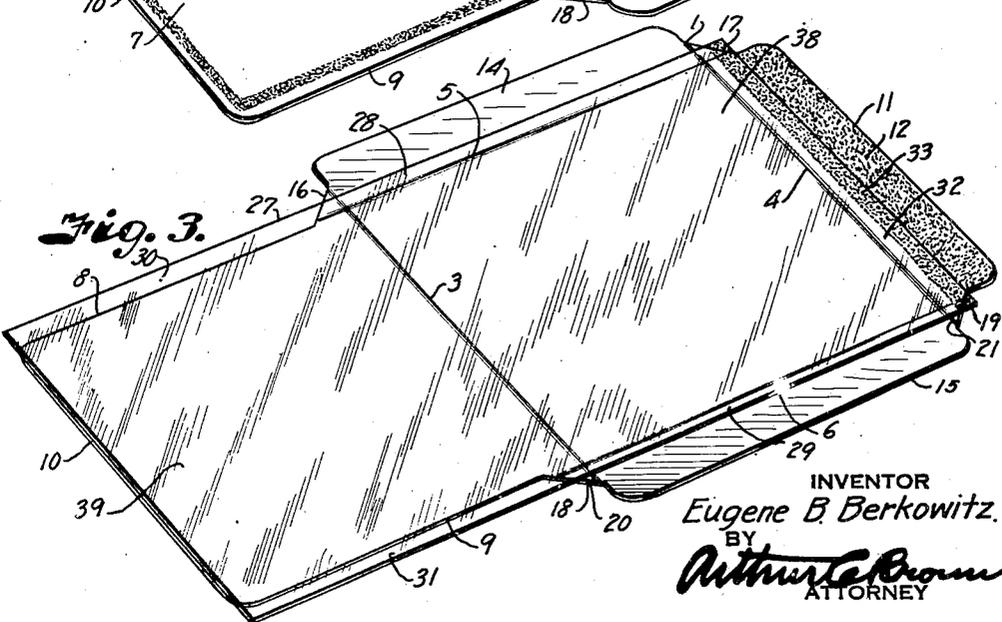
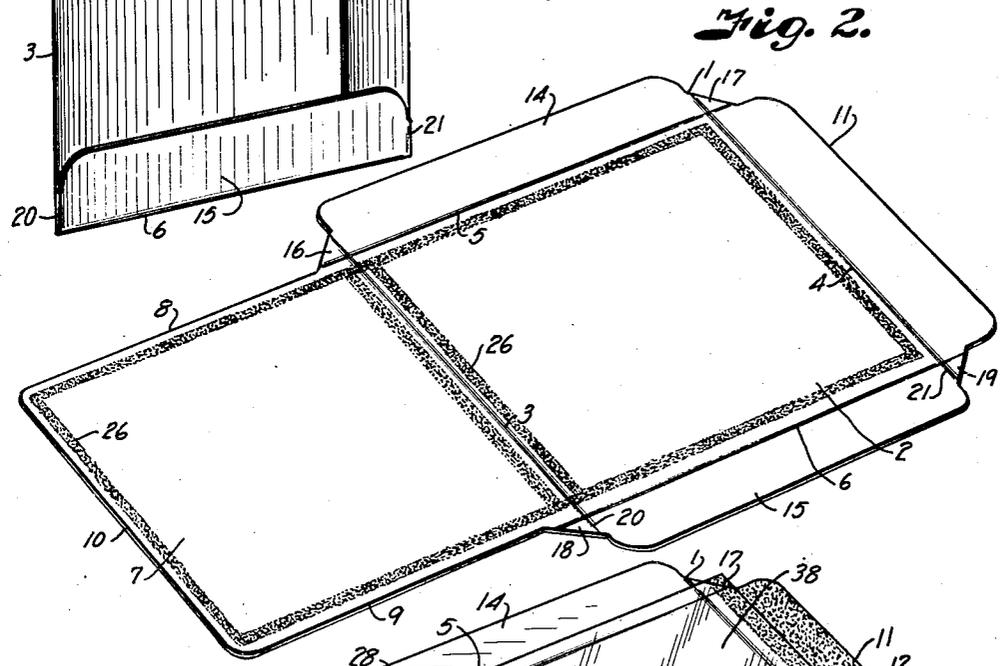
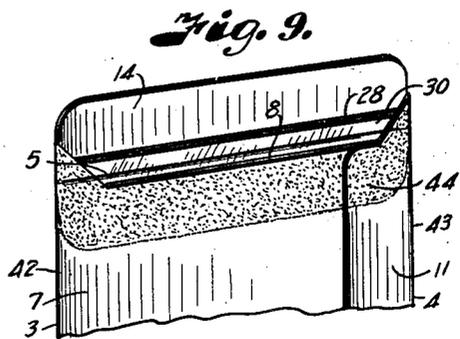
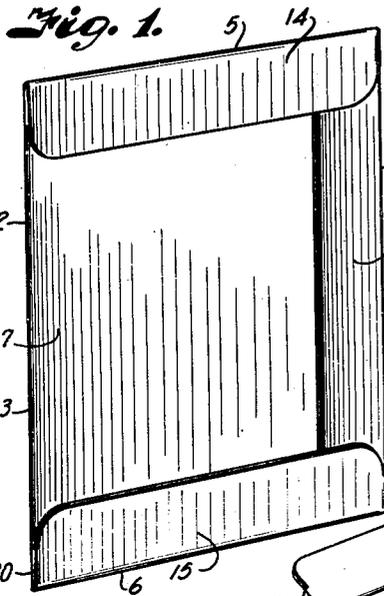
E. B. BERKOWITZ

2,139,654

MOISTUREPROOF ENVELOPE

Filed June 23, 1937

2 Sheets-Sheet 1



INVENTOR  
Eugene B. Berkowitz.  
BY  
*Arthur C. Brown*  
ATTORNEY

Dec. 13, 1938.

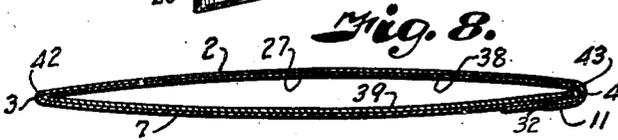
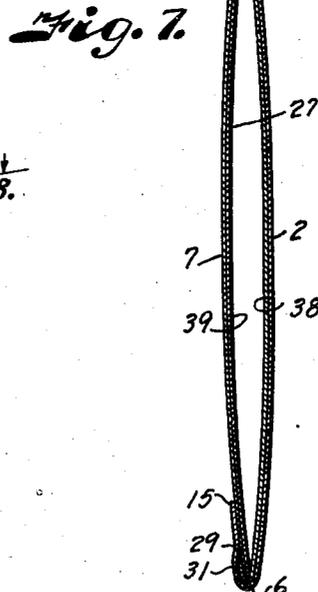
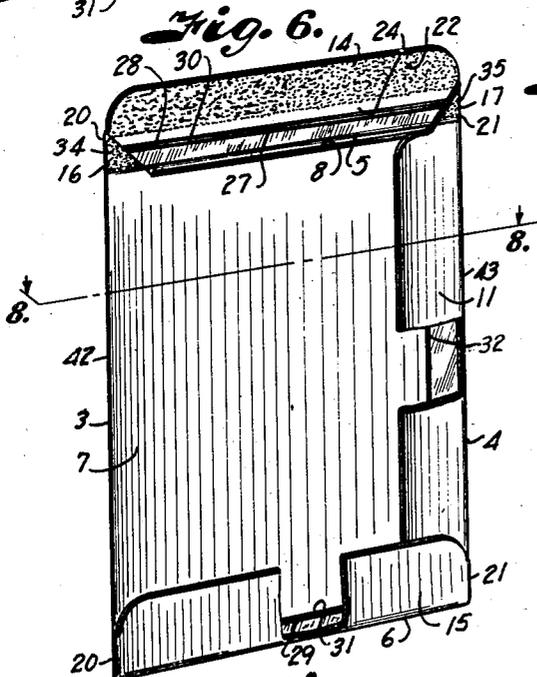
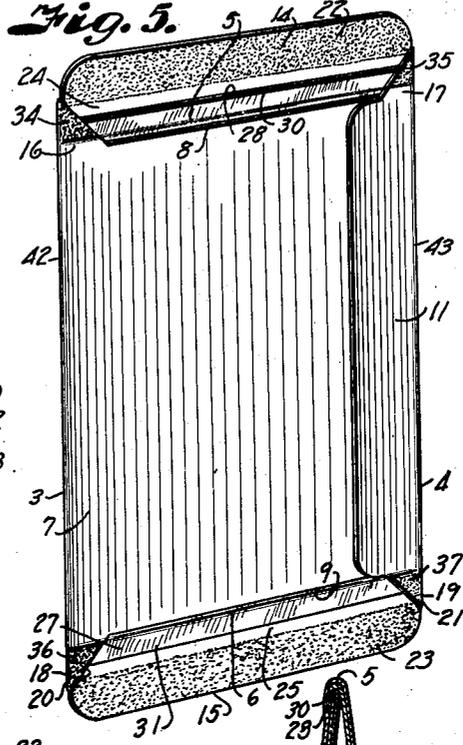
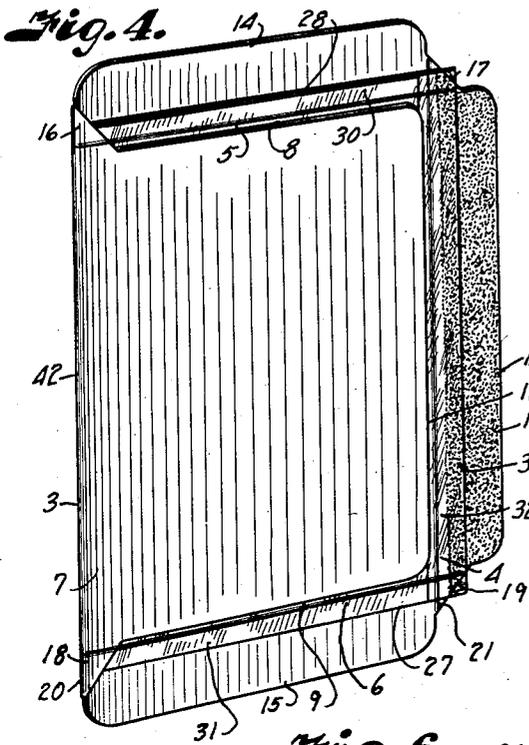
E. B. BERKOWITZ

2,139,654

MOISTUREPROOF ENVELOPE

Filed June 23, 1937

2 Sheets-Sheet 2



INVENTOR  
Eugene B. Berkowitz.

BY  
*Arthur Brown*  
ATTORNEY

## UNITED STATES PATENT OFFICE

2,139,654

## MOISTUREPROOF ENVELOPE

Eugene B. Berkowitz, Kansas City, Mo., assignor  
to Berkowitz Envelope Company, Kansas City,  
Mo., a corporation of Delaware

Application June 23, 1937, Serial No. 149,905

6 Claims. (Cl. 229—68)

This invention relates to envelopes and particularly those of moisture-proof type for containing merchandise that is normally affected by moisture, air or other external influences. In the present manufacture of moisture-proof envelopes it is impossible to provide the envelopes with high quality lithographing and highly colored exteriors, especially at low cost.

It is, therefore, the principal object of the present invention to provide a moisture-proof envelope construction which permits use of ordinary paper stock suitable for lithographing or printing in the manner of ordinary envelopes, whereby they may be furnished in colors at relatively low cost to the user.

Other important objects of the invention are to provide a moisture-proof lining which is positively sealed in air-tight condition incidental to folding and sealing of the blank from which the envelope is formed; to provide a construction which effects air-tight seal of the corners of the envelope; and to provide an envelope construction which includes a liner in strip form.

In accomplishing these and other objects of the invention, as hereinafter pointed out, I have provided improved details of structure, the preferred form of which is illustrated in the accompanying drawings, wherein:

Fig. 1 is a perspective view of a moisture-proof envelope constructed in accordance with the present invention.

Fig. 2 is a perspective view of the blank from which the outer covering of the envelope is formed.

Fig. 3 is a similar view showing the moisture-proof lining superimposed on the blank.

Fig. 4 is a perspective view of the blank showing the back flap folded over the front portion.

Fig. 5 is a similar view showing the side sealing flap folded over and sealed to the back flap to complete the side closures of the envelope.

Fig. 6 is a similar view showing the bottom flap folded over and sealed to the back flap to close the bottom of the envelope, a part of the bottom and side sealing flaps being broken away to show the inner fold of the lining.

Fig. 7 is a longitudinal section through the completed envelope, showing the sealing flap folded over and sealed to the back flap.

Fig. 8 is a horizontal section through the envelope on the line 8—8 of Fig. 6.

Fig. 9 is a perspective view of a modified form of the invention.

Referring more in detail to the drawings:

1 designates an envelope blank that is died from ordinary paper stock, such as used in lithograph printing, and which in itself is not necessarily of moisture-proof character. The blank 1 may be of various dimensions to produce an envelope of the desired size and shape, depending

upon the nature of the merchandise to be packaged therein.

In the illustrated instance the blank includes a substantially rectangular body portion 2, defined by spaced parallel score lines 3—4 and 5—6 to form the front portion of the envelope. Extending from the score line 3 is a back flap 7, corresponding in length and width to the spacing between the respective score lines 3—4 and 5—6, to provide the back portion of the envelope when the flap is folded over the front portion thereof as later described. The side edges 8 and 9 of the back flap are substantially continuous with the score lines 5 and 6, and the edge 10 substantially registers with the score line 4 when the flap is folded on the score line 3.

Extending from the score line 4 is a sealing flap 11, having a gummed portion 12 extending along the edge thereof. Extending from the score lines 5 and 6 are top and bottom sealing flaps 14 and 15 respectively, and which are adapted to be folded on the score lines 5 and 6, as later described. The sealing flaps 14 and 15 are coextensive with the width of the front portion and have their ends connected with the back and side sealing flaps 7 and 11 by triangular-shaped web corners 16—17 and 18—19 which, in the illustrated instance, are substantially the shape of right angle triangles with the base portions formed by continuations of the respective score lines, as indicated at 20 and 21, and extend substantially half the width of the respective sealing flaps. The top and bottom sealing flaps are provided with gummed portions 22 and 23 that are spaced from the fold lines 5 and 6 to leave ungummed portions 24 and 25.

The inner faces of the back flap 7 and front portion 2 have lines of gum 26 spaced inwardly from the marginal edges thereof to affix a lining 27 of moisture-proof character. The lining 27 is cut from a strip of Cellophane, wax paper or the equivalent, and is preferably of relatively thin character so that it may be folded into the envelope to form a moisture-proof pocket enclosed by the nonmoisture-proof material composing the blank. The lining 27 is of greater width than the spacing between the score lines 5 and 6 to leave top and bottom marginal edges 28 and 29, overlapping the ungummed portions 24 and 25 of the top and bottom sealing flaps and margins 30 and 31 projecting beyond the side edges 8 and 9 of the back flap, as clearly shown in Fig. 3. The length of the sheet is cut to provide a marginal edge 32 projecting beyond the score line 4 to overlap a portion of the side flap, as clearly shown in Fig. 3. The gum 12 preferably extends over the marginal edge of the lining sheet, as indicated at 33 in Fig. 3.

The opposite faces of the webs 16, 17, 18 and 19 are coated with gum as indicated at 34, 35, 60

36 and 37 to cooperate with the gum on the sealing flaps to effect air-tight seal of the envelope when the blank is folded as later described. The outer face of the blank may have been printed or lithographed as desired.

5 In folding the envelope, the back flap, including the affixed portion of the lining 27, is folded on the score line 3 so that the respective ends of the lining sheet form the front and back portions

10 38 and 39 of a moisture-proof inner pocket. When thus folded the edge 10 of the back flap substantially registers with the score line 4, and the marginal edges 30 and 31 overlie the marginal edges 28 and 29 at the top and bottom of the

15 pocket, as shown at 40 and 41 in Fig. 4. The side sealing flap 11 and the exposed marginal edge of the lining is then folded on the score line 4 and sealed to the outer face of the back flap as shown in Fig. 5. In making this fold, the

20 marginal edge 32 is bent retractively in registry with the score line 4 to engage between the outer face of the back flap and the side sealing flap so that it is not only sealed to the back flap but is locked therebetween, and the fold forms a substantially air-proof seam at the side of the envelope. The bottom flap is then folded on the

25 score line 6 to bring the sealing gum of the web portions 18 and 19 and the bottom flap into sealing relation with the back and bottom portion of the side flaps, as shown in Fig. 6. When the flap is thus folded the marginal edges 29 and 31 are bent retractively over the edge 9 of the back flap to underlie the bottom flap and effect an air-tight seam.

30 When the bottom flap is thus folded the marginal corners of the lining are not only sealed to prevent loss of contents and admission of air or moisture to the interior of the pocket, but the corners of the envelope are positively sealed to enhance the security. The envelope is then complete with the lining forming a moisture-proof

40 pocket in which merchandise may be safely protected from the effects of moisture, air or other elements exteriorly of the envelope. When the envelope is to be filled, slight pressure is applied to the side edges 42 and 43 of the envelope to cause the mouth thereof to open, spreading the marginal edges 28 and 30 to permit filling of the pocket. When the pressure is

45 relieved the mouth of the envelope closes, bringing the marginal edges of the lining into contact with each other. The gum 22 on the sealing flap, as well as the gum 34 and 35 on the web portions 16 and 17, is moistened to effect seal to the outer

50 face of the back flap and the upper portion of the side flap as shown in Fig. 7. Upon sealing the envelope the marginal edges 28 and 30 of the pocket are folded over the upper edge 8 of the back flap to be anchoringly engaged under the sealing flap for effecting an air-tight seam similar to the bottom seam, previously described. When the envelope is thus sealed, the lining forms a closed pocket that protects the contents from external influences and provides all the protection

65 of more expensive envelopes coated with Cellophane, varnishes and other exterior protective coatings.

In Fig. 9 the sealing gum 44 is shown as applied to the back flap so that, when the gum is

70 applied, it is spaced from the edges of the lining and there is no chance of the gum sticking the edges together and making the pocket difficult to open.

What I claim and desire to secure by Letters

75 Patent is:

1. An envelope of the character described including front and back portions, a moisture-proof lining interposed between said front and back portions and having margins projecting beyond side edges of said portions, sealing flaps on one of said portions and folded with said margins over the other portion to form a seal of said lining on the sides of said envelope, and gum on said sealing flaps for sealing said flaps with said other portion.

2. An envelope of the character described including front and back portions, a side flap on one of said portions, top and bottom closure flaps on one of said portions, gum on said flaps and spaced from said portions to provide unglued areas on said flaps, and a lining sheet bendable with the back portion to form a pocket, said lining sheet having marginal edges overlapping the unglued areas on said flaps and bendable with the flaps when the flaps are brought into sealing relation.

3. An envelope of the character described including a blank shaped to form front and back portions bendable one over the other to form a pocket, a side flap on the front portion and sealable over the back portion, sealing and bottom flaps on the front portion, web portions respectively connecting the side flap and the back portion with the adjacent ends of the sealing and bottom flaps and bendable with the back portion and side flap to overlie said front portion, gum on the sealing and bottom flaps and on said web portions for sealingly engaging the back portion, and a lining sheet fixed to said front and back portions and bendable with the back portion to form the front and back portions of a pocket, said lining sheet having marginal edges projecting over said flaps and bendable therewith to overlie the back portion when the flaps are moved to sealing position.

4. An envelope of the character described including front and back portions, a lining interposed between said front and back portions and having margins projecting beyond side edges of said portions, sealing flaps on one of said portions and folded with said margins over the other portion, gum on said sealing flaps for sealing said flaps with said other portion, and gum on one of said margins for sealing the margin to said other portion.

5. An envelope of the character described including a blank shaped to form front and back portions, sealing flaps connecting the front and back portions, web corners at the ends of the sealing flaps, and a moisture-proof lining for said blank having margins extending over said sealing flaps and web corners and bendable with said flaps and web corners when the sealing flaps are moved into sealing position.

6. An envelope of the character described including front and back portions, a side flap on one of said portions, a bottom closure flap on one of said portions, gum on said flaps, a moisture-proof lining juxtaposed against the front and back portions and having margins extending over the side and bottom flaps and bendable with the front and back portions and with said flaps when the flaps are brought into sealing relation to form a moisture-tight pocket having seams under said flaps, and a closure for the top of the envelope having a fold line extending across the liner whereby the liner is folded with the closure when the envelope is sealed to retain contents placed in said pocket.

EUGENE B. BERKOWITZ.