Aug. 8, 1939. W. J. YOUMANS 2,168,504

COIN HOLDER

Filed Aug. 27, 1938 2 Sheets-Sheet 1

Fig. 1.

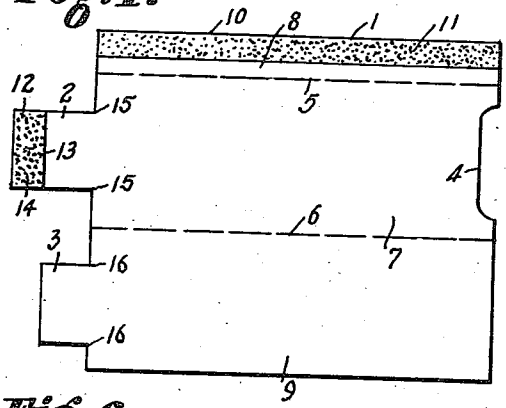


Fig. 2.

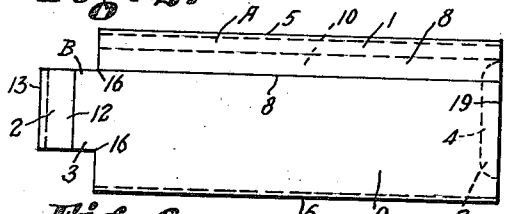


Fig. 3.

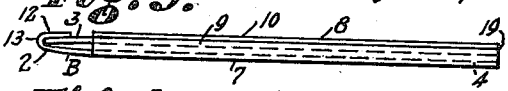


Fig. 4.

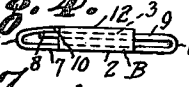


Fig. 5.

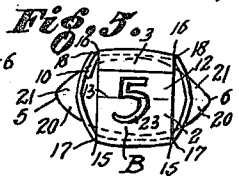


Fig. 6.

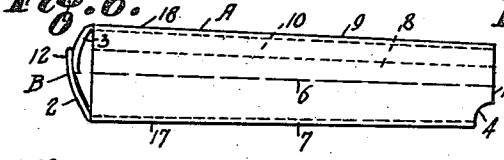


Fig. 7.

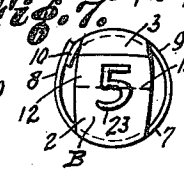


Fig. 9.

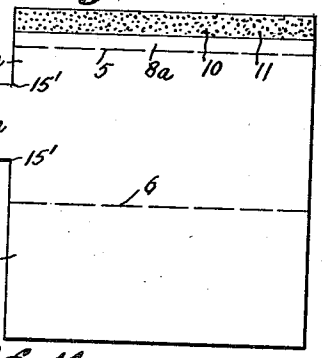


Fig. 8.

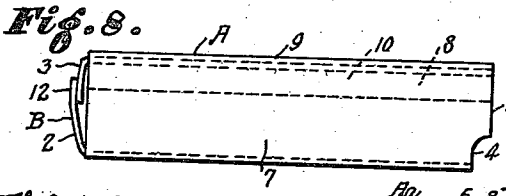


Fig. 10.

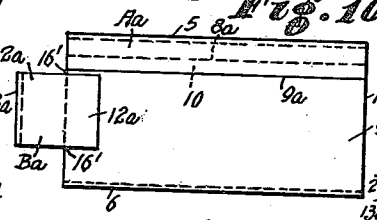


Fig. 16.

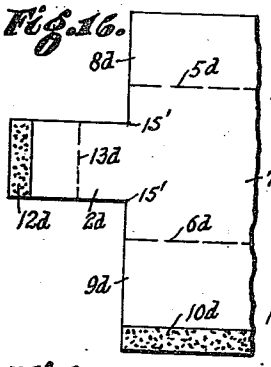


Fig. 11.

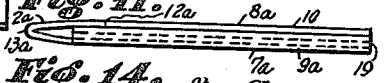


Fig. 13.

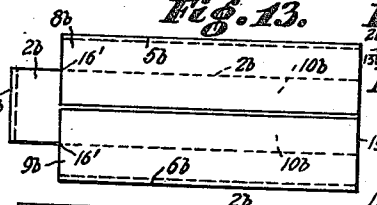


Fig. 14.

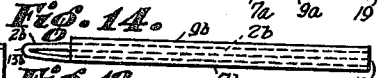


Fig. 12.

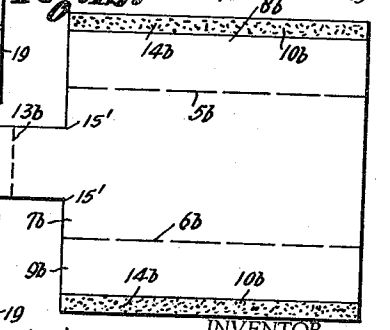


Fig. 17.

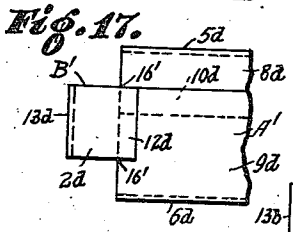
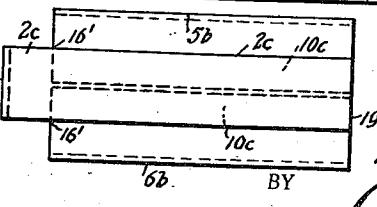


Fig. 15.



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BY

Clarence Parker

ATTORNEY.

Aug. 8, 1939. W. J. YOUMANS 2,168,504

COIN HOLDER

Filed Aug. 27, 1938 2 Sheets-Sheet 2

Fig. 18.

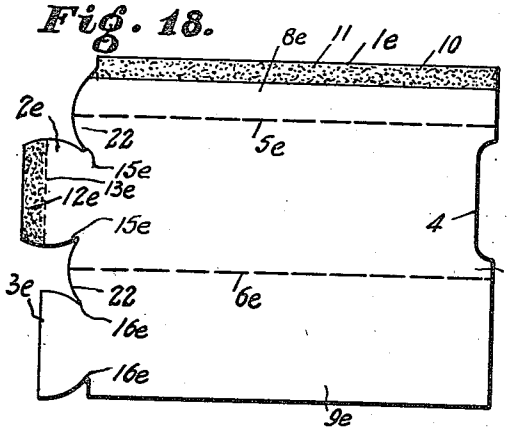


Fig. 19.

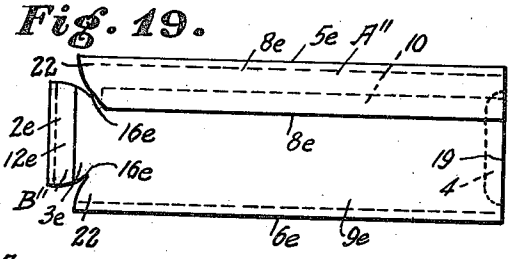


Fig. 21.

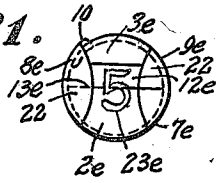


Fig. 20.

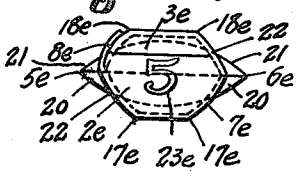


Fig. 22.

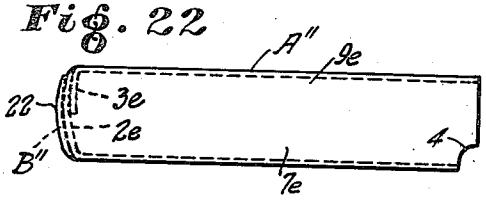


Fig. 23.

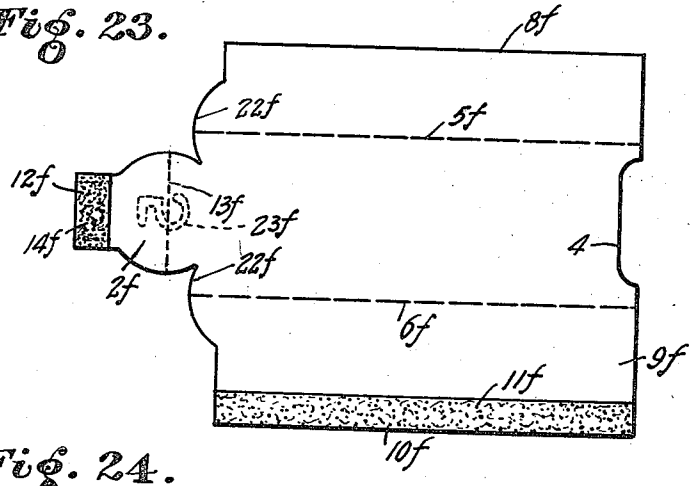
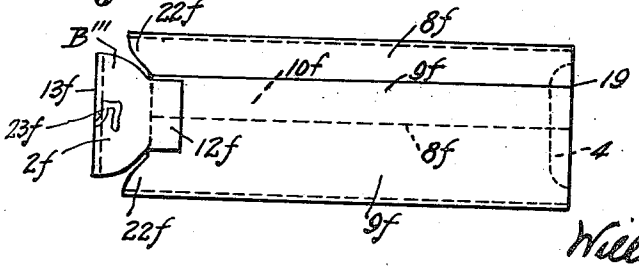


Fig. 24.



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Clarence Forbes ATTORNEY.

Patented Aug. 8, 1939 2,168,504

UNITED STATES PATENT OFFICE

2,168,504

COIN HOLDER

William J. Youmans, Fort Thomas, Ky.

Application August 27, 1938, Serial No. 227,171

10 Claims. (Cl. 133—9)

My invention relates to holders for holding coins in a row or stack, face to face, forming a cylindrical package. One largely used means for this purpose is a wrapper rolled around the stack of coins, with end parts crimped over the edges of the end coins of the stack. Another is a tube preformed to receive the coins snugly, open at both ends, and requiring the stack of coins to be carefully located to have sufficient projection at each end for crimping. Such tubes have been provided folded flat, requiring to be squeezed out into shape to receive the coins, which are inserted by hand, or are dropped in by a machine which stacks the coins.

Objects of my invention are to provide a coin holder, preformed in flat tubular shape, which may be more easily given the shape to receive the coins; which will more easily receive the coins; which may be more readily closed to retain the coins; and which will be more secure against accidental opening. A further object is to afford an area at the end of the package to bear a designation as to the contained coins, visible when the packages are stacked with their sides, which heretofore have borne the indicia, concealed from view.

It will be understood that, while I have shown only one size of holder herein, my invention, as with prior coin tubes, requires a holder of proper size for each size of coins.

My present invention is related to that disclosed and claimed in my co-pending application, Serial No. 705,703, filed January 8, 1934; and certain examples thereof, shown herein, are improvements thereover, especially in simplicity of formation and economy of material; without, however, departing from the principle of said prior invention.

A further object is to have a minimum number of thicknesses of material making up the over all thickness of the holder when it is in its flattened form; and to have a more nearly uniform thickness throughout the length of the holder in that form, in certain examples as compared with others shown herein; which is an advantage in common with said previous invention, but which is attained more simply and economically than with said previous invention.

Other objects will appear in the course of the following description, referring to the accompanying drawings, in which—

Figure 1 is a plan view of a blank for forming a holder;

Fig. 2 is a plan view of a holder formed from said blank;

Fig. 3 is an edge view of the holder shown in Fig. 2;

Fig. 4 is an end view of the same;

Fig. 5 is an end view of this holder when it has been brought to shape to receive the coins;

Fig. 6 is an edge or side elevation of the holder in its shape as shown in Fig. 5;

Fig. 7 is an end view of the holder when it has assumed its final shape upon insertion of the stack of coins;

Fig. 8 is an edge or side elevation of the holder in its shape as shown in Fig. 7;

Fig. 9 is a plan view of a blank for a modified holder;

Fig. 10 is a plan view of this modified holder;

Fig. 11 is an edge view of the same;

Fig. 12 is plan view of a blank for a holder of a second modified construction;

Fig. 13 is a plan view of a holder formed from the blank shown in Fig. 12;

Fig. 14 is an edge view of the holder which is shown in Fig. 13;

Fig. 15 is a plan view of a holder which is a submodification of the modified holder shown in Figs. 12, 13 and 14;

Fig. 16 is a partial plan view of a blank for forming a holder of a third modified construction;

Fig. 17 is a like view of a holder formed from the blank of Fig. 16;

Fig. 18 is a complete plan view of a blank for forming a holder like that of the first example, Figs. 1 to 8, inclusive, with certain modifications;

Fig. 19 is a similar plan view of a holder formed from the blank of Fig. 18;

Fig. 20 is an end view of the holder of Fig. 19, in its approximately cylindrical condition for receiving coins;

Fig. 21 is a like view of the holder in its substantially true cylindrical shape after it has received a stack of coins;

Fig. 22 is an edge or side elevation of the holder in its shape as shown in Fig. 21;

Fig. 23 is a complete plan view of a blank for forming a holder of construction similar to that shown in Figs. 16 and 17, with certain modifications; and

Fig. 24 is a similar plan view of a holder formed from the blank shown in Fig. 23.

Referring to Figs. 1 to 8, inclusive, the blank, as shown in Fig. 1, of sheet material, preferably paper stock of the kind known in the art of making coin tubes, comprises a simple rectangular main portion 1 and two tabs 2 and 3 integral with and projecting from one end of this main

portion 1. So that the coin holder will have one edge of its coin-admitting end recessed, to facilitate scooping coins, a portion of the opposite end of the blank is cut away, leaving a recess 4. It will be understood that the provision of this recess is optional.

The main portion 1 is to be folded along two parallel longitudinal lines 5 and 6 so located as to define a middle area 7 flanked by areas 8 and 9 adjacent to the respective longitudinal edges of the blank. The area 9 is much wider than the area 8, so that when the two areas 8 and 9 are folded in on the lines 5 and 6, respectively, across middle area 7, narrow area 8 will have an edge part 10 which may overlap the edge part of wide area 9, for securing the edge parts together. This preferably is done with adhesive 11 shown on edge part 10; but it will be understood that the adhesive usually is applied in the course of folding.

Tab 2 is median to the end edge of the area 7, and is longer than tab 3, which is located slightly out past the middle of the end edge of the wide side area 9, in such location that when the areas 8 and 9 are folded in as above described, the tabs 2 and 3 will register. This permits the outer end part 12 of longer tab 2 to be folded on line 13 around the end of short tab 3 and down onto the end portion of this tab 3, for securing the tabs 2 and 3 together. This also preferably is done with adhesive 14 shown on end part 12; but it will be understood that this adhesive also usually is applied in the course of folding.

The coin holder, formed as just described, and as seen in Figs. 2, 3 and 4, will be a flat-formed tube, of which middle area 7 is one side and outer areas 8 and 9 collectively form the other side; and this tube will have projecting from the middle of one end a flat-folded end-closure formed by the joined-together tabs 2 and 3. The tube is as a whole designated A, and the end-closure is as a whole designated B.

It will be noted that the width of the end closure B at each of its junctions with the ends of the sides of the tube A, i. e., the width between corners 15 and the width between corners 16, is half the width of these ends measuring between folds on lines 5 and 6. Also, it will be noted that the length of end closure B, from one junction between corners 15 to the other junction between corners 16, is about the same as the width of either of its junctions, 15 to 15, or 16 to 16, above described. This proportioning of the length and width of junctions of the end closure B relatively to the width of the sides of the tube A is especially important to the functioning of the end closure B to enforce and maintain an approximately cylindrical distension of the adjacent end portion of the tube A, with the end closure B extended across this end of the tube A, as a result of simply pressing toward each other the folds of tube A on lines 5 and 6.

By pressing the side edges, formed by the folds on lines 5 and 6, toward each other, the flattened tube A is distended, and it distends the end-closure B, so that the tube assumes, especially in the end portion of the tube A the distension of which is limited by the end-closure, a roughly hexagonal shape somewhat as indicated in Fig. 5. The end-closure B is almost completely unfolded in this operation, toward a straight shape across the end of the tube, as best seen in Fig. 6. The shaping of the tube is due to concentration of pressures at the corners 15 and 16 where the sides of the end-closure B, that is, tabs 2 and 3, form junctions with the end edges of the tube A, causing creases 17 and 18 extending from these corners for some distance along the tube. This, with the partial unfolding at lines 5 and 6, results in defining the six approximately equal sides, not completely straight but slightly bowed outwardly, in approach to a circular cross section. Those portions of the tube A next to the opposite, or open, end 19, not influenced by the closure B as just described will take the shape of two arcs with their chords coinciding, as at 20 and 21 in Fig. 5.

Were it not for the restricting end-closure B and the concentration of pressures enforcing the formation of the creases 17 and 18, the mere squeezing on the edge folds would result merely in this double-arc formation throughout the length. To bring about an approximation to circular cross section of the tube from such a full-length double-arc formation requires the pressure of the parts of the hand, fingers at one edge and thumb and heel of thumb at the other edge, all along the edges.

The end-closure B causes the restriction at one end, and enforces an approximately cylindrical cross section for some distance from this end of the tube by the much simpler manipulation of merely pressing a finger and the thumb on the edges about midway of the tube length. Also, approach of the tube portions next to the open end 19 of the tube to circular cross section, from the double-arc formation at 20, 21 just mentioned, is accomplished with much less care and dexterity on the part of the operator, who can work more rapidly in opening the tubes and getting the coins into them. This is because the roughly hexagonal, that is, the approximately circular, cross section of the closure end part of the tube A is formed at once, by this simple pressure; and the creases 17 and 18 thus created, sustain this cross section without special pressure of the parts of the hand at the closure end, leaving the hand free to concentrate the pressure on the portions at 20, 21 nearer the open end for completion of shaping of those portions as just above described.

The two overlapping portions 10 and 12 do not meet, so that the over all thickness of the holder is that of only three thicknesses of material. In practice, of course, the holder is not absolutely flat, but its walls are separated very slightly, as seen in Figs. 4 and 5, due to the resilience of the material at the folds along the lines 5 and 6.

However, this construction saves space, as compared with a construction in which an end-closure flap overlaps the overlapping part in the junction of the folded over side areas of the tube. It also affords, throughout the areas of overlap, a uniform thickness of the holder, allowing more even bunching in the packaging of the holders for storage and shipment.

The construction shown in Figs. 9, 10 and 11 is modified in that instead of two tabs, there is one longer tab 2*a* median to the end edge of middle area 7*a*. This tab 2*a* is folded transversely on line 13*a* to have a portion 12*a* next to its free end lapped over and secured to the top surface of infolded side area 9*a*, alongside of but not lapping over the overlapping junction portion of side area 8*a*. End portion 12*a* of tab 2*a* is shown as coated with adhesive 14*a*, it being understood that in practice this adhesive usually is applied in the process of folding. Thus, this construction also has the advantage of only three thicknesses of material making up the over all thickness of the

flattened holder. The closure B*a* thus forms junction corners 15' and 16' with tube A*a*, corresponding to the corners 15 and 16 in Figs. 1 to 8, inclusive.

In the construction shown in Figs. 12, 13 and 14, side areas 8*b* and 9*b* are equal in width, and there is but one tab 2*b*, which is made much longer than the one in the previous example, Figs. 9, 10 and 11, being, as therein, median to the end edge of the tube area 7*b* and folded on line 13*b* to lie over middle area 7*b* with side areas 8*b* and 9*b* folded in on lines 5*b* and 6*b* to overlap tab 2*b* and be secured thereto, at 10*b*, 10*b*. It will be understood that the adhesive 14*b* usually is applied in the process of folding the blank. This construction will result in but three thicknesses, as the areas 8*b* and 9*b* merely have their edges meeting over flap 2*b*, and not interlapping; the flap 2*b* being long enough to extend to the end edges of these areas 8*b* and 9*b*, at the open end of the tube. In Fig. 15, the same result is attained; the only difference being that flap 2*c* is lapped over the meeting edge portions 10*c* of the areas 8*c* and 9*c*, instead of under them.

In the construction of Figs. 16 and 17, the side areas 8*d* and 9*d* interlap, in the area 19*d*, where they are secured together, within the width of the end-closure B'. Also, this closure is formed of a single flap 2*d*, folded in on line 13*d*, with portion 12*d* next to its end overlapping and secured to overlapping area 9*d*. Therefore, this construction aggregates four thicknesses of the material; lacking the advantages of the previous examples, in this respect.

Figs. 18 to 21, inclusive, show a holder like that of the first example, Figs. 1 to 8, inclusive, with the difference that the end-closure tabs 2*e* and 3*e* are wider at their outer ends than they are at their junctions with the main part 1*e* of the blank; and ears 22 project from said main part 1*e* at each side of tab 2*e*, substantially symmetrical to the fold lines 5*e* and 6*e*, respectively. The outer edges of these ears 22 are preferably curved convexly. By the widening of the tabs 2*e* and 3*e* at their outer ends, so that they collectively, when secured together, approximate a circle in shape, the end closure B'' thus formed is adapted to more completely cover the coin at the closure end, as seen in Fig. 20. The ears 22 are tucked or crimped inward onto the edge parts of the end closure B'', as seen in Figs. 21 and 22, completing the closure of the end, and reinforcing the end closure B''. This construction affords especially acute notches 15*e* and 16*e* at the junctions of the end closure with the main part, to enforce the formation of the creases 17*e* and 18*e*, after the manner of, but in a more pronounced manner than in the examples preceding.

Figs. 23 and 24 show a construction similar to that of Figs. 16 and 17, with the overlap 12*f* of the end closure B''' overlapping the overlap 19*f* of the joined side areas 8*f* and 9*f*. The difference is in that end-closure flap 2*f* is widened at its midlength to approximate a circular shape, and the ears 22*f* are provided at each side of the flap 2*f*; these parts affording the more complete closure, and the ears affording the reinforcement when crimped in, that is had in the example of Figs. 18 to 21, inclusive. The closed condition of the holder will be understood to have the same apppearance as is shown in Figs. 20, 21 and 22, and as above described.

It will be seen that all of the constructions shown have the advantage of easy formation to receive coins, as described for Figs. 1 to 8, inclusive. When a stack of coins is placed in the holder, which has been brought approximately to finished shape as shown in Figs. 5 and 6, or in Fig. 20, the holder being of such dimensions that the coins fit the inside of the holder snugly when it has been distended further, the coins will enforce this further distension. Also, their weight against the end closure B, B', B'' or B''', will, together with their distending action on the adjacent end of the tube, stretch the end closure substantially straight across the end of the tube, as seen in Fig. 8 or in Fig. 22. The package of coins then will be approximately cylindrical, as seen in Fig. 6, or in Fig. 21.

The end closure of any of the examples affords an area which may bear a designation relating to the contained coins, as at 23 in Fig. 7, 23*e* in Fig. 21, or as indicated in dotted lines at 23*f* in Fig. 23 where the closure is not folded up to show this designation. An advantage of this last example, which is also had with that of Figs. 9 to 17, inclusive, is the continuity of the closure in the area for receiving such a designation. There is an advantage in having the designation on an end of the tube instead of on a side. When the tubes are stacked the sides are concealed, whereas the end of the tube is in full view. It will be understood that the method of closing the end 19 of the holder is not involved in my present invention; so that the construction of this end 19 of the holder may vary from that herein illustrated.

Modifications other than those illustrated herein may occur; and it will be understood that I am not limited to the specific examples herein set forth, but what I claim as new and desire to secure by Letters Patent is:

1. A coin holder comprising a tube of sheet material folded flat along a pair of longitudinal folds between which, at each end, the tube has separable edges, and an end-closure member of sheet material, having junctions, one with a middle part only of each of the two edges at one end of the tube, and having a transverse fold substantially midway between its two junctions, said member being folded flat on said fold and extending out from said edges, and the width of each junction and the length of said member between its junctions being so substantially equal to each other and so substantially less than the width between the longitudinal folds of the tube that said flat-folded end-closure member is adapted to unfold upon distension of the tube by pressing toward each other said longitudinal folds thereof, and that, by concentration of pressures at each side of each junction, there is enforced and materially maintained an approximately cylindrical distension of the adjacent end portion of the tube with said end-closure member extended across said end.

2. A coin holder as set forth in claim 1, in which the end-closure member, along its transverse fold, is substantially wider than its junctions with said end edges of the tube, forming, with said edges, acute notches at which the pressures are concentrated as therein set out, and said widened end-closure member thereby having a shape approximating the shape of the end of the distended tube.

3. A coin holder as set forth in claim 1, in which the end-closure member, along its transverse fold, is substantially wider than its junctions with the end edges of the tube, and in which the portions of said end edges outlying from said junctions are

convexly curved outwardly to form ears, said end-closure member and said curved edges forming, where they meet the end edges of the tube, acute notches at which the pressures are concentrated as therein set out, said widened end-closure member thereby having a shape approximating the shape of the end of the distended tube and said ears being adapted to be formed inward across edges of said end-closure member.

4. A coin holder as set forth in claim 1, in which the end-closure member is made up of tabs integral with the respective end edges of the tube, interlapping and attached together where they interlap.

5. A coin holder as set forth in claim 1, in which the tube is formed from a blank with spaced longitudinal folds defining a middle area and side areas overlying the middle area and interlapping and attached together where they interlap, and in which the end-closure member is made up of tabs integral with the respective end edges of the tube, interlapping and attached together where they interlap, said tabs interlapping in a location displaced from the interlapped portions of the tube side areas, for for the purposes set forth.

6. A coin holder as set forth in claim 1, in which the end-closure member comprises a tab integral with an end edge of the tube and with a part overlapping and attached to another part of the holder, the tube being formed from a blank with spaced longitudinal folds defining a middle area and side areas overlying the middle area and interlapping and attached together where they interlap, said side areas being of such unequal widths that they interlap substantially at one side of the median line of the folded blank, whereby their interlapping parts are in a location displaced from the overlapping part of the tab.

7. A coin holder as set forth in claim 1, in which the end-closure member is made up of a tab integral with the end edge of one side of the tube and has a part interlapping with and attached to the other side of the tube, said other side of the tube being made up of areas with portions that interlap and are attached together out at one side of said attached part of the tab.

8. A coin holder as set forth in claim 1, in which the tube is made up of a middle area and side areas folded in over the middle area, with their edges close together but not interlapping, and in which the end-closure member is made up of a tab integral with the end edge of said middle area and has a part interlapping with and attached to the edge portions of said folded-over side areas, substantially throughout the lengths of their close-together edges.

9. A coin holder as set forth in claim 1, in which the end-closure member is made up of tabs integral with the respective end edges of the tube, interlapping and attached together where they interlap, said tabs being wider in their outer end portions than their junctions with the tube end edges, leaving acute notches at the sides of said junctions, for the purpose set forth, and when attached together as aforesaid, giving the end closure a shape approximating the shape of the end of the distended tube.

10. A coin holder as set forth in claim 1, in which the end-closure member is made up of a tab integral with the end edge of one side of the tube and has a part interlapping with and attached to the other side of the tube, said other side being made up of areas with portions that interlap and are attached together where they interlap, said tab being wider in its midlength portion than it is at its junctions, leaving acute notches at the sides of said junctions, for the purpose set forth, and giving to the end closure a shape approximating the shape of the end of the distended tube.

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