Dec. 24, 1929. W. R. BUXTON 1,741,009

BILL FOLD

Original Filed March 26, 1926 2 Sheets-Sheet 1

Fig. 1.

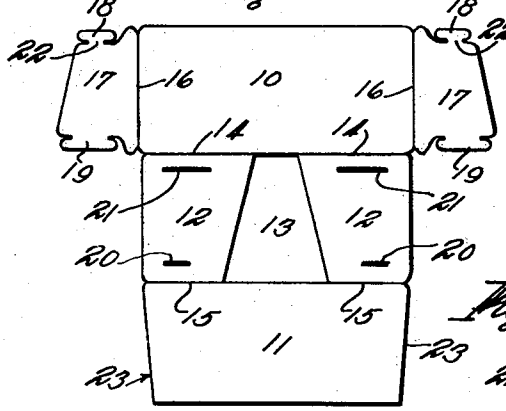


Fig. 2.

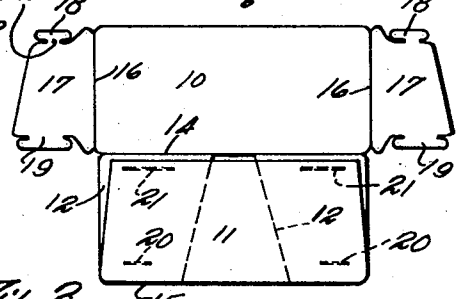


Fig. 3.

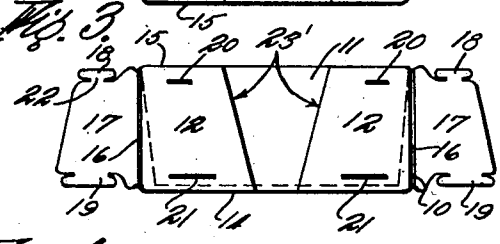


Fig. 4.

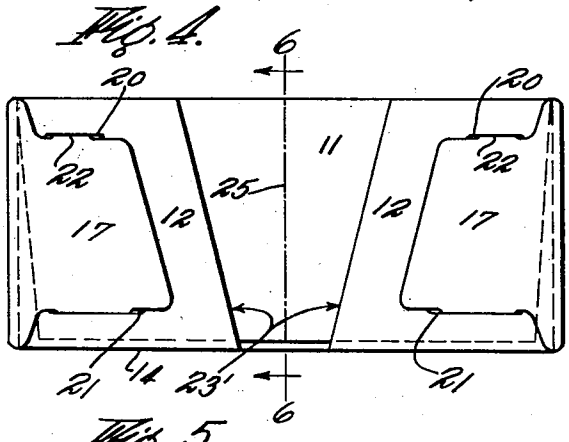


Fig. 6.

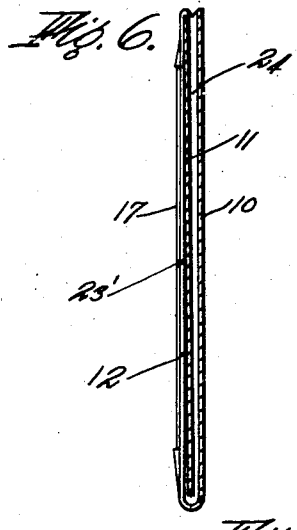


Fig. 5.

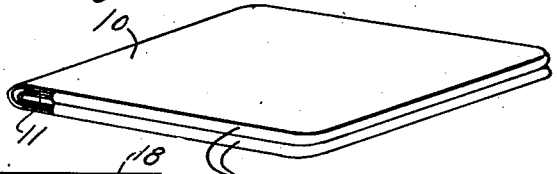


Fig. 7.

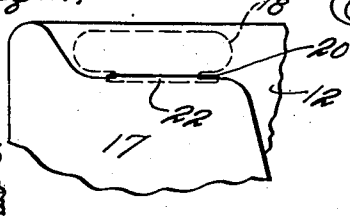
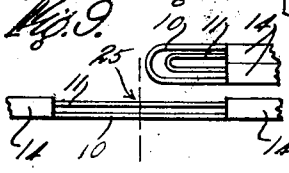


Fig. 8.

Fig. 9.



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Fig. 10.

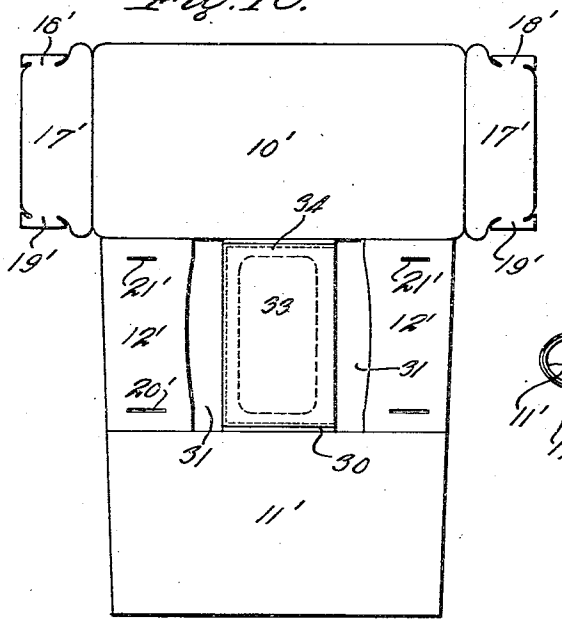


Fig. 12.

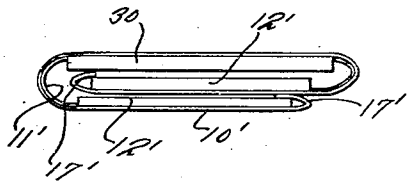


Fig. 13.

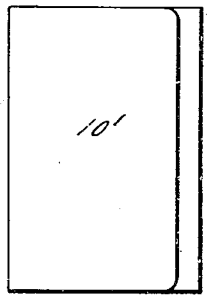
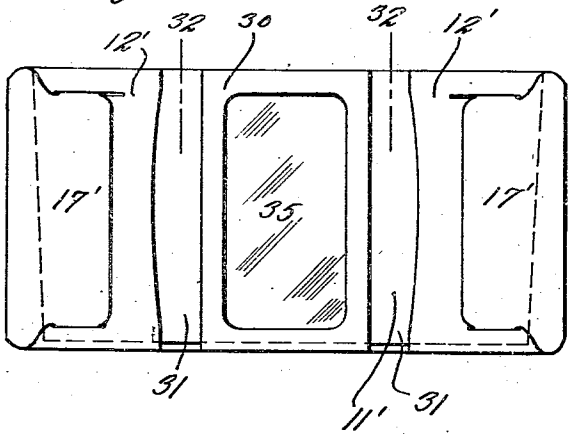


Fig. 11.



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UNITED STATES PATENT OFFICE

WARNER R. BUXTON, OF LONGMEADOW, MASSACHUSETTS

BILL FOLD

Application filed March 26, 1926, Serial No. 97,636. Renewed September 27, 1929.

This invention relates to an improved flexible pocket receptacle adapted to carry bills, cards and the like and commonly known as a bill fold.

An object of the invention is to provide a bill fold with improved provisions for relative longitudinal movement between the inner and outer walls of the bill receiving compartment, whereby when the bill fold is doubled or otherwise folded upon itself to fit the pocket, it will fold into substantially flat, compact form even when a number of bills are in said compartment, without buckling or irregular folding of the flexible material particularly with respect to said inner wall.

Another object of the invention is to provide an improved bill fold which can be made up from a single piece of flexible material folded in an improved way and interlocked in folded relation without stitching.

The attainment of these objects separately or together results in an improved bill fold structure of small bulk.

Other objects and advantages will appear in the following description and will be pointed out in the appended claims.

The invention will be disclosed with reference to the accompanying drawings, in which:—

Fig. 1 is a plan view of the blank from which one form of a bill fold embodying the invention, is made;

Figs. 2 and 3 are views showing successive stages in the positioning of the bill fold walls and locking tabs of the blank shown in Fig. 1;

Fig. 4 is an enlarged elevational view showing the locking tabs in position to hold the walls in pocket forming relation;

Fig. 5 is a perspective view of the bill fold when folded along the line 6—6 of Fig. 4;

Fig. 6 is an enlarged cross sectional view taken on the line 6—6 of Fig. 4;

Fig. 7 is an enlarged fragmentary elevational view showing a detail of construction;

Figs. 8 and 9 are full size fragmentary end elevational views showing the bill fold closed and open, respectively;

Fig. 10 is a plan view of a blank from which another form of bill fold, embodying the invention, is made;

Fig. 11 is an enlarged elevational view showing the completely formed bill fold, as made up from the blank shown in Fig. 10; and

Figs. 12 and 13 are top plan and elevational views of the bill fold, when folded to fit the pocket.

Referring to these drawings; the bill fold may be and desirably is made up from a single piece of suitable material, such as leather or the like, cut out and slotted in the form shown in Figs. 1 or 10. Considering the blank shown in Fig. 1, the sections of the bill fold are positioned by successive folding operations followed finally with simple tab tucking operations which interlock certain sections and maintain all the folded sections in folded relation. The first folding operation on the blank causes the sections to take the positions as shown in Fig. 2. At the end of the second folding operation, the sections occupy the positions shown in Fig. 3. The article shown in Fig. 3 is then by two folding operations and four tab tucking operations converted into the finished form shown in Fig. 4.

The blank shown in Fig. 1, includes an outer wall section 10, of an area slightly larger than that of one of the bills to be carried and an inner wall section 11, somewhat smaller in length and width than the outer wall section for a special purpose which will appear. The sections 10 and 11 are disposed in parallel but spaced relation and the adjacent side edges of each wall section 10 and 11 are connected by two intervening flap sections or tabs 12 of a width about equal to the width of the outer wall section 10. The flap sections 12 are laterally spaced,—an opening 13 being cut out of the blank for this purpose. The opening 13 is preferably trapezoidal in shape so that the adjacent end edges of the flap sections 12 diverge away from their hinge line connection 14 with the outer wall 10 and toward the hinge line connection 15 with the inner wall 11. The opposite end edges of flap sections 12 lie parallel with the corresponding ends of the outer wall section 10 but preferably somewhat nearer together. Connected to the ends of the outer wall sec-

tion 10 by a hinge line connection 16 are end flaps 17 each having upper and lower tabs 18 and 19, respectively, adapted for insertion in slits 20 and 21, respectively, formed in the flap sections 12. The length of the tabs 18 and 19 is greater than that of the slits 20 and 21, through which they are respectively passed, and each is connected to the body of flap 17 by a narrow neck, such as 22. These narrow necks ride in the slits so that they can move laterally back and forth therein. This will be clear from Fig. 7.

The blank is preferably scored along the lines 14, 15 and 16, or otherwise formed so that the blank readily folds along these lines. The end edges 23 of the inner wall section 11 preferably diverge away from the hinge line connection 15.

The sections of the blank, above described, are positioned into a bill fold in the following manner. The inner wall section 11 is first folded along the line 15 up, over and upon the flap sections 12, being superposed thereon as shown in Fig. 2. The next step is to carry these superposed sections up over and upon the outer wall section 10, the flaps 12 folding along the hinge line connection 14. The sections then occupy the positions shown in Fig. 3,—the inner wall 11 being superposed on and contiguous with the outer wall 10 and being connected therewith solely by the flaps 12. These flaps, aside from the flexible connecting function, just alluded to, form in cooperation with the inner wall 11 pockets 23′ on the outside of the inner wall 11 for the reception of cards and the like. Except for this additional result flaps 12 could be made of smaller area. The next step is to secure the folded sections in folded relation and at the same time close the otherwise open ends of the continuous bill compartment 24 formed between the walls 10 and 11 as well as the otherwise open ends of the pockets 23′. While this object may, according to some features of the invention, be accomplished in any suitable manner, it is preferably accomplished, as shown, by folding over the end flaps 17 along the hinge line connections 16, bringing the flaps into superposed relation with the flap sections 12. The tabs 18 and 19 are then inserted in their respective slits 20 and 21, thus interlocking the flaps 12 and 17 and thereby holding the various sections in folded relation. The sections are then positioned, as in Fig. 4, and the bill fold is ready for use.

The complete bill fold in form for use, is shown in open position in Fig. 4 ready for the insertion or removal of bills. When not in use, the bill fold may be folded along a central transverse line of fold 25 so that one half thereof is superposed upon the other as shown in Fig. 5, the folded article being of such size and shape as to be conveniently carried in the pocket. If it is desired to omit the extra pockets formed by flaps 12 with the inner wall 11 such flaps and flaps 17 may be made with the sole purpose of interlocking and to close the bottom and ends of the bill compartment just enough to prevent the bills from falling out.

In folding the bill fold from open to closed position as used, the inner wall 11 necessarily has to bend about a smaller radius than the outer wall and the difference in these radii increases as the compartment 24 is filled with bills. This will be readily apparent from Fig. 8. Now, unless provision is made for relative longitudinal shifting movement between the inner and outer walls, the inner wall must necessarily buckle near its central portion and this buckling of the inner wall prevents the bill fold, when closed, from lying in smooth flat and compact form.

I am aware that provision has been made heretofore to take care of this cramping action between the inner and outer walls of bill folds as, for example, that shown in British patent to Brooks No. 103,416. But the provision made according to the present invention consists in a distinctly better provision for the purpose in view.

The bill fold construction herein described in characterized by peculiar provisions for the relative shifting of the inner and outer walls when the bill fold is moved from open to closed position and vice versa. The inner wall is free from a direct connection with the outer wall and is connected thereto solely by a flexible connection comprising the flaps 12. The flaps 12, it is true, also have a flexible connection with the outer wall by means of the flaps 17. This connection between flaps 12 and 17, however, is of a loose nature so that flaps 12, particularly near their upper edges can move longitudinally back and forth relatively to flaps 17. For example, either flap 12 (Fig. 4) can be pushed outwardly until the inner end of its slit 20 abuts the adjacent part of the narrow tab 22 on flap 17 or until an outer end edge of flap 12 abuts the end closure of the bill fold defined by the hinge line 16. Said outer end edges of flaps 12 are cut back from the corresponding ends of outer wall 10 sufficiently to permit this freedom of movement of flaps 12. The inner wall 11, while attached to flaps 12 at its upper edge and necessarily moving therewith at such location, is free from these flaps along its lower edge and can move longitudinally back and forth relatively thereto. This is permitted because the connection between the walls 10 and 11 is a flexible one, consisting of the flaps 12, which can warp or twist somewhat and enable enough movement of wall 11 relatively to wall 10 for the stated purpose. For example, one can grasp the member 11 near its upper edge and shift it back and forth relatively to the outer wall 10 over an appreciable distance without noticeably warping

the bill fold. In so doing, the flaps 12 move with the inner wall 11 near the upper ends since freedom for this movement is permitted by the slits 20. Obviously, these flaps 12 cannot, at their lower edges, move longitudinally relatively to the outer wall 10 to which they are fastened but they do nevertheless yield enough for the function but without appreciably distorting the bill fold. The flaps 12, as member 11 is moved back and forth seem to pivot at their outer lower corners and their lower edges can, if examined closely, be seen to roll up or down somewhat accordingly as the member 11 is pushed outwardly or inwardly. This rolling action of the lower edges of flaps 12 increases progressively from the pivot points at the outer corners to the inner lower corners.

When the bill fold is moved from open to closed position, the central line of fold 25 of inner wall 11 remains substantially stationary and the inner wall 11 pushes outwardly in opposite directions relatively to the outer wall 10, or stated more accurately, the outer wall actually moves in sliding relation to the inner wall. The relative action between the walls is analogous to that above described where member 11 was pushed outwardly toward an end wall of the bill fold by hand. When the bill fold is again opened, the member 11 slides in relatively to the outer wall, or to put it another way, the latter slides outwardly on the inner wall. The relative positions of the inner and outer walls, when the bill fold is closed and opened, are shown full size in Figs. 8 and 9, respectively. From these figures it will be seen that the outer wall has a considerable shifting movement relatively to the inner wall, amply sufficient to avoid buckling, bunching, crinkling or irregular folding of the inner wall when the bill fold is doubled upon itself into closed or pocket carrying position.

In the event that it is desired to fold the bill fold into more than two sections, an additional connecting flap between the outer and inner walls is provided for each additional section desired. For example, if the bill fold is to be folded into three sections an additional flap 30 (Figs. 10 and 11) is provided to connect the central portion of the lower edge of the outer wall to the corresponding portion of the upper edge of the inner wall and the flaps 12′ are reduced in width and modified slightly in shape, as shown, with the object of making the several flaps 12′ and 30 define in an approximate way the several sections into which the bill fold is to be folded. The flap 30 is spaced from the adjacent flaps 12′ so that the bill fold will naturally fold along lines which extend through the spaces between these flaps.

One particular way of accomplishing the object just set forth is shown in Figs. 10 to 12. The blank is shown in Fig. 10 and it is formed in the same general manner as that shown in Fig. 1 and corresponding parts are designated by the same reference numerals primed. The flaps 12′ have been made narrower to permit the addition of flap 30 and at the same time leave spaces 31 between flap 30 and the adjacent flaps 12′. The construction is otherwise similar to that of Fig. 1 and the blank is folded in the same manner to produce the bill fold shown in Fig. 11. The completed bill fold may be folded along the lines 32, which pass through spaces 31, into the form shown in Figs. 12 and 13, thus resulting in three superposed sections instead of two as heretofore.

The provision of flap 30 makes possible the provision of an additional pocket, if desired. A strip 33 is superposed on the back of flap 30 and stuck thereto along three edges as indicated at 34, thereby affording a pocket between the parts 30 and 33. Such pocket may be used for an automobile registration or membership card which may be rendered visible while in the pocket by a transparent section 35 provided in flap 30.

The bill fold, just described, embodies the same provisions for relative longitudinal movement between its outer and inner walls as that shown in Fig 4. The action is essentially the same except that there is substantially no relative longitudinal movement between the inner and outer walls at their central portions over an area commensurate with and defined by the flap 30. When the end portions of the bill fold are folded over upon the central portion, the end portions of the outer wall push outwardly in opposite directions, starting from locations defined by the side edges of flap 30. Otherwise, the action is the same as that already described.

Aside from the important advantage, relating to provisions for relative longitudinal movement between the inner and outer walls of the bill fold, which follows from the improved constructions disclosed, the invention affords desirable manufacturing advantages adapting it to quantity production at low unit cost. Either form of blank can be formed at and by one single stamping operation, in which the lines of fold may also be suitably defined. Having the blanks thus formed, the only other necessary labor is for folding the sections and interlocking them to form the finished bill fold, all of which may be accomplished expeditiously by relatively unskilled labor inasmuch as the operations are so simple. It may be desirable to score the fold lines apart from the stamping operation.

Thus, I have provided an improved bill fold which not only possesses important advantages from the point of view of the manufacturer but also possesses advantages which are important from the user's point of view

inasmuch as the bill fold, even when filled with many bills, is adapted to fold into comparatively flat, smooth and compact form, adapting it to be comfortably carried in the pocket by very simple means.

That feature of the invention relating to the one piece construction of the bill fold, while desirable and important by reason of the manufacturing advantages incident thereto, is not necessarily essential in so far as the other distinctive feature of the invention is concerned. That is to say, that feature characterized by an arrangement which permits relative longitudinal shifting of the inner and outer walls, does not depend on the one piece construction although that is now thought the best and most desirable form. The same action would be obtained at least to a substantial degree if the various sections were not integral and were fastened together by other means. Either feature of the invention may be used independently of the other and, when so used, some of the advantages pointed out herein will be obtained. A structure utilizing either of these features or both together is considered within the scope of the invention.

The invention has been disclosed herein, in an embodiment at present preferred, but the scope of the invention is defined by the appended claims rather than by the foregoing description.

What I claim is:

1. A bill fold, having flexible outer-wall forming means and flexible inner-wall-forming means, the walls thus formed being substantially rectangular and affording between them a bill receiving compartment, flexible means connecting one side edge of the first named means to the opposite and non-adjacent side edge of the second named means and closing a portion of the bottom of said compartment, and flexible means connecting the first and third named means and closing the ends of said compartment.

2. A bill fold, made up from flexible material and having outer and inner walls connected by flaps which extend from one side edge of one wall to the opposite and non-adjacent side edge of the other wall, and end flaps connecting the first named flaps and outer wall and permitting limited longitudinal shifting of the first named flaps relatively to the outer wall.

3. A bill fold, comprising, outer and inner walls defining the bill compartment, flexible means connected to one side edge of the outer wall and to the opposite and non-adjacent side edge of the inner wall and forming a sufficient closure for the bottom of said compartment to prevent escape of the contents thereof, and flexible means connecting the first named means and outer wall and closing the ends of said compartment.

4. A bill fold, comprising, outer and inner walls defining the bill compartment, flexible means connected to one side edge of the outer wall and to the opposite and non-adjacent side edge of the inner wall and substantially closing the bottom of said compartment, and flexible means connecting the first named means and outer wall and closing the ends of said compartment, the connection afforded by said last named means permitting limited longitudinal movement of the first named means and said inner wall relatively to the outer wall.

5. A bill fold, comprising, outer and inner walls, end and intermediate flaps arranged in longitudinally spaced relation and each connected to one side edge of the outer wall and to the opposite and non-adjacent side edge of the inner wall, and end flaps for connecting the outer wall to said first named end flaps.

6. A bill fold, comprising, outer and inner walls, end and intermediate flaps arranged in longitudinally spaced relation and each connected to one side edge of the outer wall and extending over the outer surface of the inner wall and connected to the opposite and non-adjacent side edge of the same, and end flaps for connecting the outer wall to said first named end flaps, the connection between said first named and last named end flaps permitting limited relative longitudinal shifting movement between the same.

7. A bill fold comprising, outer and inner walls of flexible material of an area substantially commensurate with that of a bill to be carried, flaps of flexible material serving to connect said outer and inner walls and foldably connected in longitudinally spaced relation to the lower edge of the outer wall and extending over the outer surface of the inner wall and foldably connected to the upper edge of the same, and flexible flaps for connecting the first named flaps and the outer wall and closing the ends of the bill compartment formed between said outer and inner walls.

8. A bill fold comprising, outer and inner walls of flexible material of an area substantially commensurate with that of a bill to be carried, flaps of flexible material for connecting the outer and inner walls together, said flaps being foldably connected in longitudinally spaced relation to the lower edge of the outer wall and extending over the outer surface of the inner wall and foldably connected to the upper edge of the same, and flexible flaps for connecting the first named flaps and the outer wall and closing the ends of the bill compartment formed between said outer and inner walls, said last named connection permitting relative longitudinal movement between the connected parts.

9. A bill fold comprising, outer and inner walls of flexible material of an area substan-

tially commensurate with that of a bill to be carried, flaps of flexible material foldably connected in longitudinally spaced relation to the lower edge of the outer wall and extending over the outer surface of the inner wall and foldably connected to the upper edge of the same, said flaps serving as the connection between the outer and inner walls and permitting relative longitudinal movement between the same, and flexible flaps foldably connected to the ends of the outer wall section and overlapping the first named flap sections and connected thereto.

10. A bill fold comprising, outer and inner walls of flexible material of an area substantially commensurate with that of a bill to be carried, flaps of flexible material serving as the only connections between said outer and inner walls and foldably connected in longitudinally spaced relation to the lower edge of the outer wall and extending over the outer surface of the inner wall and foldably connected to the upper edge of the same, and flexible flaps foldably connected to the ends of the outer wall section and overlapping certain of the first named flap sections, and interlocking means provided on said overlapped flap sections for connecting them together with freedom for limited relative longitudinal shifting movement.

11. A one piece bill fold made up from a blank of flexible material having an outer wall section, flap sections foldably connected at longitudinally spaced points to one side edge of said outer wall section, an inner wall section foldably connected to the free ends of said flap sections, end flap sections foldably connected one to each end of said outer wall section, said inner wall section adapted to be folded in superposed relation upon the first named flap sections, and the latter with the inner wall section superposed thereon adapted to be folded into superposed relation with the outer wall section to bring the inner and outer wall sections in contiguous relation, said end flap sections adapted to be folded inwardly over the first named sections and connected thereto.

12. A one piece bill fold made up from a blank of flexible material having an outer wall section substantially commensurate in area with that of a bill to be carried, flap sections of a height substantially equal to that of the outer wall section foldably connected at longitudinally spaced points to one side edge of said outer wall section, an inner wall section of a height not greater than that of said flap sections foldably connected to the free ends of said flap sections, end flap sections foldably connected one to each end of said outer wall section, said inner wall section adapted to be folded in superposed relation upon the first named flap sections, and the latter with the inner wall section superposed thereon adapted to be folded into superposed relation with the outer wall section to bring the inner and outer wall sections in contiguous relation, said end flap sections adapted to be folded inwardly over the first named sections, and interlocking means provided on the end flap and first named flap sections for detachably holding them together and permitting relative longitudinal shifting movement therebetween.

13. A complete bill fold made from one piece of flexible material comprising, inner and outer walls connected solely by integral flaps some of which are directly connected to both walls and some of which are directly connected to only one wall, said last mentioned flaps being slidably connected to the first mentioned flaps by tab and slot connections, all constructed and arranged for relative movements of the inner and outer walls permitted by the flexibility of the flaps connecting them.

14. A bill fold comprising, an outer wall and a superposed inner wall, a pair of flaps connecting one edge of the inner and one edge of the outer wall and arranged parallel to said walls, and end flaps on one of said walls slidably interlocked with the first mentioned flaps, all of said walls and flaps being adapted to lie parallel with each other when the bill fold is open and except for the fold in the walls to lie parallel with each other when the bill fold is closed, the connection of said walls by said flaps permitting simple folding of the walls without cramping them or the flaps.

15. A complete bill fold made from one piece of flexible material, comprising, outer and inner walls, flaps connecting said walls and extending from one side edge of one wall to the opposite and non-adjacent side edge of the other wall, and means connecting each end of the outer wall to the outer end of the adjacent flap.

16. A bill fold, having flexible outer-wall forming means and flexible inner-wall forming means, the walls thus formed being substantially rectangular and affording between them a bill receiving compartment, flexible means connecting one side edge of the first named means to the opposite and non-adjacent side edge of the second named means and closing a portion of the bottom of said compartment, and means connecting the ends of the first and third named means for closing the ends of said compartment.

In testimony whereof I have affixed my signature.

WARNER R. BUXTON.