March 5, 1963 E. S. DONLE 3,079,771

LOCKET HAVINC A HINGED LEAF WITH A MARGINAL OPENING FACING SAID HINGE

Filed Nov. 9, 1959

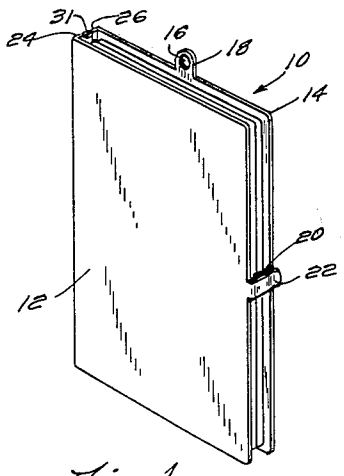


Fig. 1

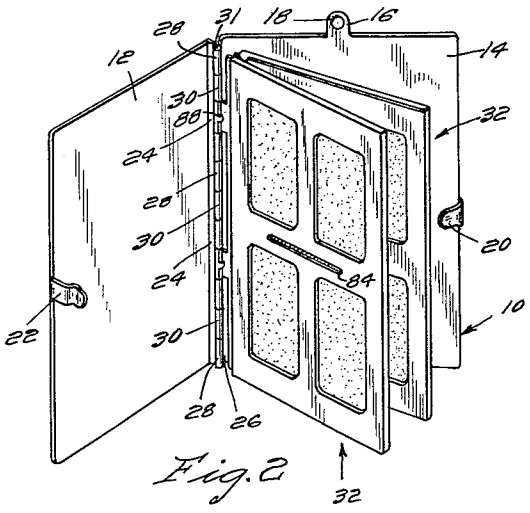


Fig. 2

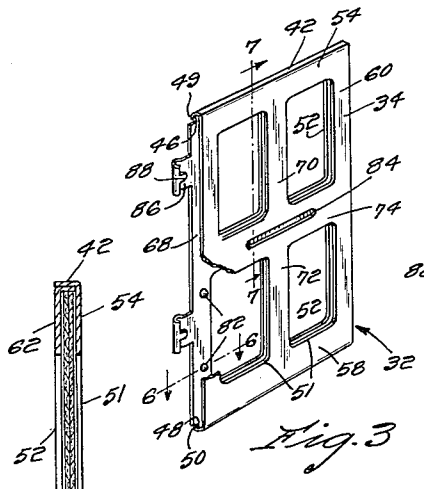


Fig. 3

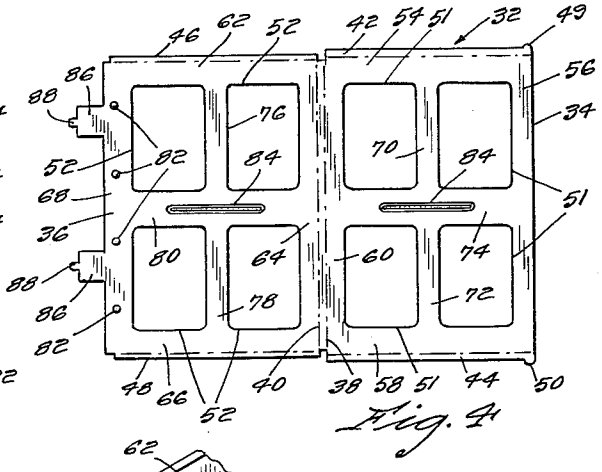


Fig. 4

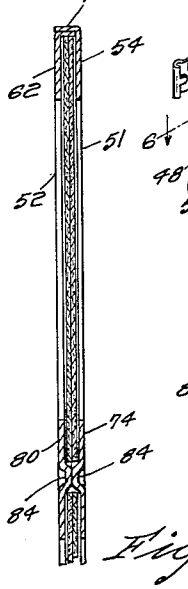


Fig. 7

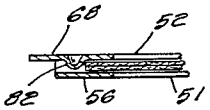


Fig. 6

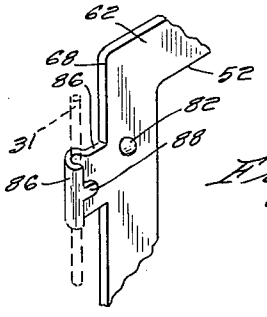


Fig. 5

INVENTOR.

Edwin S. Donle

BY Elliot A. Salter

Attorney.

United States Patent Office

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LOCKET HAVING A HINGED LEAF WITH A MARGINAL OPENING FACING SAID HINGE

Edwin S. Donle, Warwick, R.I., assignor to Coro, Inc. of Rhode Island, Providence, R.I., a corporation of Rhode Island

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1 Claim. (Cl. 63—19)

The present invention relates to a locket construction. More particularly, the present invention relates to a locket construction having a plurality of interiorly positioned hinged leaves, each of the leaves being formed with windows or viewing spaces therein and having a specially designed hinge construction for retaining the leaves in hinged position within the locket.

The locket construction embodied in the present invention defines a departure over the lockets known heretofore in that the hinged leaves formed as part of the assembly thereof are adapted to be freely pivoted within the front and rear covers of the locket. Prior to the instant invention, locket constructions were known that utilized hinged leaves having windows for displaying pictorial or illustrative matter therein and these usually included the common type of hinge member that was bent to receive a hinge pin therethrough. It was found that after assembling the locket leaves that had plating applied to the finished construction thereof, the plating would harden the metal, and the hinge members thereafter were not easily adaptable for being bent around the hinge pin. As a result, the interiorly positioned leaves did not freely pivot within the prior known locket constructions, thereby resulting in faulty operation and eventually resulting in the hinge members thereof being sheared from their leaves.

The interior leaves of the prior known lockets were also difficult to fabricate, being constructed in several machinery operations. Thus, the prior art devices were not only more complicated in structure, but were considerably more expensive to produce. The interior leaves of the present invention are stamped in a single stamping operation from a one-piece blank, the stamping operation forming appropriately positioned windows and fold lines, the sections of the leaves thereafter being folded to the finished position to complete the assembly thereof.

Accordingly, it is an object of the present invention to provide a locket construction having a plurality of interiorly positioned hinged leaves that are simple to manufacture and that are mounted for free pivotal movement in the locket assembly.

Another object of the present invention is to provide a locket construction having interiorly positioned hinged leaves, each of which is formed with spaced peripheral margins to define interior marginal spaces for receiving and retaining pictorial or illustrative matter therein.

Still another object of the present invention is to provide a locket construction having interiorly positioned hinged leaves, each of the leaves being provided with a specially designed hinge member for providing for free pivotal movement of the hinged leaves.

Still another object is to provide a hinge member for a locket construction that includes a projecting hinge finger that overlaps the hinge pin and provides for free pivotal movement of the hinge member on said hinge pin.

Still another object is to provide a hinge leaf for a locket construction that is stamped from blank form to define complementary sections, the complementary sections being separated by fold lines and including marginal portions that in the folded position thereof define interior marginal spaces for receiving pictorial or illustrative matter therein.

Still another object is to provide a hinged leaf for a locket construction that is folded from blank form and that has at least one window formed therein defined by peripheral margins.

Still another object is to provide a hinged leaf for a locket construction that is formed in complementary sections, each of the sections being separated by fold lines and including peripheral margins that have foldable edge portions formed on the exterior edges thereof whereby, when the sections are folded along their fold line, the edge portions overlap and cooperate with the peripheral margins to form a marginal space having an opening facing the hinge pin of the locket construction.

Still another object is to provide interior projections in the marginal portions of a hinged leaf member that are formed in the stamping operation and that are adapted to retain pictorial or illustrative matter in position in the leaf member.

Other objects, features and advantages of the invention will become apparent as the description thereof proceeds when considered in connection with the accompanying illustrative drawings.

In the drawings which illustrate the best mode presently contemplated by me for carrying out my invention:

FIG. 1 is a view in perspective showing the locket construction embodied in the present invention in the closed position thereof;

FIG. 2 is a perspective view of the locket construction in the open position thereof and showing the interiorly positioned hinged leaves;

FIG. 3 is a perspective view of one of the interior leaves, a portion thereof being broken away;

FIG. 4 is a plan view of one of the interior leaves after the stamping thereof and prior to the bending thereof for insertion into the locket assembly;

FIG. 5 is a fragmentary view in perspective of a corner of an interior leaf showing the novel hinge construction embodied in the present invention;

FIG. 6 is a sectional view taken along line 6—6 in FIG. 3; and

FIG. 7 is a sectional view taken along line 7—7 in FIG. 3.

Referring now to the drawings and more particularly to FIGS. 1 and 2, the locket construction or assembly embodied in the present invention is illustrated therein and is generally indicated at 10. As shown more clearly in FIG. 2, the locket construction or assembly 10 includes a front cover 12 and a rear cover 14 that are preferably stamped from a blank of metal material, the exterior surfaces of which may be etched or embossed and then plated to form a decorative exterior for the locket assembly when in use. The rear cover 14 is shown formed with an upstanding lug 16 having an opening 18 formed therein, the opening 18 being adapted to receive a chain therein. The chain may be of any conventional style and is preferably of that type that is adapted to be hung around the user's neck, the locket assembly 10 depending from the neck of the wearer in the usual manner. Also formed on the rear cover 14 along the side edge thereof is an extension tab 20 that defines one element of a friction latch, the other element of the friction latch being defined by an extension tab 22 formed on the edge of the front cover 12. As illustrated in FIG. 1, the extension tab 22 is slightly longer than the tab 20 and includes an offset outer portion that extends beyond the tab 20, thereby providing a convenient catch for engagement by the finger of the user when the locket is to be opened.

The locket assembly 10 which includes the front and rear covers 12 and 14 is constructed to fold in the manner of a book, and to carry out this purpose, the front

cover is formed with a perpendicular flange 24, while the rear cover is correspondingly formed with a perpendicular flange 26.

In order to hingedly interconnect the front and rear covers 12 and 14, each of the covers is formed with a plurality of spaced hinge members. As shown in FIG. 2, the front cover 12 includes spaced hinge members 28 that are joined to the flange 24 of the front cover 12. The rear cover 14 is similarly formed with spaced hinge members 30 that are joined to the flange 26 of the rear cover 14, the hinge members 28 and 30 being bent to receive a hinge pin 31 therethrough. As shown, the hinge members 28 and 30 are of conventional style and are preformed to define an opening for receiving the hinge pin 31 therein. As is usual in pivoted elements of this type, one set of the hinge members is bent into firm engaging relation with the pin 31 so that the pin will be prevented from inadvertent removal therefrom. The other set of hinge members loosely engages the hinge pin 31 wherein relative pivotal movement of the front and rear covers 12 and 14 is provided.

Pivotally mounted within the confines of the front and rear covers 12 and 14 are a plurality of inner leaf members, each of which is generally indicated at 32. As shown in FIG. 2, only two leaf members 32 are mounted in the locket assembly 10, although it is understood that only one of the inner leaf members 32 may be utilized or, if desired, more than two may be incorporated in the assembly without departing from the spirit of the invention.

Referring now to FIGS. 3 through 7, one of the leaf members 32 is shown in detail, and it is understood that all of the leaf members are similarly constructed. The leaf member 32 is also preferably formed of a metal material and is adapted to be etched or embossed and then plated for decorative purposes. As shown in FIG. 4, the leaf member 32 is formed from a one-piece blank member and is adapted to be stamped in a single stamping operation to define complementary sections indicated at 34 and 36. The complementary sections 34 and 36 are separated by fold lines 38 and 40, the fold lines 38, 40 being spaced so that in the folded position of the assembly the sections 34 and 36 are sufficiently spaced from each other to define a space therebetween for receiving pictorial or illustrative matter therein. In order to enclose the space between the sections 34 and 36, oppositely positioned foldable edges 42 and 44 are formed on the section 34, while oppositely positioned foldable edges 46 and 48 are formed on the section 36. Outwardly extending locking projections 49 and 50 are formed on the edges 42 and 44, respectively, and are adapted to be folded over the corners of edges 46 and 48, respectively, to lock the sections 34, 36 in the folded position thereof. Also formed in the sections 34 and 36 are windows 51 and 52, respectively, and as illustrated in FIG. 3, the windows 51, 52 are adapted to be aligned when the sections 34 and 36 are moved to the folded position thereof. Although four windows are shown formed in each of the sections, it is understood that a single window may be formed therein, or two or three windows may also be formed therein, depending upon the manner in which the assembly is to be employed.

The windows 51 and 52 occupy a substantial portion of the central area of each of the sections 34, 36, and as such define a plurality of peripheral margins. Thus, outer margins 54, 56, 58 and 60 are defined by the windows 51, while outer margins 62, 64, 66 and 68 are defined by the windows 52. The windows 51 are also spaced to define inner margins 70, 72 and 74 in the section 34, and corresponding inner margins 76, 78 and 80 are defined by the windows 52 in the section 36.

In assembling the locket construction, the sections 34 and 36 are folded along lines 38, 40 to the position shown in FIG. 3. The edge 42 is then folded to overlap the edge 46, thereby sealing the upper edge of the leaf 32 and is held in position thereby by the locking projection 49. Similarly, the edge 44 is adapted to overlap the edge 48 to seal the lower edge of the leaf member 32, the locking projection 50 being rolled over the edge 48. Since the leaf member 32 is folded along the fold lines 38 and 40 and is provided with closed sides defined by the edges 42, 46 and 44, 48, an interior space is formed as defined by margins 54, 62; 56, 68; 58, 66; 70, 76; 72, 78 and 74, 80, the space having an open edge that is adapted to extend along the edge facing the hinge pin 31 when the inner leaf 32 is mounted in position in the locket. In this position, the windows 51, 52 are in communication and are adapted to display pictorial or illustrative matter therethrough that has been inserted into the space defined by the peripheral and inner margins.

As illustrated more clearly in FIG. 3, the section 34 is foreshortened with respect to the section 36 so that in the folded position of the leaf member the outer edge of the marginal portion 68 is exposed. Since this is the side of the leaf member that faces the hinge pin 31 and in which the space for receiving the pictorial matter is formed, a shelf is defined for aiding in inserting the pictorial matter within the interior space. Furthermore, by foreshortening the section 34, any possible conflict by the marginal portion 56 with the hinge assembly is avoided.

In order to effectively retain the pictorial or illustrative matter that is located within the space defined by the marginal portions of the sections 34 and 36, inwardly extending projections 82 are formed in one of the margins of the section 36 and, as shown in FIG. 4, are located in margin 68. Elongated recesses 84 are further formed in the interior margins 74, 80 and, as shown in FIG. 7, cooperate to divide the folded leaf 32 into top and bottom sections. As shown in FIG. 6, the projections are defined by inwardly impressed dimples and reduce the inner marginal space to firmly retain the pictorial matter in position between the folded sections 34 and 36.

Since the leaf members 32 are adapted to be pivotally mounted between the front and rear covers 12 and 14, the plating thereof would normally cause the hinges to harden, which would thereby prevent the hinges from being easily bent around the hinge pin 31. This eventually would result in faulty operation of the device or in shearing of the leaf member hinge element. The present invention avoids this prior difficulty by providing a unique hinge construction for the leaf member. As illustrated in FIG. 4, in the unfolded position of the leaf member 32, the hinge element includes a hinge member 86 to which is joined an outwardly extending hinge finger 88. Prior to the plating of the leaf member 32, the hinge member 86 is bent to the position it will normally occupy and, as shown in FIG. 5, is adapted to envelope a major portion of the circumference of the hinge pin but leaving a portion thereof exposed. In the assembly of the front cover 12, rear cover 14 and the leaf members 32, the hinge pin 31 is inserted through the hinge members 28, 30 of the front and rear covers 12, 14, respectively, and slidably received within the bent portions of the hinge members 86. As described above, one set of the hinge members, and preferably the hinge members 28 of the front cover 12, are first bent into firm engaging relation with the pin 31 so that the pin is movable therewith. The other hinge member 30 is located in loose fitting engagement around the pin 31 so that relative movement therebetween is provided. After the plating operation and during the assembly of the hinge member 86 on the hinge pin 31, the relatively small hinge finger 88 is bent to bridge the gap over the hinge pin defined by the incompletely closed hinge member 86, thereby loosely locking the hinge pin 31 in the bent portion of the hinge member 86. Thus, by utilizing the hinge finger 88, the hinge member 86 may be plated in the bent position, while the only element necessary for movement to loosely lock the hinge member 86 on the hinge pin, is the relatively small hinge finger 88. The hinge finger

88 not only provides for simplicity in assembly of the device but further acts to positively retain the leaf member 32 in the assembly. Since the hinge pin 31 had already been fixed to the hinge members of either the front or rear cover, the hinge members 86 may be simply locked on the hinge pin 31 in aligned position with the hinge members 28 and 30 by bending the fingers 38 until they enclose the relatively fixed hinge pin 31. It is understood that the hinge members 86 are pivotally movable on the hinge pin 31 together with the cover member that is loosely mounted thereon, whereas the hinge pin 31 actually rotates with the cover member to which it is secured.

It is seen that the present invention is simple in construction and is economical to manufacture. Moreover, pictorial or illustrative matter may be easily inserted into the interior leaf members and cannot be dislodged due to the location of the opening therefor that faces in the direction of the axial hinge pin 31. Furthermore, the unique hinge construction assures freedom of movement of the leaf members and also enables the leaf members to be easily and simply removed from the hinge pin for repair or replacement as desired.

While there is shown and described herein certain specific structure embodying the invention, it will be manifest to those skilled in the art that various modifications and re-arrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described except insofar as indicated by the scope of the appended claim.

What is claimed is:

In a locket construction, a front cover, a rear cover hingedly joined to said front cover by a hinge pin, at least one interior leaf member connected by hinge portions to said hinge pin and disposed within the confines of said front and rear covers so that in the closed position thereof said interior leaf member is hidden from view,

said interior leaf member being stamped from blank form to define complementary sections separated by fold lines, each of said sections having at least one window formed therein defined by peripheral margins, foldable edge portions formed on the exterior edges of said sections whereby when said sections are folded along said fold lines said edge portions overlap and cooperate with said peripheral margins to form an interior marginal space having a single exterior marginal opening, said opening facing said hinge pin, said opening receiving illustrative matter therein and said window providing for viewing of said illustrative matter therethrough, one of said sections being foreshortened with respect to the other, so that a marginal shelf is defined adjacent said opening when said sections are located in the folded position thereof, said hinge members being joined to said marginal shelf, said marginal shelf thereby providing a surface for aiding in introducing the illustrative matter through said opening, and a plurality of projections formed on the surface of one of said sections and cooperating with an overlying peripheral margin of the adjacent section to reduce the internal marginal space, said projections firmly retaining said illustrative matter when it is located in said space for effectively retaining said matter therein.

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