June 3, 1941. C. L. ESTERLY 2,244,246

NOTEBOOK

Filed Aug. 6, 1938 2 Sheets-Sheet 1

Fig. 1.

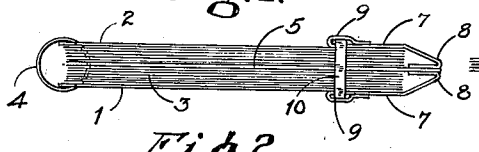


Fig. 3.

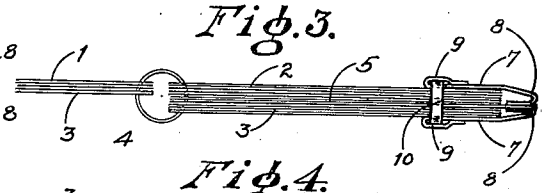


Fig. 2.

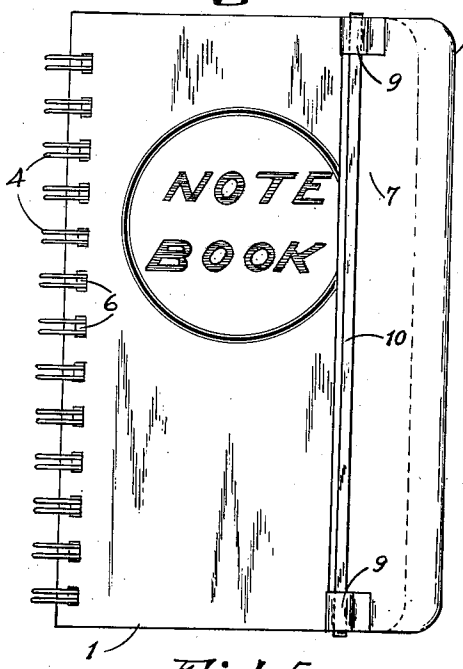



Fig. 4.

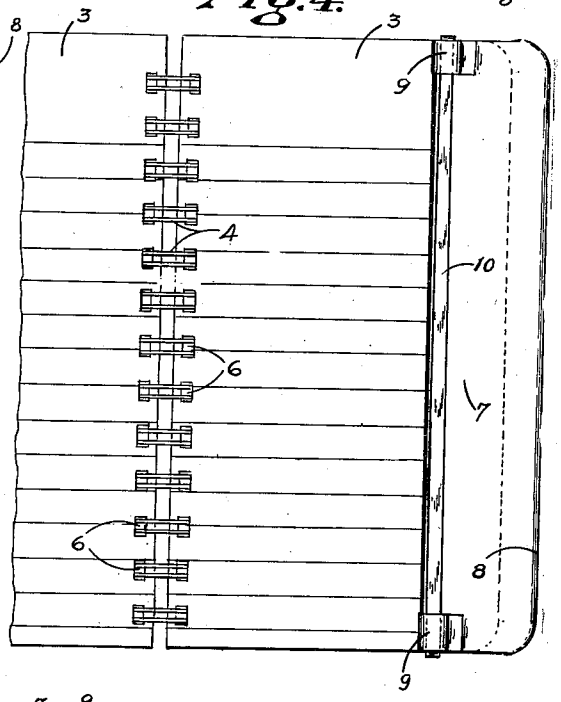


Fig. 5.

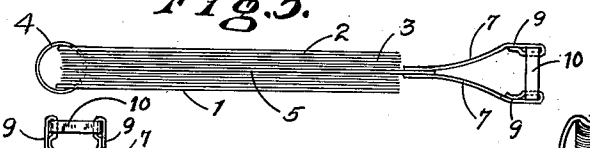


Fig. 7.

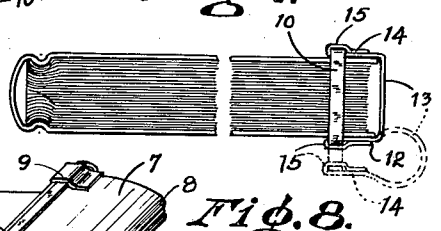


Fig. 9.

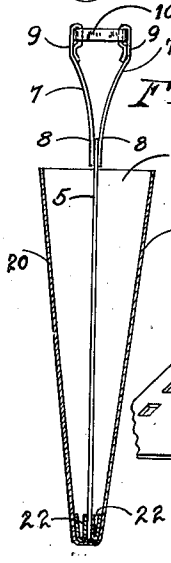


Fig. 6.

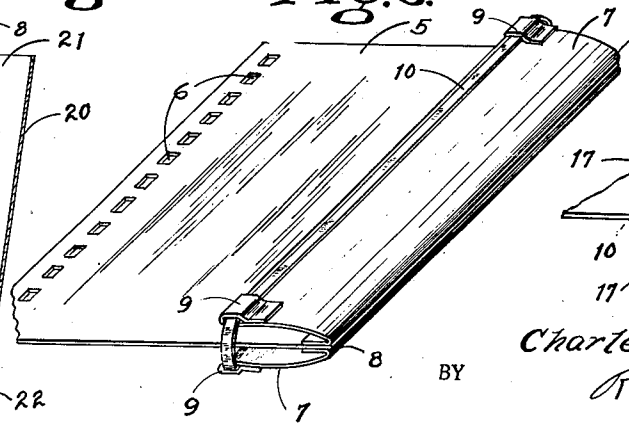
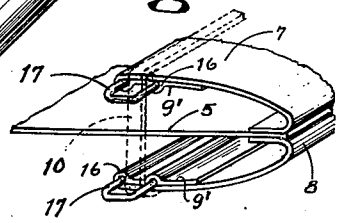


Fig. 8.



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Fig. 10.

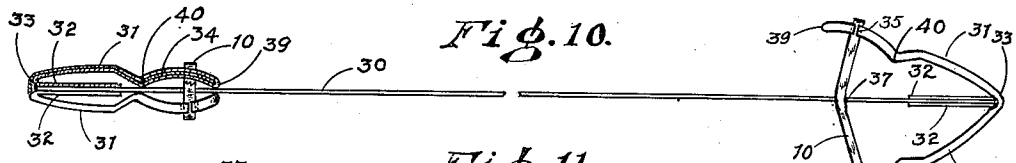



Fig. 11.

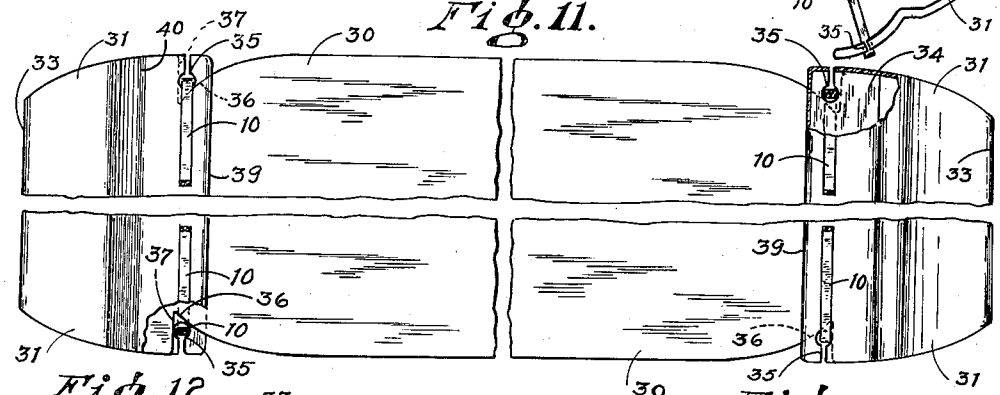
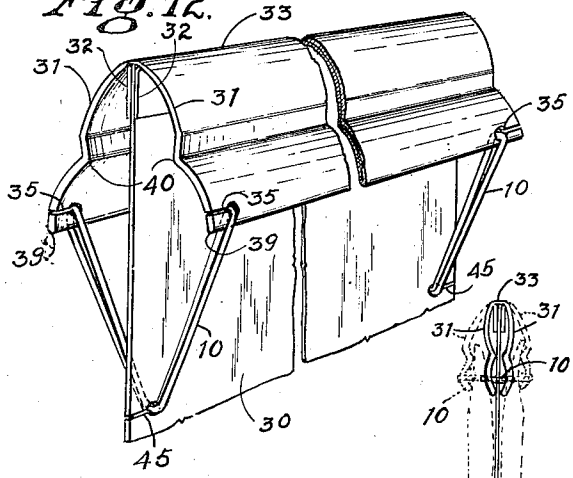



Fig. 12.



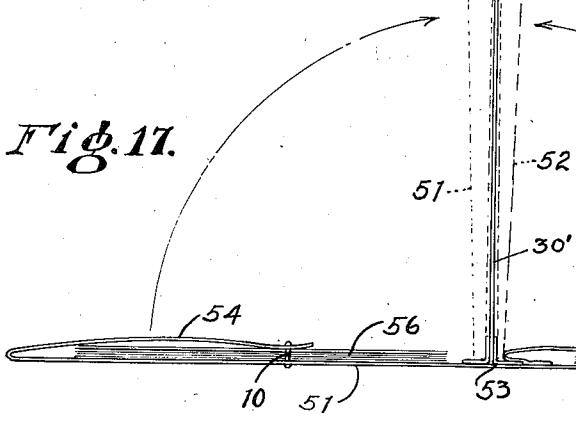




Fig. 17.




Fig. 13.




Fig. 14.

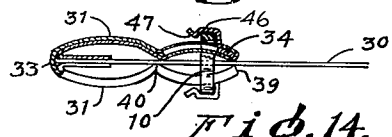



Fig. 15.

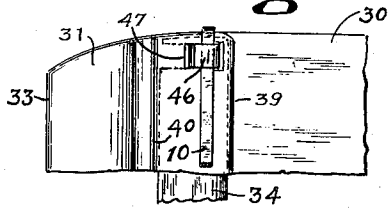



Fig. 16.







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Patented June 3, 1941

2,244,246

# UNITED STATES PATENT OFFICE

2,244,246

## NOTEBOOK

Charles L. Esterly, Cleveland, Ohio, assignor to J. D. Douglass, Rocky River, Ohio

Application August 6, 1938, Serial No. 223,475

7 Claims. (Cl. 281—20)

This invention relates to improvements in holders, and more particularly to improvements in devices for holding and protecting the free edges of the pages of loose-leaf notebooks or the like.

In the use of notebooks, particularly those of the loose-leaf type, I have found that the pages in time are apt to become "dog-eared" or frayed, and that ordinary means of finding or holding any particular page, such as book-marks are very apt to become dislodged and lost. Heretofore there has been no convenient means for holding the loose-leaf type of book closed or for holding it open in any particular position.

By my present invention I have provided a device which may be readily attached to the existing types of notebooks or other types of books such as catalogues, street directories and the like wherein the pages of the book may be securely held in either an open or closed position, and where the device cannot become lost or misplaced when released. Furthermore the nature of the device is such that it serves as a protector for the edges and corners of the book, preventing the same from becoming "dog-eared" or frayed and soiled, and wherein loose pages or notes which have been loosely placed in the book may be retained therein without falling from the book.

Although the device is particularly adapted to notebooks, it may be applied with equal facility to the other types of books mentioned. Furthermore it is adaptable to such devices as clip boards and may be used to replace the spring-pressed clamp used on such boards for holding loose papers or the like.

Still other advantages of the invention and particular character of the invention itself will become more apparent from the following description wherein several embodiments of the invention have been described and which description is illustrated by the accompanying drawings.

In the drawings:

Fig. 1 is an end edge elevational view of a ring type notebook showing the device of my invention applied thereto;

Fig. 2 is a plan view of the book of Fig. 1;

Fig. 3 is an end edge elevation with the covers up and showing the book open;

Fig. 4 is a plan view of the book of Fig. 3;

Fig. 5 is a view similar to that of Fig. 1 showing the holding device released from engagement with the edges of the book;

Fig. 6 is a perspective view of the device of my invention removed from the book;

Fig. 7 shows the device of my invention applied to an ordinary book;

Fig. 8 is an enlarged fragmentary perspective showing in detail a modification of the parts which make up the invention;

Fig. 9 is a view partly in elevation and partly in section of the device of my invention applied to an envelope;

Fig. 10 is a side elevational view of the invention applied to a clip board;

Fig. 11 is a fragmentary plan view of the device of Fig. 10;

Fig. 12 is a modified form of the invention;

Figs. 13 and 14 are fragmentary edge and plan views of a modified form of the invention;

Figs. 15 and 16 are views similar to Figs. 13 and 14 of another modification of the invention; and

Fig. 17 is an end elevation of a folder embodying the invention, certain alternate positions of the parts being shown by dotted lines.

Referring now to the drawings throughout which like parts are designated by like reference characters, and particularly to Figs. 1 to 6 inclusive, the invention is shown as applied to the well known ring type of notebook which comprises front and back covers 1 and 2 having a plurality of blank sheets 3 therebetween, the pages and covers being engaged along one edge by a binding element 4 which may be any of the well known types of binding elements now on the market. A spiral binding element may be used in place of the ring elements 4 or separate rings may be used. It is also within the purview of the invention to apply it to those types of books which are sewed along the back for holding the pages in place. In the type shown the covers and pages have rectangularly aligned holes punched therethrough through which the ring sections 4 extend permitting the book to lie open as best shown in Figs. 3 and 4.

As best shown in perspective in Fig. 6, I provide a supporting member 5 which may comprise a sheet of fiber board or other stiff material provided along one edge with rectangular apertures 6 adapted for connection with the rings 4, which board may be of substantially the same size as the pages of the sheets in the book in which it is adapted to be used. In the embodiment shown, however, the supporting member 5 extends slightly beyond the edges of the book, and has attached thereto a pair of flaps 7. The flaps 7 may be of relatively stiff material or of flexible material with a stiff insert of material along the edge to stiffen the same. In either event the point of attachment of the flaps with the support 5 provides a hinge at 8 which allows the flaps to be

folded-over back upon the element 5 or in parallelism therewith as shown in the figures. Each of the flaps is provided with guides at its outer corner extremities which may be formed of folded-over portions 9 which provide a channel opening therethrough through which a rubber band 10 may be passed. If the material of the flaps is relatively stiff they may be scored at 8 in order to provide the hinge mentioned. It will be quite obvious that the part of the flap to be folded over could be made of stiff material and the zone where the flaps are attached to the supporting member 5 would comprise flexible material such as cloth or other fabric, adhesively or otherwise connected to the supporting member 5 or to the supporting member of the flaps. Although in the disclosure of the drawings the point of connection of the flaps with the supporting member 5 is shown as extending beyond the edge of the book, it is quite within the purview of this invention that this zone could be between the pages of this book, thus bringing the hinged portion of the device closer to the edges of the pages.

As best shown in Fig. 1, the flaps may be folded over around the edges of the cover portions and the free edges of the book and held in position securely by a rubber band 10 which surrounds both the flaps and the pages of the book, being guided and held by the guides 9. In this position the book is held securely closed and the edges of the pages are protected by the material of the flap against abrasion and accidental turning. When it is desired to open the book, the extreme edge of the flap adjacent the book cover is engaged by the fingers and raised, stretching the rubber band, and the flaps are thus unfolded or turned inside-out to the position shown in Fig. 5. This action is quickly accomplished and when the flaps are disengaged the edges of the book are free and may readily be opened or laid flat for use.

If it is desirable to hold the book open at some predetermined place, the flaps may be returned to a similar position as shown in Fig. 1, which position is clearly illustrated in Figs. 3 and 4 wherein one flap engages the back cover and the other flap engages and holds the remaining pages of the book, those on the left hand side being free. When used in this manner, the sheets may be slid from under the flaps singly if desired. If it should be desired to hold the book open at a particular place, for instance if it were desired to hold all of the sheets securely at a place where the book is open as shown in Figs. 3 and 4, the loose pages 3 and the cover 1 can be folded until the covers are back-to-back and the flap engaged over the loose pages and covers, holding the book open and inside-out.

In applying the invention to permanently bound books such as street directories, reference books or the like, the invention may comprise a single flap as best shown in Fig. 7 having an edge 12 secured to or formed integral with the cover of the book and a flexible intermediate portion 13 and a movable flap portion which comprises the parts 13 and 14 adapted to be snapped over the free edge of the book as shown in the full lines and which parts take the position shown in the dotted lines when disengaged to permit access to the leaves. Loops or guides 15 are provided for the rubber band 10 as in the other instance. It will readily be seen that the flap 13—14 may be folded over to encompass any desired number of pages to hold any particular position that the reader of the book desires.

Although in Figs. 1 to 7 inclusive I have shown the guides 9 and 15 for the rubber bands as being formed integral with the flaps, it is obvious that different forms of guides may be used, one other such form being shown in Fig. 8. In this instance the flaps 7 are provided with a folded-over portion 9' which is formed to provide a pair of channels 16 in which a U-shaped clip 17 may be slidably inserted. With such an arrangement the clips 17 may be removed from engagement with the flaps to permit the installation of new rubber bands, should the old ones become worn out. Still other clips which permit removal of the rubber bands and renewal thereof, are shown as will hereinafter more clearly appear. Although the rubber band 10 is the preferred form of resilient member used because of the economies involved, it will be clear that other expedients may be used and achieve the same result. For instance, a fabric tape could be used which would not entirely surround the book but would have ends partially surrounding the book and spaced apart, a spring would be secured to the ends of the tape; the tape being free to slide in the guides 9, the spring and tape combination would have substantially the same effect as the rubber band. Furthermore the flexible material for the hinge could be supplanted by a metallic hinge commonly known as a piano hinge.

In Fig. 9 I have shown another modification of my invention as applied to an envelope. In this event the envelope would have the side walls 20 and a bellows type end wall 21 formed in any desirable manner and the member 5 would be inserted in the envelope and secured by hinge elements 22 to the bottom of the envelope. In this device the flaps could be folded over to engage the free edges of the sides 20 of the envelope to hold the same closed, the ordinary flap of the envelope may thus be eliminated. In operation the flaps are released in exactly the manner as described for the book, the release being quick and substantially instantaneous, with no danger of the contents of the envelope being lost. With this device the usual rubber band passed around the envelope as is common practice is eliminated. This is highly desirable since ordinarily the rubber band is often lost in removing it from the envelope because it snaps away to parts unknown or is rolled off of the envelope when pulled from the pocket of the user.

In Figs. 10 and 11 I have shown the invention applied to what is commonly known as a clip board. This board which is ordinarily of relatively thick fiber or wood provided with a metal clip hingedly secured at one end, the papers being secured under the clip in a well known manner, has many disadvantages among which may be considered the weight; the board of necessity having to be made heavy because of the structure of the clip and the springs being attached thereto. These prior boards, as is well known, cannot be conveniently stacked one upon the other because the clip presents an irregular surface not conducive to stacking. In the clip board of my invention, the board 30 may be made of relatively light weight fiber or thin sheet metal and the flaps 31 are secured to the board by portions 32 which are riveted or cemented thereto providing a hinge at 33. The flaps in this instance comprise a sheet metal insert 34 covered by any desired material and are provided with keyhole shaped notches 35 at their outer edge corners in which rubber bands

10 may be inserted. The particular board shown is provided with clip flaps at each end which permits holding of the papers at both top and bottom. The flaps being on each side, blank papers may be placed on one side and when filled out may be removed and placed on the other side. Although the flaps in this instance may be made reversible as those previously described, I have found that in a board of this type there are some advantages to be obtained in eliminating the reversible feature and to even provide means whereby they cannot be reversed. In this instance, the means comprises a notch 36 formed in the edge of the board and which provides a shoulder 37 against which the rubber band is engaged as best shown in the Fig. 10. Obviously when this notch is provided the flaps cannot be reversed unless the rubber band is deliberately removed from engagement with the shoulder 37. At the same time the flaps may be opened sufficiently far to permit the papers to be readily inserted. Not only does the rubber band serve to hold the flaps closed, but it also guides the edges of the paper maintaining the same in alignment as they are inserted under the flap. This is particularly desirable when the board is used for the making of manifold copies from forms where certain blank spaces are provided on printed forms. In the embodiment shown the flaps are formed to provide inwardly protruding transversely extending portions, one being at the extremity of the flap as at 39, and the other being spaced from the extremity of the flap at 40. These portions, 39 and 40, provide a line contact of the flap transversely across the papers serving to hold the same more securely. It should be understood, however, that the flaps may be made flat if desirable, and that the flaps instead of converging toward the hinge could be square adjacent the hinge, on the order of the flap of Fig. 7, or of more flexible material which would allow the insertion of a greater number of papers. Such flexibility would also permit the flaps when holding the papers to lie parallel with the papers rather than to extend divergently as shown particularly at the right hand side of Fig. 10. As previously stated, the keyhole shaped slot permits the rubber band to be engaged in the flap or removed for renewal when desired.

In Fig. 12 I have shown a modified form of a resilient means for holding the flaps closed. In this instance the notch 36 in the board may be eliminated and a keyhole slot 45 provided in the edges of the board. The rubber bands are then looped through the keyholes 35 in the flaps and through the notch 45, holding the flaps closed. It will be obvious that in this type of fastening a spring could also be used secured to the board at the point 45 and to the flap and that no tape would be necessary.

In Figs. 13 and 14 I have shown another modification particularly designed for the clip board but which may be also applied to the other flaps, wherein the metallic insert 34 has struck from it a hook 46 which extends through the covering and which provides a guide for the rubber band. The end of the hook may extend downwardly at 47 to prevent accidental escape of the rubber band therefrom and may be in actual contact with the flap, the hook being sufficiently resilient to permit the same to be raised to allow insertion of the rubber band, or the hook may extend in the other direction.

Another modification is shown in Figs. 15 and 16 which is substantially the same as that of Figs. 13 and 14 except that the hook 46 is struck inwardly on the inside of the flap. In this event the curved portion 49 of the flap provides a channel extending transversely across the board and which permits the rubber band to be concealed on the inside of the flap.

In Fig. 17 I have illustrated a folder to which the invention may be applied. In this instance the device is provided with cover members 51 and 52 hingedly secured to each other at 53. The cover 51 may be provided with a flap 54 to which a rubber band 10 is secured to hold the same in position in substantially the same manner as Figs. 10 and 11 and which permits papers indicated at 56 to be readily inserted and held in position. The other cover may be provided with a pocket comprising the parts 57 and the flap 58 for holding papers which it is desired to conceal. In this event the flap 58 might not have the self-closing feature or it could be made shorter than shown and embody the self-closing feature.

Secured at the point of hinged connection 53, is the supporting element 30' substantially the same as the clip board and which carries hingedly at its ends the flaps 31 held by the rubber band 10. With this embodiment, the folder which may be the ordinary folder such as used in business files and is particularly adapted for that use, the sections 51 and 52 may be folded up against the member 30' and engaged by the flaps 31 which holds the same, in the same manner as described for the papers in the clip board.

It will thus be seen that there are many departures that can be made from the structures shown and which will be apparent to those skilled in the art and it is not my intention to limit the invention to the precise structure shown but that the invention should be limited only as defined in the appended claims and which claims should be construed with a range of equivalents to which they are entitled in view of the status of the prior art.

I claim:

1. In a device of the class described, including a flap, supporting means hingedly supporting the flap, guide loops formed on the underside of said flap, resilient means comprising a rubber band trained through and slidable in said guide loops and extending along the underside of the flap for holding the flap resiliently toward one side of the support.

2. In combination with a notebook having a plurality of pages, means for holding the pages of said book comprising a supporting member secured to said book, flaps hingedly secured to said member and extending over opposite sides thereof, guides carried by the flaps, resilient means trained through the guides on said flaps and under the flaps to hold said flaps engaged over the edges of said pages.

3. In a protector for a notebook or the like, a supporting member formed with openings therein for binding it in a notebook, a pair of protective flaps hingedly carried by the support and extending over opposite sides of the support, said flaps extending over the free edges of the notebook, resilient means connected to the flaps for holding the flaps in folded over position, said flaps being capable of being turned in unfolded position from holding engagement with the free edges of the notebook, said resilient means holding said flaps in open position.

4. In a device for holding a book closed comprising a supporting member adapted to be connected to the book, flaps connected to said sup-

porting member and extending over the free edges of the book, guides carried by the flaps and a resilient means trained through said guides and around said flaps for holding the flaps in folded-over position, said resilient means adapted to be stretched to allow said flap or flaps to be turned from folded-over book edge engaging position to unfolded book edge disengaged position and holding said flaps in said open position.

5. In a device of the class described, a supporting member adapted to be secured to an article having loose parts to be held, a pair of flaps of flexible material secured along the edge of said support, and adapted to be folded over said loose parts, stiffening means for the edges of said flaps and guide means connected to said stiffening means, a resilient band extending through said guide means and around said flaps and supporting member adapted to hold said flaps resiliently toward said supporting member, said flaps and resilient band adapted to be quickly folded over said loose parts to hold the same against the supporting member and unfolded for disengagement thereof.

6. In a device of the class described, a supporting member and a pair of flaps hingedly connected thereto, resilient means connected to the flaps for holding the flaps against the opposite faces of the member, said resilient means being of sufficient resiliency to permit said flaps to be raised from engagement with said member to allow insertion of loose papers thereunder, said resilient means extending between the sides of the flaps and guiding and aligning the edges of said papers under said flaps.

7. In a device of the class described, a supporting member adapted to be secured to an article having loose parts to be held, a pair of flaps movably secured along the edges of the support and adapted to be folded over said loose parts, guiding means carried by the flaps on the underside thereof adjacent their side edges, a resilient band extending through said guide means and along the underside of said flaps holding said flaps resiliently toward the supporting member, said flap and resilient band adapted to be quickly folded over said loose parts to hold the same against the supporting member and unfolded for disengagement thereof.

CHARLES L. ESTERLY.