March 7, 1950 F. A. WHITFIELD 2,499,436

MEANS FOR INTERLOCKING FOLDERS

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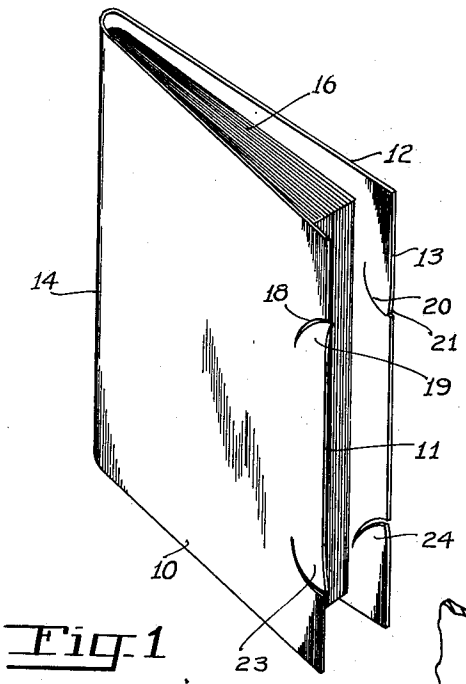


Fig. 1

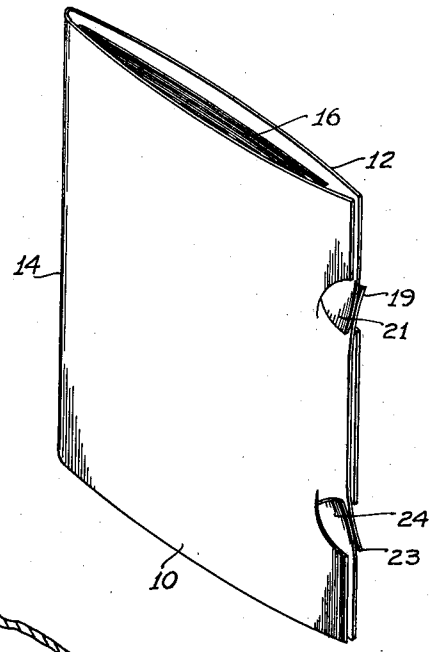


Fig. 2

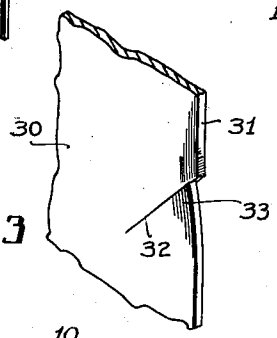


Fig. 3

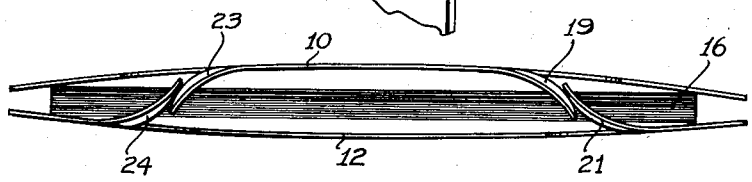


Fig. 4

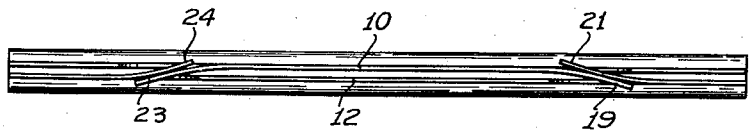


Fig. 5

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MEANS FOR INTERLOCKING FOLDERS

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1 Claim. (Cl. 281—29)

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My present invention relates to method and means for interlocking folders and, more particularly, to a system of forming and interlocking opposed tabs in two adjacent pieces of sheet material which are to be joined together along common juxtaposed edges.

With particular reference to articles commonly used in direct mail advertising, but having in mind many other uses obvious to those skilled in the art of locking means for folders and the like, I have found that there is a great need for a suitable closure. Those that I have observed in use usually required a crimped staple, a gummed sticker or stamp, or a notched tab integral with one of the leaves to fit into a slit in the other leaf. In the latter instance, it is often found that there is a great waste of paper stock or sheet material due to the fact that the tab has to be cut to extend beyond the edge with which it is integral, in order that it may extend into the slit of the opposed sheet. The main difficulty of such an arrangement arises where the exposed faces of the sheets are printed. Either a portion of that printing is then covered by the tab or the tab must be printed with the same copy appearing thereunder. This requires critical register during printing. With respect to the stapling or sticker fastenings, additional material is necessitated and often mechanism is required for the application of the fastener, both of which conditions are somewhat undesirable.

Having in mind the defects of the prior art, it is an object of my invention to provide a closure for folders, and the like, that is capable of construction by a printer using his already available cutting means and without requiring elaborate mechanisms for volume production.

Another object of my invention is to provide, in a closure of the type described, opposed elements capable of securely locking together two juxtaposed sheets of a folder or the like, and which can be brought into the closed position with facility, but which will not be unlocked upon mere relative movement without distortion of the locked sheet.

A still further and more specific object of my invention is the provision, in a closure of the type described, of an arrangement of parts which will join two sheets without requiring additional fastening means.

The foregoing objects, and others ancillary thereto, I prefer to accomplish as follows:

According to a preferred embodiment of my invention, in a folder or leaflet of booklike construction, I form suitable opposed locking slits in two adjacent edges, whereby the same may be interlocked. Specifically, the locking means comprises a slit in each edge extending inwardly in a direction other than at right angles for a predetermined distance. The slits usually will be formed so that when the two sheets are brought into side-by-side position, the inner terminals of the slits will coincide, and the tabs formed thereby will be capable of being overlapped and interlocked. In a preferred form of my invention, the slits are curved, but in an alternative form, they may lie in a straight line. Such being the case, when the two pages or sheets having slits therein are brought together and the slits interlocked, there will be obtained a suitable closure of such a nature that the pages cannot be opened and the interior exposed without an intentional unlocking of the interlocked closure tabs. By arranging in a single edge on each of two sheets, opposed tabs, the sheets may be locked together against relative movement.

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The novel features that I consider characteristic of my invention, are set forth with particularity in the appended claims. The invention itself, however, both as to its organization and its method of operation, together with additional objects and advantages thereof will best be understood from the following description of a specific embodiment when read in connection with the accompanying drawings, in which:

Fig. 1 is a perspective view of an unlocked leaflet embodying my locking means;

Fig. 2 is a perspective view of a leaflet showing it in the locking position;

Fig. 3 is a perspective view of a fragmentary portion of a sheet showing a modified form of the interlocking elements;

Fig. 4 is an edge view of an element disclosing the method of interlocking opposed locking elements between two sheets; and

Fig. 5 is an edge view of a leaflet in the locked position.

A closure for folders to overcome the defects hereinbefore enumerated must have at least two totally distinct characteristics; it must be capable of being simply and quickly formed and locked, and it must also provide a closure lock arrangement which will endure a reasonable amount of handling and hard usage, especially in the mails.

Accordingly, a preferred embodiment of my invention, referring to Figures 1 and 2 of the drawing, is constituted by a folder, in the edges of which have been formed interlocking tabs. For the purposes of this description, the folder com-

prises the cover sheet 10 and the sheet 12, normally joined and folded at 14, and closing a plurality of pages 16. It will be noted that the cover sheets 10 and 12 extend outwardly a slight distance beyond the edges of pages 16, and it is in these extended edges that my closure means is formed.

The closure is produced by slitting the edge 11 of cover 10, as at 18. This slit extends inwardly from the edge 11 in a direction other than at a right angle to that edge, and in this instance, is shown as being curved. Thus is formed the tab 19. In the back cover 12, in edge 13, is also formed the slit 20, to produce tab 21. Slits 18 and 20 extend inwardly in converging directions. When the two sheets 10 and 12 are brought side by side, as they appear in Fig. 1, it will be observed that the tabs 19 and 21 are oppositely directed, and that the pointed end of the tab 19, as well as the pointed end of the tab 21, lie adjacent the root of the opposite tab. In other words, the tabs overlap each other, and this permits them to be interlocked in the manner shown in Figures 4 and 5, which is accomplished by so distorting the tab that the outer faces of tabs 19 and 21 are placed contiguous to each other and the inner ends of the slits 18 and 20 are caused to coincide in the manner shown in Fig. 2. The foregoing described arrangement is suitable under certain circumstances to form a closure for folders. In certain cases, however, it has been found desirable to insure unlocking of the interlocked cover faces of the folder to provide auxiliary tabs 23 and 24, each of which is directed oppositely to the corresponding tab of the same cover page in which each is formed. In other words, the tabs 19 and 23 are directed toward the top and bottom edges of the page 10, and away from each other, while the tabs 21 and 24 are likewise directed toward the top and bottom of the page 12, but toward each other. Thus, when the tabs 19 and 21 are locked together, and the tabs 23 and 24 are locked together, the folder is closed in a manner more accurately shown in Fig. 2, as well as in Fig. 5.

In a slightly modified form of the invention, the sheet 30, having the edge 31, is slit at 32, to form the tab 33. The principal difference between the arrangement in Fig. 3 and that of Fig. 1 is that the slit 32 lies in a straight line, rather than in a curved line. The function of pointed tabs 33, as distinguished from tab 19, is no different in serving as a closure element.

While I have shown and described particular embodiments of my invention, it will occur to those skilled in the art that various changes and modifications may be made without departing from the invention, and I therefore aim in the appended claim to cover all such changes and modifications as fall within the true spirit and scope of my invention.

Having thus described my invention, I claim:

In a booklet of the type having a front cover member; a plurality of pages disposed behind said front cover member and having a width less than that of the front cover member; a rear cover member identical in size with that of the front cover member; means for joining said front cover member, the interposed pages, and the rear cover member along one margin to form a booklet, said cover members and pages being arranged so that the free edges of the front and rear cover members protrude past the free edges of the interposed pages; locking means for the said free edges of said cover members, comprising: formed in the protruding edge of each of said cover members, an arcuate slit extending inward from said edge, the slit of one said sheet being in a direction to intersect on its inner end the slit of the other cover member when said sheets are juxtaposed, said slits being of like length; a second reversed pair of slits in said cover members spaced from said first pair of edge slits, said second pair of slits being of like nature with said first pair of slits, the slits in one cover member being directed toward each other, and the slits in the opposite cover being directed away from each other.

FRED A. WHITFIELD.

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