

[54] COIN AND KEY CONTAINER

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[56] References Cited

UNITED STATES PATENTS

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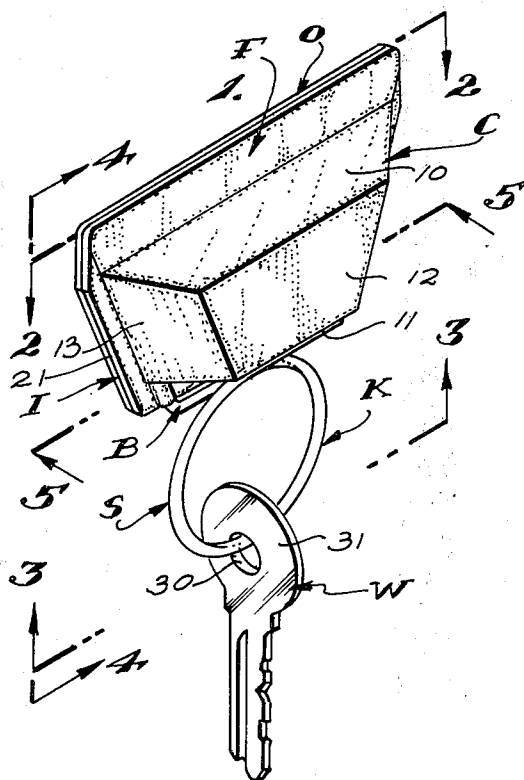
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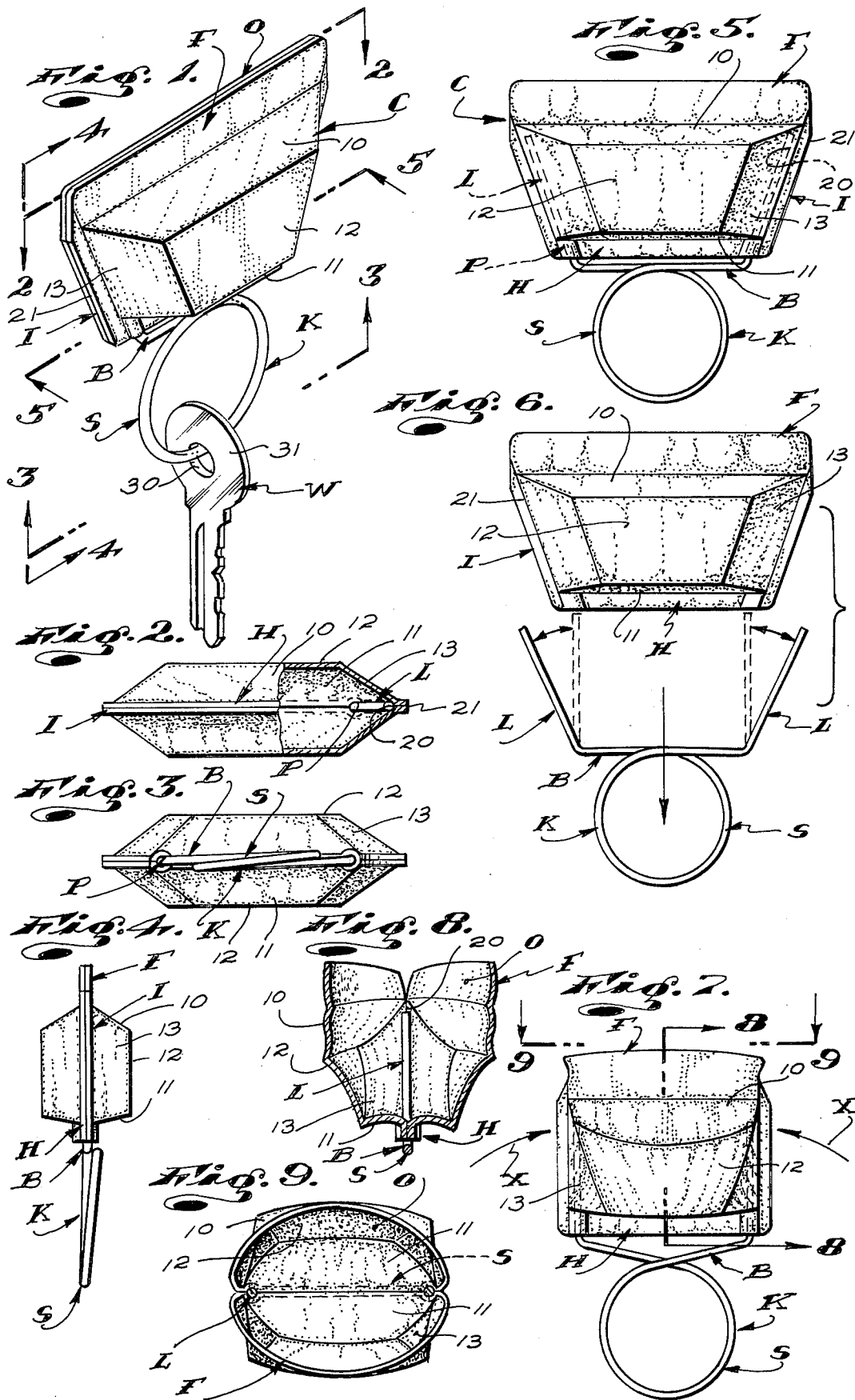
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[57] ABSTRACT

In combination, an elongate flexible container with opposite ends and a longitudinal access slot at one side thereof, said container adapted to be subjected to axially inwardly directed forces at its opposite ends to collapse said container whereby the edges of the container defining the slot are caused to move laterally in opposite directions and provide access to the interior of the container and spring means to normally yieldingly resist collapsing and opening of the container and comprising a central key containing loop portion at the exterior of the container opposite the slot arm portions extending to the opposite end portions of the container and leg portions at the ends of the arm portions and slidably engaged in the container to engage and normally yieldingly urge the opposite ends thereof longitudinally outward.

9 Claims, 9 Drawing Figures





COIN AND KEY CONTAINER

The present invention has to do with an improved combination key and coin container. The coin container included in the present invention is substantially the same and can be identical to the container described and illustrated in FIGS. 1 through FIG. 4 of the drawings in my U.S. Pat. for Container Construction, No. 3,426,814, issued Feb. 11, 1969.

My above noted patented coin container, while enjoying commercial success and having proven itself to be a most convenient and effective container, could be noticeably improved if it could be made more stiff, longitudinally, and so that it remains in its normal closed position with greater resistive force. Efforts to stiffen the noted container so as to make it close tighter, and/or afford greater resistance to being opened have included making the container of stiffer stock or increasing the wall thickness of the container to increase its stiffness. Such efforts proved to be wanting since they also stiffened the container with respect to all other applied and distributed forces and with the end that it became excessively difficult to open or would not open properly. One such effort included the addition of stock to the upper opening defining flag-like portions of the container. While this effort established some improvement, the cost of the additional stock could not be justified by the gain attained.

An object or feature of the present invention is to provide spring loading means in a container of the character noted and referred to above to normally yieldingly urge and hold the container in its normal closed position and which does not adversely affect the normal and intended operation or functioning of the container.

Another object and feature of the instant invention is to provide a spring means for a container as above referred to which means defines a key engaging and retaining ring or loop at the exterior of the container, at a side thereof remote and clear from the side of the container in which the opening occurs and so that the loop and keys carried thereby will not interfere with opening and closing of the container or with access to the interior thereof.

It is an object and feature of my invention to provide a container and related key-loop defining spring means of the character referred to which is such that one can engage his automobile keys on the loop and can, by use of the container, keep and maintain a supply of coins for coin-operated parking meters in close and convenient proximity to and with those keys.

Yet another object and feature of my invention is to provide a combination coin container and key loop defining spring means of the character referred to above which is such that the key loop defining spring means can be easily and quickly disengaged from the container when it is desired to separate the container with its supply of coins from the spring means and its related keys, as when the keys carried by the spring means are to be left in the custody of or accessible to a person or persons with which the contents of the container should not be left with or made accessible to.

It is an object and feature of my invention to provide key loop defining spring means wherein the engaging and removal of keys into and from engagement therewith is made exceedingly easy and simple by the nature of the spring means.

Finally, it is an object and feature of the instant invention to provide a combination coin container and related key loop defining spring means wherein the subject spring means is exceedingly simple and inexpensive to make.

The foregoing and other objects and features of my invention will be fully understood and will become apparent from the following detailed description of a typical preferred form and carrying out of my invention throughout which description reference is made to the accompanying drawings, in which:

FIG. 1 is an isometric view of my invention;

FIG. 2 is a top view taken as indicated by line 2—2 on FIG. 1;

FIG. 3 is a bottom view taken as indicated by line 3—3 on FIG. 1;

FIG. 4 is an end view taken as indicated by line 4—4 on FIG. 1;

FIG. 5 is a side view taken as indicated by line 5—5 on FIG. 1;

FIG. 6 is an exploded view of the structure shown on FIG. 5;

FIG. 7 is a view similar to FIG. 5 showing the structure in an actuated, opened position;

FIG. 8 is a sectional view taken as indicated by line 8—8 on FIG. 7; and

FIG. 9 is a top view taken as indicated by line 9—9 on FIG. 7.

The structure here provided and illustrated in the drawings includes, generally, a container C and a spring means S.

The container C is an elongate, horizontally extending, flexible pouch-like container with top, bottom, side and end walls 10, 11, 12 and 13.

The top wall 10 has a longitudinally extending slot opening O defined by a pair of flat, upwardly projecting, longitudinally extending, juxtapositioned flanges F which occur on the central longitudinal vertical plane of the container. The portions of the top wall 10 occurring at the opposite sides of the flanges F and/or opening O are slightly inclined laterally outwardly and downwardly.

The bottom wall 11 is characterized by a longitudinally extending bottom hinge means H defined by downwardly projecting, longitudinally extending, flexible, flange-like portions on the said wall and integrally joined as by heat sealing of the plastic material from which said flanges are established. The hinge means H occurs on the central longitudinal vertical plane of the container. The portions of the bottom wall 11 occurring at the opposite sides of the hinge means are slightly inclined laterally and upwardly.

The side walls 12 are simple flat laterally outwardly disposed vertical walls.

The end walls 13 have flat, longitudinally outwardly convergent and laterally outwardly and downwardly disposed, inclined side portions occurring at opposite sides of the central longitudinal vertical plane of the container and converging and joining each other on said central plane of the container to define longitudinally outwardly and upwardly, flexible, inclined, inside end corners 20 and outside finger engaging end edges 21. The corners 20 and edges 21 are defined by flat, longitudinally outwardly projecting flange-like portions on the side portions of end walls, extending between related flanges F on the top wall 10 and the noted flange portions on the bottom wall and heat sealed together, as are the flanges establishing the bottom hinge

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means H. The corners and edges 20 and 21 of the end walls define flexible end hinge means I, similar in nature to the means H.

Finally, the container C is provided with and/or includes a pair of longitudinally spaced round ports P at the opposite ends of the bottom wall 11 or ends of the hinge means H, on axes parallel with the axes of the inside corners 20 of the end walls and with the bores of said ports on planes substantially tangential with the inside surfaces of the opposite side portions of the end walls.

In practice, the container is established of two like laterally inwardly opening, opposite, shell-like parts modeled of a flexible plastic material and integrally joined together, as illustrated, by a suitable heat sealing operation, as above indicated.

It is to be noted that the two inside corners 20, at the opposite ends of the container C are longitudinally outwardly and upwardly inclined and are upwardly divergent relative to each other. Further, the ports P in the bottom of the container open at and continue downwardly from the lower ends of the corners 20.

In use, the container is normally closed, as illustrated in FIGS. 1 through 6 of the drawings. When it is desired to open the container to insert or remove articles such as coins therefrom, longitudinally inwardly disposed forces, as indicated by the arrows X in FIG. 7 of the drawings, are applied to the opposite finger engaging edges 21, as by the user's thumb and index finger of one hand. Upon such application of forces and yielding flexure of the end walls longitudinally inwardly and laterally outwardly, the flanges F are caused to bow laterally outwardly, opening the opening O, as illustrated in FIGS. 7, 8 and 9 of the drawings. The opposite sides of the container yieldingly swing or pivot laterally outwardly and downwardly. When the container is fully open, as shown, the corners and edges 20 and 21 are substantially vertical.

The novel and desirable feature of the subject container resides in the fact that when it is opened in the above manner, the opening O is greater in extent, in all dimensions, than the area of the bottom of the container (see FIG. 9) and such that the user can freely easily and conveniently insert his finger into the container to selectively engage a coin or article therein for removal or extraction.

The spring means S that I provide is a unitary, substantially U-shaped structure made of a single length of spring wire stock and is characterized by two, longitudinally outwardly and upwardly inclined, relatively upwardly divergent end legs L and a central, longitudinally extending central base portion B, extending between the lower ends of said legs.

The legs L are normally inclined longitudinally outwardly and upwardly a greater extent from vertical than the inside end corners 20 of the container and are substantially equal in longitudinal extent with said corners.

The central base portion B of the spring means S is provided with an intermediate, downwardly projecting key engaging loop K. The loop K occurs on a plane common with the central, longitudinal vertical plane of the container.

In use and practice, one or more keys W can be engaged and retained by the loop K by engaging one of the legs L through the key ring receiving opening 30 in the head 31 of a related key and then feeding the key longitudinally inwardly of the base B to and between

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the crossed portions of the base and/or loop whereby the key is moved into engagement with the portion of the stock establishing the loop, as shown in FIG. 1 of the drawings. The key or keys can be removed by reversal of the above operation.

It is to be noted that the legs L and opposite end portions of the base B, extending from the loop K provide means for easy and convenient engagement and removal of keys from the loop K. The long endured problem and difficulty of manually opening split-ring key rings with one's fingernails or the like, to facilitate engagement and removal of keys therefrom, is effectively eliminated by the presence of the end portions of the base B and related legs L in the instant ring or loop K.

The spring means S is normally related to the container C, as shown in FIGS. 1 through 5 of the drawings. That is, the legs L of the spring S are engaged through related ports P in the container and extend upwardly therefrom in seated engagement in those related inside end corners 20 in the container. The legs L are sprung or biased longitudinally inwardly whereby they normally yieldingly urge the ends of the container and more particularly the finger engaging end edges 21 of the container longitudinally outwardly, supplementing the natural resiliency of the container which serves to normally hold it in its closed position. That is, the biased legs of the spring means normally yieldingly urges and holds the container in its normal closed position.

Due to the relative, downwardly convergent, inclination of the corners 20 and legs L, it will be apparent that the biased, seated, legs L cannot drop or normally slide downwardly in the corners 20 through the ports P and from engagement with the container, but rather, due to the bias at which they are set, tend to move upwardly and outwardly in and relative to the corners 20, whereby the base B is normally yieldingly urged and moved upwardly into parallel, adjacent relationship with the bottom of the container, or with the bottom edge of the hinge means H.

In practice, when it is desired to separate the spring S from the container C, the container is engaged in one hand, the spring is engaged in the other hand of the user and the two components are pulled apart. The effort required to so separate the components is not great or excessive, but is such that it must be deliberately and specifically applied.

When it is desired to reassemble the components, one leg L is engaged in one of the ports P and is moved into partial engagement with its related corner 20. Thereafter, the other leg L is manually biased, moved into alignment and entered into the other port. Thereafter, the spring is released and the spring moves, by itself, into its normal position in and with the container C.

In use or operation, and when the container is manually urged into its open position, as shown in FIGS. 7 through 9 of the drawings, and as described in the foregoing, the spring S is biased substantially as illustrated in the noted figures of the drawings and to a position where the legs L are, as are the corners 20, substantially vertical.

It is to be noted and it will be apparent from the foregoing that the spring S, in addition to providing means for holding and relating keys W to or with the container C, serves to impart additional and desirable resiliency in and/or to the container to better and more positively holds the container closed. Such increase in resiliency, which is highly desired, is effected without redesigning

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the container and/or without that provision and/or addition of added costly stock in the establishment of the container.

With and by the use of my invention a person can, for example, maintain a supply of parking meter coins in direct relationship with his automobile keys and can, when necessary or desired, easily and conveniently separate the keys from the coin supply.

It is to be noted that the structure here provided is extremely easy and economical to manufacture and is both highly effective and dependable in operation.

Having described but one typical preferred form and carrying out of my invention, I do not wish to be limited to the specific details herein set forth but wish to reserve to myself any modifications or variations which may appear to those skilled in the art and which fall within the scope of the following claims:

Having described my invention, I claim:

1. In combination, an elongate normally horizontal flexible container having top, bottom and side walls and end walls with longitudinally and laterally upwardly inclined opposite side portions defining longitudinally outwardly and upwardly inclined inside corners and outside finger engaging end edges occurring on the central longitudinal vertical plane of the container, a central elongate normally closed slot opening extending longitudinally of the top wall on said plane of the container, said end edges adopted to be manually engaged and urged longitudinally inwardly to urge said opposite side portion longitudinally inwardly and outwardly and said side walls and portions of the top wall laterally outwardly and opening said slot opening, ports in the bottom wall at the lower ends of said inside corners and spring means including a spring unit with a key-engaging base at the exterior extending longitudinally of the bottom wall and normally upwardly and longitudinally outwardly inclined legs removably slidably engaged through said ports and seated in said inside corners to normally yieldingly resist longitudinally inward movement of the end edges inwardly and to normally yieldingly hold the container walls in a position where the slot opening is closed.

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2. A structure as set forth in claim 1 wherein the legs are normally inclined longitudinally outwardly from vertical to a greater extent than the inside corners whereby the legs are normally yieldingly biased to urge said corners and end edges longitudinally outwardly.

3. A structure as set forth in claim 1 wherein said base is formed with a downwardly extending key engaging loop intermediate its ends, said loop occurring on said plane of the container.

4. A structure as set forth in claim 3 wherein the legs are normally inclined longitudinally outwardly from vertical to a greater extent than the inside corners whereby the legs are normally yieldingly biased to urge said corners and end edges longitudinally outwardly.

5. A structure as set forth in claim 1 wherein said bottom wall has a central longitudinal flexible hinge means and wherein said corners and edges at the end walls define flexible hinge means.

6. A structure as set forth in claim 5 wherein the legs are normally inclined longitudinally outwardly from vertical to a greater extent than the inside corners whereby the legs are normally yieldingly biased to urge said corners and end edges longitudinally outwardly.

7. A structure as set forth in claim 5 wherein said base is formed with a downwardly extending key engaging loop intermediate its ends, said loop occurring on said plane of the container.

8. A structure as set forth in claim 5 wherein the legs are normally inclined longitudinally outwardly from vertical to a greater extent than the inside corners whereby the legs are normally yieldingly biased to urge said corners and end edges longitudinally outwardly.

9. A structure as set forth in claim 8 wherein the slot opening in the top wall is defined by flat normally straight, flat, upwardly projecting, longitudinally extending, flanges on opposite side portions of the top wall and said hinge means, end edges and corners are established by flanges on opposite side portions of the bottom wall and on the opposite side portions of the end walls and are fixed together.

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