

May 16, 1933.

W. R. BUXTON

1,909,809

BILL FOLD

Filed May 26, 1932

Fig. 4.

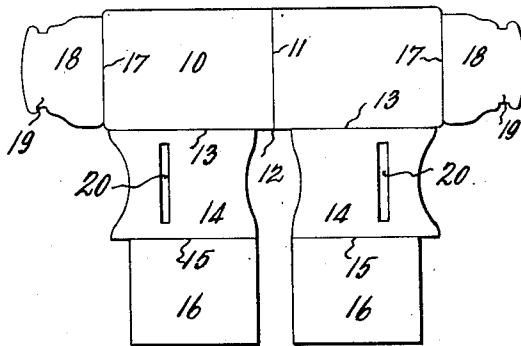


Fig. 2.

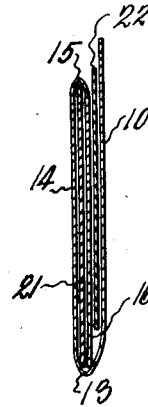


Fig. 1.

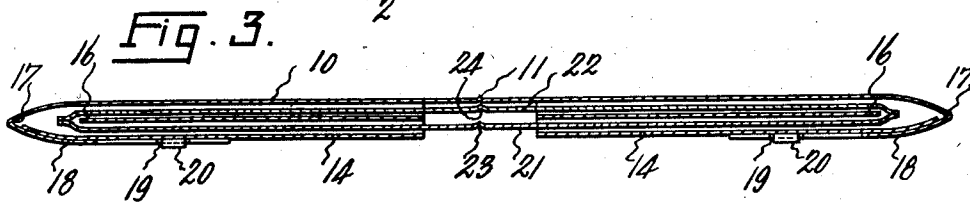
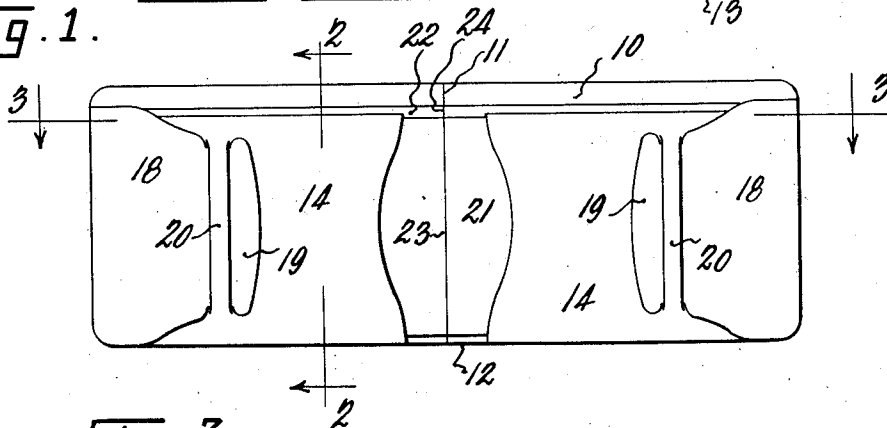


Fig. 5.

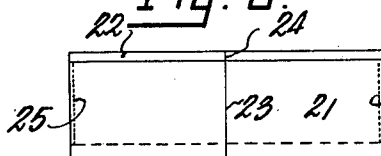


Fig. 6.

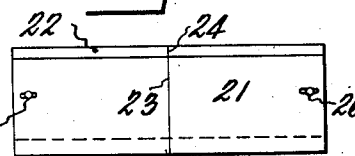
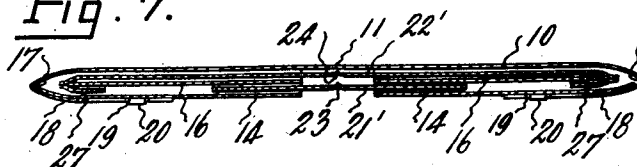


Fig. 7.



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BILL FOLD

Application filed May 26, 1932. Serial No. 613,621.

This invention relates to improvements in bill folds.

The invention is directed to, and has for an object, the provision of a bill fold having a partition in the bill-receiving compartment, which partition is free to move longitudinally in such compartment and is related in a novel and advantageous manner to the central slidable section of the inner wall of the bill fold so as to move in synchronized relation therewith.

The invention will best be understood as the detailed description proceeds and the above and other objects will more particularly appear from such description and will be pointed out in the appended claims.

The invention will be disclosed for illustrative purposes in connection with the accompanying drawing, in which:

Fig. 1 is an elevational view of a bill fold embodying the invention;

Figs. 2 and 3 are sectional views thereof taken on the lines 2—2 and 3—3, respectively, of Fig. 1;

Fig. 4 is a developed view of the blank from which the body portion of the bill fold is made;

Fig. 5 is an elevational view showing the remaining members which are used with the blank of Fig. 4 to form the complete bill fold;

Fig. 6 is a view showing a modification in the construction shown in Fig. 5; and

Fig. 7 is a view taken similarly to Fig. 3, showing a modification.

Referring to the drawing; the body of the bill fold is formed in substantially the same manner as disclosed in my copending U. S. patent application Serial No. 293,056, filed July 18, 1928, from a one-piece blank of leather or other suitable flexible material. Such blank is shown in Fig. 4 and includes an approximately rectangular section 10 which forms the outer wall of the bill fold and is transversely creased to form a central line of fold 11. Integrally connected to the lower edge 12 of section 10 and foldable relatively thereto about the lines of fold 13, are two flaps 14, disposed in longitudinally spaced relation one on each side of the

line of fold 11. Integrally connected to each flap 14 and foldable relatively thereto about a line of fold 15, paralleling the line 13, is a second flap 16. Each pair of flaps 14 and 16 forms a two-ply or tubular inner wall end section. Integrally connected to each end edge of section 10 and foldable relatively thereto about the line of fold 17 is an end flap 18, having a tongue 19 adapted to be slipped beneath a strap 20 on the adjacent flap 14, for the purpose of fastening the ends of the inner wall end sections to the outer wall 10 and at the same time closing the ends of the bill fold.

This blank is folded in the following manner. Each section 16 is folded upwardly and over and upon the section 14 to which it is connected. Then each section 14, with the section 16 superposed thereon, is folded upwardly and over and upon the outer wall 10. The sections 16 then lie next to the outer wall and form the end portions of the inner wall of the bill compartment. The flaps 14, which form the outer plies of the two-ply or tubular end sections, are then connected along their outer ends to adjacent ends of the outer wall 10 in any suitable way, as for example by folding over flaps 18 upon flaps 14 and passing the tongues 19 beneath the straps 20. There are various other ways, well known in the art, for effecting the same result and the particular means disclosed is not of the essence of the invention.

The bill fold structure, formed as just described, is complete except for the central or sliding section of the inner wall and except for a partition for the bill fold compartment. Such sliding section and partition are designated 21 and 22, respectively, each consisting of a strip of suitable material, preferably leather. Preferably these members 21 and 22 are provided with centrally located and pre-formed creases or lines of fold 23 and 24, respectively. These members are preferably combined into one piece and this may be done in any suitable way, as for example by stitching their end edges together as indicated at 25 in Fig. 5. An alternative construction is shown in Fig. 6 in which the members 21 and 22 are con-

connected at their ends as by the pin and slot connection 26, for a limited degree of relative sliding movement. The combined members form a closed loop and they are or
 5 may be substantially in the nature of an endless belt. Preferably the superposed members 21 and 22 are offset so that the upper and lower edges of the partition 22 are located above the corresponding edges
 10 of the central sliding section 21. The length of these members 21 and 22 is somewhat less than the length of the outer wall to allow freedom for the necessary degree of relative sliding movement between these members
 15 and such wall.

In folding up the bill fold from the blank shown in Fig. 4, the combined members 21 and 22 are preferably first put in place on the flaps 16. These two flaps will both be
 20 passed between the members 21 and 22 so that the member 21 rests upon these flaps face up, or as shown in Fig. 5. Then the blank is folded as above described with the result that the member 21 will lie between
 25 the pairs of flaps 14 and 16 and the partition 22 will lie between the flaps 16 and the outer wall 10, as indicated in Figs. 2 and 3. The member 21 is thus telescopically received near its ends in the tubular end sections 14—16 of the bill fold and its central
 30 and creased portion bridges the gap between these end sections and completes the inner wall of the bill fold. This central section 21 is slidable relatively to at least one of the aforesaid end sections and preferably,
 35 as shown, relatively to both. The section 21, fitting as closely in its tubular end sections as is compatible with free sliding movement, serves as a guide for the partition 22,
 40 which as shown preferably does not touch the bottom of the bill fold in order to minimize resistance to sliding movement as well as to avoid unnecessary bulk at this location so that the lower edge of the bill fold may
 45 be kept relatively thin. The bill fold is shown in Figs. 2 and 3 as of somewhat exaggerated thickness to secure clearness of illustration. The partition 22, when in
 50 place, preferably extends above the upper edge of the end sections of the bill fold and divides the bill receiving compartment into two sections. The flaps 16 are shown with the outer end edges offset inwardly from the
 55 corresponding end edges of the flaps 14, thus affording space for the endless member, shown in Fig. 5, to pass around the outer ends of these flaps in passing from the tubular end sections into the bill-receiving compartment. Where such endless member
 60 is, as herein shown, made up of two superposed parts connected along their end edges, space is needed for such connection and hence the flaps 16 are cut back from their connected flaps 14 as described. Although
 65 the invention is not limited thereto, these

flaps 16 are made stiff enough to remain in their folded positions without requiring the lower edges thereof to be fastened down, although obviously, they may be so fastened if necessary or desired, as for example in the manner disclosed in the prior application. The special way in which the partition 22 is connected to the central and slidable inner wall section 21 (at its ends) permits the flaps 16 to be fastened down along
 75 the entire lower edge of each.

The bill fold is shown in open position in Figs. 1 and 3. Access may then be had to the two sections of the bill receiving compartment as well as to the various pockets, such as those formed between the member 21 and each flap 14 and those formed between each flap 14 and the overlying end flap 18. The normal condition of parts is as shown in these figures and the several
 85 pre-formed creases 11, 23 and 24 are in alignment and overlying relation. To close the bill fold, one half is superposed upon the other, the parts folding about the lines of fold described. Because of the pre-formed character of the lines of fold, the parts, such as 10, 21 and 22 tend always to bend in one place along the predetermined line. The creases form weakened lines in their respective members and cause such
 95 members to more readily bend along the predetermined lines than elsewhere. This is important where, as here, the sliding parts such as 21 and 22, are devoid of any connection with the outer wall 10 or with the
 100 end sections 14—16 of the inner wall, and are thereby free to "float" back and forth. Because of the floating nature of the members 21 and 22, they may become displaced from their proper centralized positions with respect to the outer wall. From various causes, these members may meet with more resistance to sliding movement at one end of the bill fold than at the other. Cards thrust into the pockets between the flaps 14
 105 and the member 21 cause resistance to sliding movement and if more cards are put in one pocket than the other, there will be more resistance to impede movement of the section 21 at one end than at the other.
 115 Other conditions may cause the same difficulty. With this condition in mind, when the bill fold is opened the members 21 and 22 may not remain in their centralized positions. If displaced so that the lines 23 and 24 no longer register with line 11, then with the creased structure described the parts will be centralized when the bill fold is closed. The reason for this is that the members 21 and 22 will always bend along the predetermined lines and assume a V-formation. The outer wall 10 will bend in the same way. The point of the V-formation of the outer wall may be originally out of line with the points of the V-formations of the
 120 125 130

members 21 and 22 but continued folding of the bill fold into fully closed position will bring all of the V-points into line and centralize the slidable with the fixed parts of the bill fold.

Without the pre-formed creases, and under the same conditions, the members 21 and 22, because they bend as readily at one point as another, will not be centralized when the bill fold is closed. Experience shows that the members 21 and 22 will be displaced from centralized position to various degrees and will fold at one point one time and at another the next and so on, until from repeated opening and closing of the bill fold the central area of the members 21 and 22 will become soft and flabby because of folding along so many different lines. The present construction avoids this difficulty and centralizes the slidable parts with the other parts each time the bill fold is closed.

In operation, as the bill fold is closed, the members 21, 22 and 10 bend about radii of different length, increasing in the order in which such members are named. To avoid buckling which would otherwise occur, the parts 21 and 22 are made free to slide relatively to the outer wall 10. Actually, as the bill fold is closed, the tubular end sections 14-16 move inwardly toward the center line 23 of member 21 and these sections slide rather than the member 21. The partition also must be free from connection to the outer wall and inner wall end sections for similar reasons for these end sections slide inwardly relatively to the partition although to a less degree than to the section 21. Since the partition is free to slide as well as the section 21, it is desirable to keep them in synchronized relation by tying them together so that they will slide in unison. This has been done before as disclosed in my prior application but the present invention affords a different arrangement for the same general purpose and has certain advantages. In the prior construction the partition and central section were tied together along their lower edges and with the present construction these lower edges are free which enables the partition more freedom to bend about its radius which is greater than that of section 21. For example, the ends of section 21 can be pulled in or pushed out by the partition as required to take care of the difference in length of the radii about which these members bend. If a large load of bills is placed between the partition 22 and flaps 16, the partition will pull the outer ends of section 21 inwardly and effect a compensatory adjustment because of the endless form of the combined members 21 and 22 and because their lower edges are free.

The construction shown in Fig. 6 allows

the partition to move, within limits, relatively to the section 21 to compensate for the difference in the length of the radii about which these members bend. This construction avoids the necessity of the ends of these members being pulled around the ends of flaps 16, as above described.

The invention is not in all respects restricted to the connection of the partition to the sliding section 21. There are certain advantages to the feature of "hooking" the ends of the partition or the sliding section 21 or both about the ends of the flaps 16, which accrue whether or not these members 21 and 22 are interconnected. This will be clear from Fig. 7 in which the idea is illustrated in connection with the partition alone. This figure will serve to show the principle involved and the application of the same principle to the section 21 will be clear to those skilled in the art. In Fig. 7, the sliding section 21' is free of connection to the partition 22' but the latter has inturned ends 27 which extend around the ends of flaps 16 and enter the outer ends of the tubular end sections, in which the section 21' slides. These hooked ends prevent removal of the partition. They may also serve to centralize the partition by coaction with the ends of flaps 16. If the partition is displaced from proper centralized position, it will, when the bill fold is fully opened, be again centralized by the abutment of the one or the other of the flaps 16 with one or the other of the hooked ends of the partition. It will be clear from this one example that the section 21 may be made in a similar manner.

Thus, I have provided an improved bill fold of the type having a partition in the bill compartment and provisions for avoiding buckling of the partition and maintaining it in proper relation with the central slidable section of the inner wall and maintaining both in proper relation.

What I claim is:

1. A bill fold comprising, outer and inner walls affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall comprising longitudinally-spaced end sections disposed one on each side of said line and each connected along its lower side edge and outer end edge to the lower side edge and adjacent end edge of the outer wall, at least one of said end sections composed of outer and inner plies and the inner ply having its outer end edge spaced from the adjacent end edge of said compartment, a member extending across between the end sections to complete the inner wall and extending also between said plies and beyond said end edge of the inner ply, and a partition for said

compartment slidable longitudinally therein and connected at one end to the corresponding end of said member at a point beyond said edge of said inner ply.

5 2. A bill fold comprising, outer and inner walls affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other
10 and close the bill fold, said inner wall comprising longitudinally-spaced two ply end sections disposed one on each side of said line and the outer ply of each connected along its lower side edge and outer end edge to
15 the lower side edge and adjacent end edge of the outer wall, the inner ply of each end section having its outer end edge spaced from the adjacent end edge of said compartment, a member bridging the gap between
20 said end sections to complete the inner wall and extending between the plies of said end sections through said sections and beyond the outer ends of the inner plies and slidable relatively to such sections, and a partition
25 for said compartment slidable therein and extending longitudinally thereof and connected at each end to the corresponding end of said member.

3. A bill fold comprising, outer and inner
30 walls affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall comprising
35 longitudinally-spaced two-ply end sections disposed one on each side of said line and the outer ply of each connected along its lower side edge and outer end edge to the lower side edge and adjacent end edge of
40 the outer wall, the inner ply of each end section having its outer end edge spaced from the adjacent end edge of said compartment, a member bridging the gap between said end sections to complete the inner wall
45 and extending between the plies of said end sections through said sections and beyond the outer ends of the inner plies and slidable relatively to such sections, and a partition for said compartment slidable therein and
50 extending longitudinally thereof and connected at each end to the corresponding end of said member for limited relative sliding movement.

4. A bill fold comprising, outer and inner
55 walls affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall comprising
60 longitudinally-spaced two-ply end sections disposed one on each side of said line and the outer ply of each connected along its lower side edge and outer end edge to the lower side edge and adjacent end edge of
65 the outer wall, the inner ply of each end sec-

tion having its outer end edge spaced from the adjacent end edge of said compartment, and a member of endless form looped around said inner plies with one part received in said compartment and another part between
70 said plies, said member free to slide longitudinally relatively to said outer wall and end sections, said last named part bridging the space between said end sections and completing the inner wall of the bill fold. 75

5. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other
80 and close the bill fold, said inner wall consisting of end sections disposed one on each side of said line of fold and each secured to said outer wall, at least one of said end sections being tubular and the outer end edge
85 of the inner ply of said tubular end section being spaced from the adjacent outer end of said compartment, and a partition member slidable longitudinally in said bill receiving compartment and having at least one end
90 hooked around said end edge of said inner ply.

6. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall consisting of end sections disposed one on each side of said line of fold and each
100 secured to said outer wall, at least one of said end sections being tubular and the outer end edge of the inner ply of said tubular end section being spaced from the adjacent outer end of said compartment, and a member extending across the gap between said end sections and slidably received in the tubular wall end section, said member having its free end hooked around said end edge of said inner ply. 105

7. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other
110 and close the bill fold, said inner wall consisting of end sections disposed one on each side of said line of fold and each secured to said outer wall, at least one of said end sections being tubular and the outer end edge of the inner ply of said tubular end section being spaced from the adjacent outer end of said compartment, and a partition member slidable longitudinally in said bill receiving compartment and having at least
115 one end hooked around said end edge of said inner ply and adapted to abut therewith as a stop when the bill fold is opened. 120

8. In a bill fold, an outer wall and inner wall affording between them a bill-re- 130

ceiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall consisting of end sections disposed one on each side of said line of fold and each secured to said outer wall, at least one of said end sections being tubular and the outer end edge of the inner ply of said tubular end section being spaced from the adjacent outer end of said compartment, and a member extending across the gap between said end sections and slidably received in the tubular wall end section, said member having its free end hooked around said end edge of said inner ply and adapted to abut therewith as a stop when the bill fold is opened.

9. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall consisting of longitudinally-spaced two-ply inner wall end sections connected to the outer wall and a section bridging the gap between said end sections and slidably received between the plies thereof, the outer end edge of the inner ply of each end section being spaced from the adjacent end of said compartment, and a partition member in said compartment free to slide longitudinally thereof, the ends of said member being hooked around said end edges and entering between the plies of said end sections, and said hooked ends adapted to abut said end edges as stops when the bill fold is fully opened.

In testimony whereof I have affixed my signature.

WARNER R. BUXTON.

10. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall consisting of longitudinally-spaced two-ply inner wall end sections connected to the outer wall and a section bridging the gap between said end sections and slidably received between the plies thereof, the outer end edge of the inner ply of each end section being spaced from the adjacent end of said compartment, and said slidable section having its ends hooked around said end edges to prevent it from being pulled out of said end sections, and said hooked ends adapted to abut said end edges as stops when the bill fold is fully opened.

11. In a bill fold, an outer wall and an inner wall affording between them a bill-receiving compartment, said outer wall being foldable about a transverse line intermediate its ends to superpose one part upon the other and close the bill fold, said inner wall consisting of longitudinally-spaced two-ply inner wall end sections connected to the outer wall and a section bridging the gap between said end sections and slidably received between the plies thereof, the outer end edge of the inner ply of each end section being