Sept. 17, 1935. A. TEICHER 2,014,914

ENVELOPE

Filed July 25, 1934

Fig.5

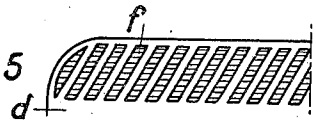


Fig.4

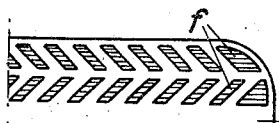


Fig.6

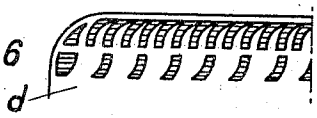


Fig.7

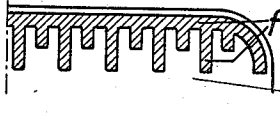


Fig.2

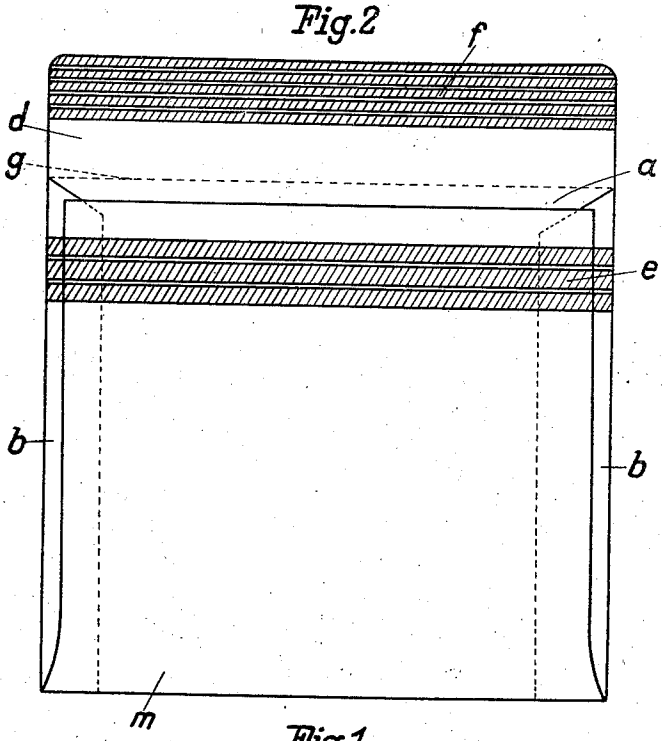


Fig.1

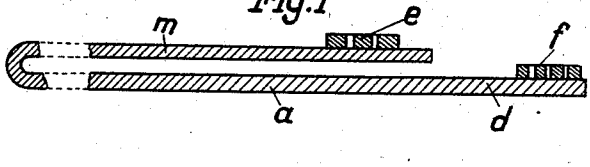
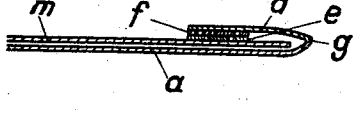


Fig.3



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Patented Sept. 17, 1935

2,014,914

UNITED STATES PATENT OFFICE

2,014,914

ENVELOPE

Albert Teicher, Leipzig, Germany, assignor to Fritz Kroch, Leipzig, Germany

Application July 25, 1934, Serial No. 736,834
In Germany July 28, 1933

3 Claims. (Cl. 229—80)

It has heretofore been proposed to apply to envelopes and the like, a self-sealing adhesive of such a character that when it is desired to seal the envelopes it is merely necessary to bring two coated surfaces together whereupon they will adhere to one another and cement together without moisture. However, the coating does not stick to an uncoated surface of the paper or other material from which the envelope is made.

Where an adhesive of the aforementioned type is used it has heretofore been the practice to apply the adhesive to corresponding areas of the back of the envelope and of the sealing flap respectively, so that when the flap is folded over the back the two coated areas are superimposed and adhere to each other and effectively seal the envelope. Various adhesives have been proposed for this purpose. The most suitable of such adhesives is a rubber solution.

The present invention relates more particularly to envelopes and the like which are provided with an adhesive of the aforementioned type and such envelopes will be termed hereafter "self-adhesive" envelopes.

Self-adhesive envelopes previously had the disadvantage, that they were prefolded at the folding line of the flap in the usual manner. The prefolding of the flap breaks the paper fibre in such a manner as to impart to the flap a tendency to close of its own accord. To prevent unwanted sealing of the envelopes prior to their use, they were stacked with the flap open, that is in the same plane with that part of the envelope to which the flap was attached, usually the front thereof, but in handling, the envelopes had a tendency to close prematurely and cause adhesion between the coated surfaces. This resulted in the loss of envelopes and in a great deal of inconvenience and loss of time in handling. In another form of self-adhesive envelope the coating was covered with a protective film which had to be removed prior to use, and this remedy was also cumbersome and expensive.

An object of the present invention is to provide a self-adhesive envelope or the like in which the flap does not tend to close of its own accord or prematurely.

Another object is to provide a self-adhesive envelope in which the closing flap is maintained coplanar with that face of the pocket of the envelope of which it is an extension, prior to the final sealing of the envelope.

Another object is to provide a self-adhesive envelope provided with a scoring line or indention which does not alter the coplanar relation between the pocket and the closing flap, but which facilitates folding of the flap at the proper line upon sealing of the envelope.

Another object is to provide a self-adhesive envelope which can easily be stored in stacks or bundles without the envelopes adhering to each other.

Another object is to provide a self-adhesive envelope which does not require special care in handling prior to the sealing thereof.

Another object is to provide a self-adhesive envelope in which the flap can be readily folded along the proper line for sealing.

Another object is to provide an envelope of the aforementioned kind in which the areas which are coated with adhesive do not have objectional bulges, creases and ridges.

Another object is to provide a seal for a self-adhesive envelope which requires a minimum of attention and which is more reliable than other seals for self-adhesive envelopes which have been proposed heretofore.

Further objects and advantages will hereinafter appear.

In the accompanying drawing, Figure 1 shows an enlarged vertical cross section of an envelope in accordance with the present invention prior to use.

Fig. 2 is a rear side view of the envelope.

Fig. 3 is a vertical cross section through the envelope after it is sealed.

Figs. 4 to 7 inclusive show different designs for the adhesive coating.

Referring to Figures 1 and 2 which illustrate a letter envelope, the same consists of a front body portion *a* and a rear body portion *m* which are attached to each other in the usual manner to form a flat bag or pocket by two side portions *b*. An extension of the top of the front body portion *a* forms the flap *d* for sealing the envelope. Corresponding areas on the outside surface of the back body portion *m* and of the inside surface of the flap *d* are coated with a self-adhesive substance as shown at *e* and *f* respectively. As illustrated in Figures 1 and 2 these coatings preferably consist of a number of strips or sections separated from each other by narrow uncoated intervening spaces, the separating spaces of the two coatings *e* and *f* being preferably arranged so that when the two areas are superimposed the coated sections only partly coincide with each other. The purpose of this arrangement is to provide air spaces or channels between the sections of the coatings *e* and *f* which, when they are brought in contact with each other, permit

the escape of air from between the two coatings and thus cause them to more readily adhere together. Thus the air which may be entrapped between the coatings is more readily expelled by pressure thereon than would be the case if the coatings presented a solid unbroken area, in which case air blisters are easily trapped between the coatings and are then hard to expel as the air has to travel a relatively great distance through the surrounding area which has already been sealed.

A further purpose of the subdivision of the coating of the coated areas by blank spaces is to avoid unsightly ridges and bulges which are produced by covering wide unbroken areas of paper with an adhesive coating and also by entrapped air after sealing.

In order to obviate premature unwanted folding and sealing of the flaps the latter is not prefolded as has been customary with envelopes heretofore but the flap is maintained in the same plane with the front of the envelope. However, in order to facilitate the folding at the correct line which is indicated by *g* in the drawing, the paper is indented by scoring or is provided with intermittent perforations along this line, so that it presents the line of least resistance to the bending strain when the flap is bent toward the back. This weakening causes the paper to readily crease on that line. It should be understood that the scoring must be accomplished in such a manner as not to prefold the paper, which would impart to the flap a tendency to close as aforedescribed.

Referring to Figs. 4, 5, 6, 7, these show different other designs in which the adhesive may be applied to the flap and to the corresponding back portions of the envelope, it being understood that the pattern of the two corresponding parts are such that the interstices which remain between adhering areas reduce the distances over which any entrapped air may have to pass before it is released are a minimum.

What I claim is:

1. An envelope comprising a flat pocket formed from a paper or other suitable sheet, a flap formed from an extension of the same sheet to close said pocket and biased to remain coplanar with said pocket until folded upon closing of said pocket, adhesive applied to complementary areas of said pocket and said flap, said adhesive requiring no moistening and adhering only to adhesive, and an indention on the sheet between said pocket and said flap, providing a guide for folding said flap, said indention leaving the coplanar relation between the pocket and the flap unchanged.

2. An envelope comprising a flat pocket formed from a paper or other suitable sheet, a flap formed from an extension of the same sheet to close said pocket and biased to remain coplanar with said pocket until folded upon closing of said pocket, adhesive applied to complementary areas of said pocket, and said flap, said adhesive requiring no moistening and adhering only to adhesive, each of said areas being divided into narrow coated sections separated by uncoated sections, and an indention on the sheet between said pocket and said flap, providing a guide for folding said flap, said indention leaving the coplanar relation between the pocket and the flap unchanged.

3. An envelope comprising a flat pocket formed from a paper or other suitable sheet, a flap formed from an extension of the same sheet to close said pocket and biased to remain coplanar with said pocket until folded upon closing of said pocket, adhesive applied to complementary areas of said pocket and said flap, said adhesive requiring no moistening and adhering only to adhesive, each of said areas being divided into narrow coated sections, the individual coated sections of one area overlapping only partly the coated sections of the other area when the flap is folded, and an indention on the sheet between said pocket and said flap, providing a guide for folding said flap, said indention leaving the coplanar relation between the pocket and the flap unchanged.

ALBERT TEICHER.