July 4, 1939. V. J. SAWDON 2,165,195

ENVELOPE

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Fig. 1.

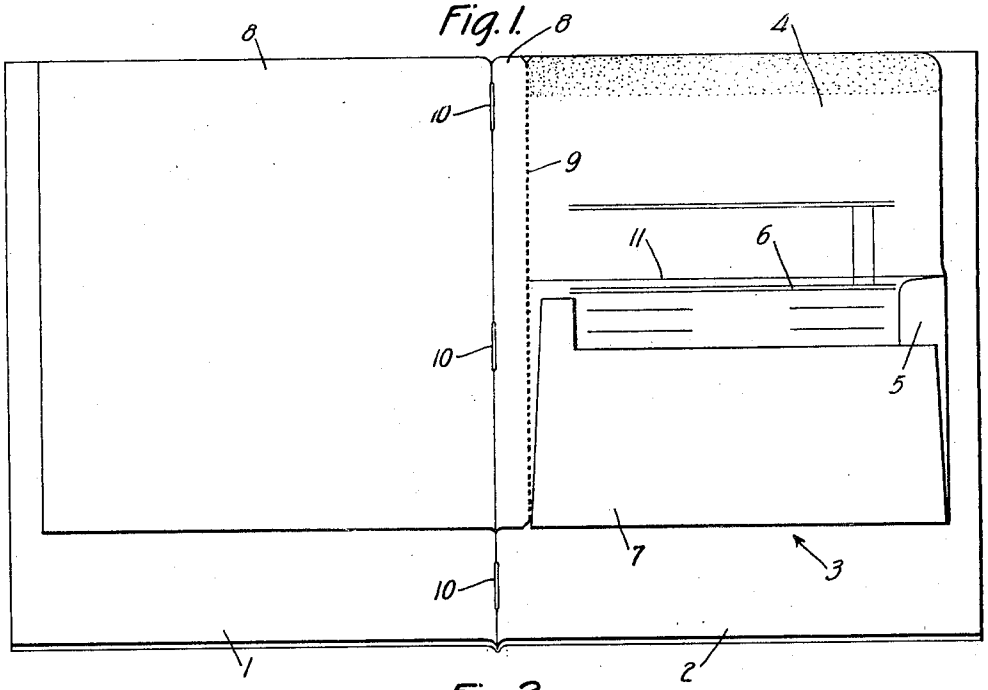
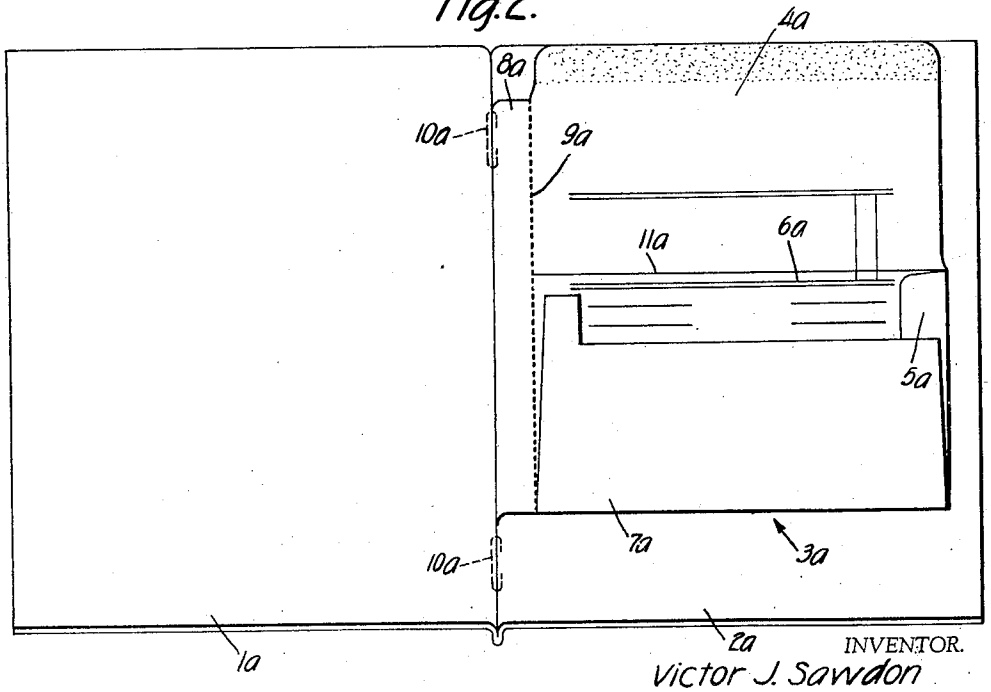


Fig. 2.



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ENVELOPE

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4 Claims. (Cl. 281—3)

This invention relates to the incorporation of envelopes in publications, its principal purpose being to provide in a periodical or bound publication a complete envelope which can be readily torn out, sealed and mailed.

The term periodical publication as used herein is intended to exclude mere packs of envelopes bound together, but is intended to be construed broadly as comprehending magazines, trade catalogs and like publications in which an envelope may be included as an appurtenant part.

It is proposed for example, to include in the copies of the periodical going to subscribers whose subscriptions are about to expire, an envelope containing on the inside a printed form directing the renewal of the subscription and indicating spaces for the name and address of the subscriber to be filled in. Preferably the envelope will bear on its face the address of the publisher and a guarantee under the postal regulations that the publisher will pay the postage, so that the subscriber is in no way deterred from acting upon an impulse to renew the subscription by the necessity of procuring an envelope or a stamp, or of writing an order, or of looking up the correct name and address of the publisher in order to address his communication.

In accordance with the present invention it is proposed to embody the idea in magazines or publications of the side stitch, perfect binding, edition binding and saddle stitch type. In a magazine or publication of the side stitch, perfect binding or edition type the signatures are gathered and collated and the envelope is provided with a binding extension of the sealing flap and the body, which extension is adapted to be registered with the folded edges of the signatures and secured to them by the same staple or staples or gum, cloth or sewing which secure them to one another.

In a magazine of the saddle stitch type; i. e., one in which the binding staples pass directly through the crease of a signature, an extension is provided as before but it is extended much farther so as to cross the saddle of the stitching machine and balance the envelope structure. The extension is, in this case also, stitched to the pages of the publication by the same staple or staples which bind the pages together. The envelope and its extending flap may also be held secure by the folds of the signatures. In each instance the binding extension of the envelope is provided with a line of perforations to facilitate the tearing out of the envelope.

It is a feature of certain embodiments of the invention that the arrangement is such that the binding extension of the envelope is made long enough in the direction of the height of the envelope to be engaged and bound by a plurality of the staples.

It is an important feature of the invention that the binding extension is made of sufficient height to extend throughout the major portion of the combined height of the body and the sealing flap and that it is disposed to extend across the centers of gravity of said panel and of said flap. The length and disposition referred to are important in connection with either a side bound or a saddle bound assembly because of the requirement that an envelope deposited in an assembly of either type in a skewed condition shall be capable of straightening itself.

Other objects and advantages will hereinafter appear.

In the drawing forming part of this specification

Figure 1 is a plan view of a publication of the saddle-stitch type having one form of envelope suitable for practicing the invention incorporated in it; and

Figure 2 is a plan view of a publication of the side-stitch type having another form of envelope suitable for practicing the invention incorporated in it.

In Figure 1 disclosure is made of a periodical of the saddle stitch type comprising the left-hand leaves 1 and the right-hand leaves 2 of the collated signatures. An envelope 3 is incorporated in the periodical. This envelope comprises a gummed sealing flap 4, a side flap 5, a body panel 6 and a bottom flap 7. The bottom flap of the illustrative envelope is adhesively connected at its right-hand margin to the inturned side flap 5. The left-hand margin of the bottom flap 7 is directly secured to the body panel by adhesive.

Both the body panel 6 and the sealing flap 4 are extended to the left of the envelope proper to provide a binding extension 8 which is separable from the envelope along a line of perforations 9. The line of perforations 9 registers substantially with the left-hand edge of the body panel 6, as seen in Figure 1. The binding extension extends across the binding or fold line at the back of the publication and across to the opposite side of the fold line for a sufficient distance to balance the envelope on the saddle of a saddle-stitch machine. For this purpose the binding extension is made of dimensions comparable with the dimensions of the envelope proper. The envelope structure is bound into the

publication at the binding or fold line by means of stitches or staples 10, these being the same stitches which serve to bind the leaves of the publication to one another.

The sealing flap desirably extends above the body panel for a distance which is at least as great as a substantial portion of the height of the body panel 6. The upper edge of the sealing flap 4 extends parallel to a fold line 11 which divides the sealing flap 4 from the body panel of the envelope. The inner face of the sealing flap desirably has printed upon it an order form which can be conveniently filled in by the reader.

It will be noted that the binding extension extends both from the body panel 6 and from the sealing flap 4 of the envelope. As illustrated, the binding extension runs throughout the fully combined height of the body panel and the sealing flap. Thus the binding extension extends well above the center of gravity of the sealing flap and well below the center of gravity of the body of the envelope. It is important that the binding extension run throughout the major portion, at least, of the combined height of the body panel and the sealing flap, and that it extend across the center of gravity of the body panel and the center of gravity of the sealing flap. When the envelope is deposited upon the saddle of a saddle-stitch machine, it is very likely to land in a skewed condition. Either the upper edge of the binding extension or the lower edge of the binding extension will engage the saddle first. The envelope must be made capable of finding a square seat on the saddle under the influence of gravity. If the upper edge of the binding extension engages the peak of the saddle first and the point of engagement is located above the center of gravity of the sealing flap, then the entire weight of the envelope body will act about a long effective lever arm and will draw the fold of the sealing flap down substantially flat against the peak of the saddle without opposition from the sealing flap 4. That is to say, the center of gravity of the sealing flap 4 does not lie at the opposite side of the fulcrum (the upper edge of the binding extension from the center of gravity of the envelope body, so that the two masses do not tend to produce opposing moments.

While it is important in a saddle-stitch assembly that the envelope structure be capable of straightening itself on the saddle, as pointed out above, that feature does not necessarily require that the binding extension extend throughout the fully combined heights of the body panel 6 and the sealing flap 4.

In a mechanical gathering and stitching machine of the saddle type, however, in which the upper edges of the collated signatures including the envelope structure are aligned against an aligning pin located at or near the peak of the saddle, it is important for the upper edge of the binding extension not to be located below the upper edge of the sealing flap. The upper edge of the binding extension is mechanically aligned or registered with the upper edges of the signature by the gathering mechanism, and hence if this edge were located below the upper edge of the sealing flap, the sealing flap would protrude beyond the upper edges of the signatures and would be trimmed off at the trimming operation which occurs after binding. This last mentioned requirement is not important, however, in a hand feed type of saddle-stitching machine, because the envelope structure in a machine of that type can be dropped onto the saddle by the attendant so as to fall between the upper and lower boundaries of the signatures, and is not shifted to register its upper edge with the upper edges of the signatures.

In Figure 2 disclosure is made of a publication of the side-stitch type comprising left-hand signatures 1^a and right-hand signatures 2^a. The envelope structure is generally the same as that disclosed in Figure 1, save that the binding extension 8^a is made short to have its left-hand edge terminate flush with the folded edges of the collated and bound signatures. The binding extension 8^a is also cut away short of the upper edge of the sealing flap 4^a, but has its upper edge disposed well above the center of gravity of the sealing flap 4^a. The other parts of the envelope may be the same as the corresponding parts of the envelope of Figure 1, and hence corresponding reference numerals have been applied with the subscript "*a*" added in each instance.

The requirement as to length and disposition of the binding extension heightwise of the envelope are the same as in the Figure 1 form with respect to the capacity of the envelope for straightening itself when deposited in a skewed condition. The signatures are advanced to the stitching mechanism supported upon their folded edges which are the edges to be bound, and the envelope structure is similarly supported upon the long edge of its binding extension, which is required to register with the folded edges of the signatures. In a mechanical gathering machine the upper edge of the sealing flap is registered with the upper edges of the signatures by engagement with aligning elements. Hence the upper edge of the binding extension is not required to perform any end registering function, even though the signatures and the envelope are mechanically gathered and registered.

In a hand gathered, side-stitch publication the envelope may be dropped by hand to lie between the upper and lower bounds of the signatures.

I have described what I believe to be the best embodiments of my invention. I do not wish, however, to be confined to the embodiments shown, but what I desire to cover by Letters Patent is set forth in the appended claims.

I claim:

1. In a bound periodical publication, the combination with the leaves thereof, of means binding the leaves together, a complete envelope whose parts include a body panel, a back panel, a sealing flap having its upper edge substantially parallel to the line of fold of said flap, the height of said flap being a substantial portion of the height of the body panel, and means connecting the back panel with the body panel in juxtaposed relation thereto, and an envelope binding extension integral with the envelope, said binding extension forming a direct continuation of the body panel and the sealing flap and extending across the centers of gravity of said panel and of said flap and throughout the major portion of the combined height of said panel and flap and being divided from the envelope by an easy tear line and secured in the publication by the means which binds the leaves together.

2. A bound periodical publication as set forth in claim 1, in which the binding extension extends throughout the fully combined height of the body panel and the sealing flap and has its upper edge in alignment with the upper edge of the sealing flap and in which the binding extension is continued past the binding line for a sufficient distance to balance the envelope on a saddle.

3. An envelope leaf comprising a complete envelope whose parts include a body panel, a back panel, a sealing flap having its upper edge substantially parallel to the line of fold of said flap, the height of said flap being a substantial portion of the height of the body panel, and means connecting the back panel with the body panel in juxtaposed relation thereto, and an extension integral with the envelope, said extension forming a direct continuation of the body panel and the sealing flap and extending across the centers of gravity of said panel and of said flap and throughout the major portion of the combined height of said panel and flap and being divided from the envelope by an easy tear line.

4. An envelope leaf as set forth in claim 3 in which the extension extends throughout the fully combined height of the body panel and the sealing flap, and has its upper edge in alignment with the upper edge of the sealing flap, and in which the extension is continued for a sufficient distance to balance the envelope.

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