June 29, 1943. H. H. CAMPBELL 2,322,920

KEY HOLDER

Filed Nov. 24, 1939 2 Sheets-Sheet 1

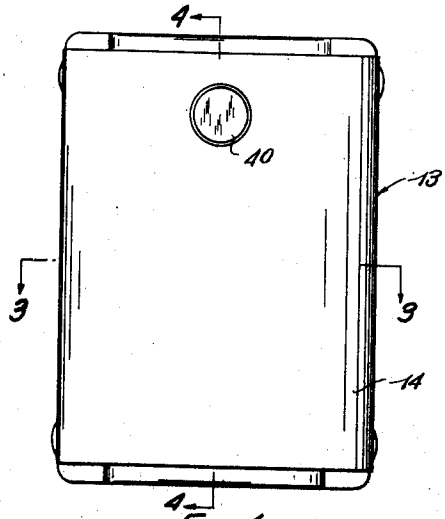


FIG. 1

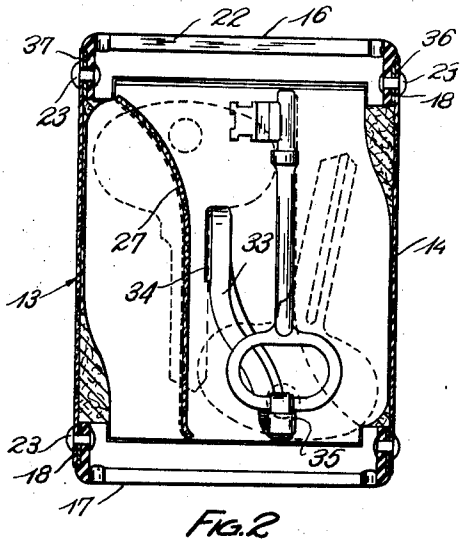


FIG. 2

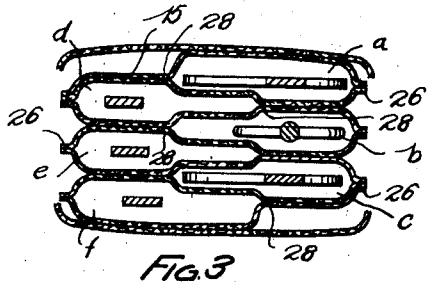


FIG. 3

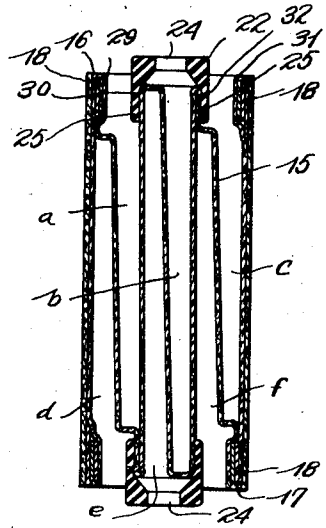


FIG. 4

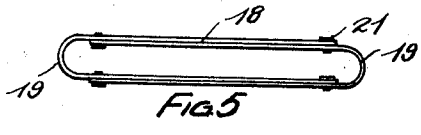


FIG. 5

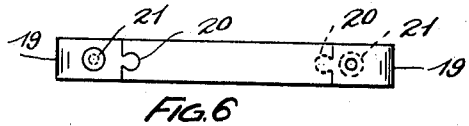


FIG. 6

Henry H. Campbell INVENTOR.

BY Robb & Robb

ATTORNEYS

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KEY HOLDER

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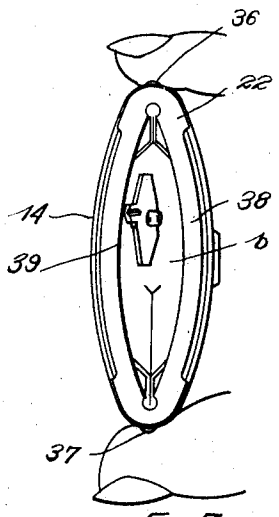


FIG. 7

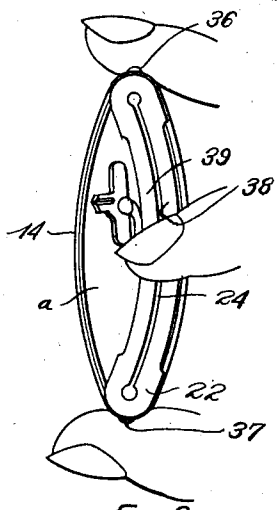


FIG. 8

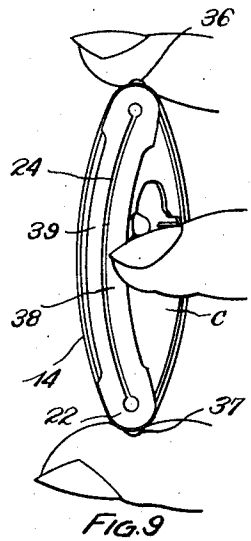


FIG. 9

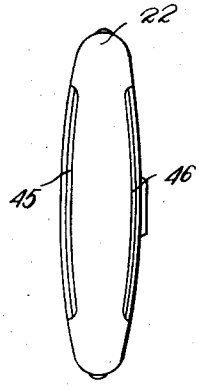


FIG. 10

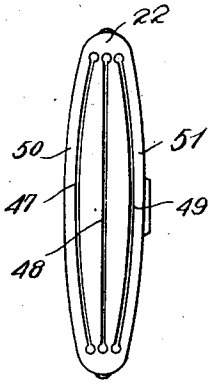


FIG. 11

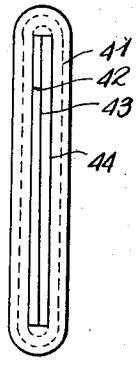


FIG. 12

BY Henry H. Campbell. INVENTOR.

Robb & Robb ATTORNEYS

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2,322,920

KEY HOLDER

Henry H. Campbell, Cleveland, Ohio

Application November 24, 1939, Serial No. 305,992

5 Claims. (Cl. 150—40)

This invention relates to key holders, and more particularly, to a holder having a plurality of key holding compartments or pockets from which a key may be readily removed from a selected compartment without the necessity of using two hands to effect such removal.

It is well known that most key holders are unsatisfactory in that they employ various types of fastening or securing elements which must be loosened in order to select a desired key, the selection of a desired key often being rendered more difficult by the entanglement of hooks or other devices to which the individual keys are secured. In the use of such holders, after loosening the fastening element, the selection of the desired key usually must be performed manually, and such selection most always requires the use of both hands in order to make the desired key available for use. Obviously, the selection of a key from holders of the type referred to is particularly exasperating when one of the hands is occupied in holding packages and is not available for use in selecting the key while the other hand is holding the key holder.

An important object of this invention is to provide a key holder from which a key may be readily selected and ejected by simple movements of the hand in which the holder is held.

A further object is to provide a key holder comprising a container having a plurality of compartments or pockets in which each pocket is adapted to hold a single key and which will readily permit the selection of a desired pocket or compartment and the removal of a key therefrom without necessitating the use of more than one hand to effect the removal of a desired key.

A further object is to provide a key holder having a plurality of pockets or compartments in which the peripheral edges of the pockets are located substantially in a common plane whereby a pocket may be selected by a finger of the hand in which the key holder is held.

A further object is to provide in a holder of the character referred to, novel resilient means for maintaining the openings providing access to the pockets in closed position, and which, when subjected to pressure edgewise with respect to the key holder, will permit removal of a key from a selected pocket or compartment while maintaining the openings to the other pockets or compartments in closed position.

Other objects and advantages of the invention will become apparent during the course of the following description.

In the drawings I have shown a preferred embodiment of the invention. In this showing:

Figure 1 is a side elevational view of a key holder.

Figure 2 is a vertical sectional view of the holder shown in Figure 1.

Figure 3 is a sectional view taken substantially along the line 3—3 of Figure 1, the casing being broken and the parts expanded to better illustrate the construction of the key holding compartments.

Figure 4 is a sectional view taken substantially on the line 4—4 of Figure 1, the parts being shown expanded from their normal position to better illustrate the construction of the key holding compartments.

Figures 5 and 6 illustrate the construction of a spring member employed for resiliently closing the openings to the key compartments or pockets.

Figures 7, 8 and 9 are top plan views of the holder shown in Figures 1 and 2 respectively illustrating the position of the parts when the holder is operated to provide access to different key holding compartments.

Figure 10 is a top plan view of the key holder illustrating the construction of the resilient rubber stiffening element for a key holder wherein the middle compartment is omitted.

Figure 11 is a top plan view of a key holder illustrating the construction of the resilient rubber stiffening element for a holder, wherein the use of the resilient member shown in Figure 5 is omitted; and,

Figure 12 is a top plan view of the key holder wherein the elastic rubber stiffening or closure element is not employed.

Referring to the drawings, the numeral 13 indicates as a whole a key holder comprising a casing 14 formed of leather or other suitable material surrounding a plurality of individual key holding compartments. The plurality of key holding compartments, as best shown in Figures 3 and 4, are formed by folding a strip of leather or suitable fabric 15 back and forth on itself and to provide compartments *a*, *b*, *c*, having openings providing access thereto at the end 16 of the container 13 and compartments *d*, *e*, *f*, having openings providing access thereto at the other end 17 of the container 13.

Spring resilient clamping members 18 are provided at each of the ends 16 and 17 of the container 13 for maintaining the openings to the various compartments normally closed. As shown in Figures 5 and 6, each of the members 18 comprises a pair of U-shaped members 19 having notches 20 in the ends thereof and projecting members 21 near the point of curvature of the U-shaped member, the notches 20 being adapted to engage with the projections 21 when the members 18 are telescopically assembled, as shown in Figure 5.

Preferably, additional stiffening members 22 of elastic material such as rubber are provided for each of the ends 16 and 17 of the container 13 for a purpose to be described. The so-called resilient stiffening members 22 are adapted to be

fitted within the resilient members 18 in the end portions of the holder 13 and rivets 23 are provided for holding the members 22 within the confines of the resilient members 18. The members 22 are made of such size and shape to fit snugly within the members 18 in order that the resiliency of the material will cooperate with the resilient members 18 to normally maintain the openings to the pockets of the container closed.

The resilient members 22 are provided with a slot 24 therein, adapted to provide an opening giving access to the central pockets *b* and *e*. The resilient members 22 are further provided with depending portions 25 which are adapted to be secured to the material 15 in the member to be described.

The rivets 23, in addition to holding the stiffening member 22 cooperatively associated with the member 18, also serve to hold the covering 14 in position with respect to the end portions of the container 13. Obviously, where the covering 14 is of sufficiently stiff material, such a covering will be effective to space the end portions 16 and 17 from each other in addition to imparting a smooth and pleasing appearance to the container 13.

The container 13 is particularly adapted to have pockets or compartments opening at each of the ends 16 and 17 thereof. However, it will be appreciated that the holder could be constructed so as to provide openings at only one end thereof without departing from the spirit of this invention. Since the pockets or compartments *a*, *b*, and *c* are respectively similar to the compartments *f*, *e*, and *d*, the manner of securing or assembling of the container will be described only for the pockets *a*, *b*, and *c*, it being understood that such description applies equally well to the pockets *f*, *e*, and *d*. The doubled back material 15 forms the side walls of all the pockets, such side walls being substantially parallel and in close relationship and meeting along common edges. The outer side edges of all the pockets are defined by vertically stitching or otherwise securing the material 15 together through the points 26 as best shown in Figure 3. The inner side edges of all the pockets are defined by stitching the material 15 together along a curved line as indicated by the numeral 27 in Figure 2. The inner edges of the pockets are indicated by the numeral 28 in Figure 3. The purpose of stitching the inner edges of the pockets along the curved line 27 is to provide a decreased width of the pockets toward the bottom thereof in order that the keys inserted in the pockets may be held upright and in order that the keys will be alternately nested in the container with respect to each other, thereby taking up a minimum of space. Obviously, the stitching along the curved line 27 could be omitted in which case the width of all the pockets would be substantially the same from the top to the bottom thereof.

Since the openings to the pockets or compartments are defined by the material forming the peripheral edges of such pockets or compartments, it will be noted that the material 15 is secured to the resilient member 18 as at 29 to provide the outer peripheral edge of the pocket *a*. The material 15 forming the pocket *a* is secured to the depending portion 25 of the member 22 as at 30, the side of the part 25 thereby forming the inner peripheral edge of the pocket *a*. In like manner, the material 15 is secured to the other side of the resilient member 18 as at 31 to provide the outer peripheral edge of the pocket *c*, and to the other depending part 25 of the member 22 as at 32 to provide the inner peripheral edge of the pocket *c*. The peripheral edges of the inner compartment *b* are defined by the edges of the slot 24 in the member 22 which provides access to the compartment *b*. It will be understood that the peripheral edges of the pockets *f*, *e*, and *d*, are similarly provided by securing ing the rubber member 22 and the resilient member 18 with respect to the material 15 at the end 17 in the same manner as described for the pockets *a*, *b*, and *c*.

A strip 33 formed of suitable pliable material is provided for each of the compartments for securing a key with respect to each of such compartments. As best shown in Figure 2, the ends of the strip 33 are fastened as a 34 to the side wall of the pocket or compartment and have their mid-portion looped about the key as at 35.

The strip 33 being formed of pliable material is of such length to permit movement of the key into its proper compartment and limited movement out of such compartment to expose the key for use when desired. Obviously, any other form of suitable fastening device could be used in place of the strip 33.

After the container 13 has been assembled or constructed in the manner set forth above, the spring member 18 will exert a force inwardly from opposite sides of the container 13, which force will maintain the peripheral edges of the pockets in close abutting relationship thereby closing the openings providing access to the individual compartments. The rubber stiffening member 22 being snugly fitted within the member 18 will also cooperate with the member 18 in maintaining the openings to the individual compartments closed. Accordingly, it will be apparent that the resilient construction of the members 18 and the rubber member 22 will be effective to normally close the openings to the individual compartments and prevent movement of a key out of such compartments. In view of the fact that the side walls of the individual compartments are close together, it will be apparent that movement of the peripheral edges of such pockets into abutting relationship will also cause the side walls of the compartments or pockets to be moved into engagement with the keys in such compartments, such engagement of the side walls providing a frictional holding force also tending to hold the keys in the compartments.

Referring now to Figures 7, 8 and 9, the operation of the container to permit withdrawal of individual keys as desired will become apparent. The container 13 is adapted to be held in the palm of a hand and the index finger is used to select a desired compartment, the application of pressure edgewise with respect to the container 13 at points 36 and 37 by other fingers of the hand holding the container being operative to effect opening of a selected compartment. Upon the application of pressure at the points 36 and 37, the resilient stiffening member 22 will be deformed and the pocket selected will have its peripheral edges moved apart and the desired key may be removed from the pocket or compartment selected by inverting the container 13 or moving the same upwardly with a rapid jerking motion, the pliable strip 33 being operative to hold the key selected with respect to the container 13 after its removal from a selected compartment.

If it is desired to select a key from the compartment *b*, pressure is first applied by the fingers at the points 36 and 37, the construction being

such that the slot 24 will open automatically to provide access to the key in the compartment *b*. Upon opening of the slot 24, the portions 38 and 39 of the member 22 will be moved outwardly with respect to each other and the resiliency of such portions will cooperate with the spring member 18 to maintain the openings to the compartments *a* and *c* closed as shown in Figure 7. Although the middle compartment will open automatically where an odd number of compartments are provided, it will be apparent that the index finger may be used for selecting such compartment in the same manner as will be presently described for the other compartments.

If it is desired to remove a key from the compartment *a*, the index finger will direct the deformation of the rubber member 22 away from the outer peripheral edge 29 of the compartment *a*, in which case the rubber stiffening member 22 and resilient member 18 will maintain the slot 24 and opening to the compartment *c* closed to prevent removal of keys from the compartments *b* and *c*, as in Figure 8. Similarly, if it is desired to remove a key from the compartment *c*, the index finger will be used to direct the deformation of the rubber stiffening member away from the outer peripheral edge 31 of the compartment *c*, the rubber member 22 thereby cooperating with the resilient member 18 to maintain the slot 24 and the opening to the compartment *a* closed to prevent removal of keys therefrom, as shown in Figure 9.

It will be noted that the openings or peripheral edges of the compartments *a*, *b*, and *c*, are located substantially in a common plane. Such location of the peripheral edges of the various compartments is important in order that the desired compartment may be readily selected by the index finger of the hand in which the container 13 is held while the thumb and third or other fingers of the same hand are being used to exert pressure at the points 36 and 37.

In order that the various compartments containing various keys may be readily located by the owner of the container 13, the container 13 is provided with an identification button 40 located adjacent the end 16. By holding the container with the identification button 40 always in one position with respect to the palm of the hand, it will be apparent that the owner will be able to readily identify the various compartments and select the desired compartment with a minimum of trouble.

A great many materials, such as leather, contain a considerable amount of elasticity and rigidity, and it will be apparent that where such materials are used, the rubber stiffening element 22 may be dispensed with, the inherent resiliency of such material taking the place of the rubber stiffening element 22. However, the use of the rubber stiffening element 22 is desirable for the reason that materials such as leather become soft and pliable after a period of use and lose their resiliency. Figure 12 illustrates a plan view of a container omitting the use of the rubber stiffening element 22, the dotted line 41 indicating the resilient member 18 and the full lines 42, 43 and 44 respectively illustrating the closed openings in individual compartments such as the compartments *a*, *b* and *c*. Where the rubber stiffening element 22 is omitted, as shown in Figure 12, the operation of the resilient member 18 will function and cooperate with the resilient material forming the peripheral edges of the individual compartments in the same manner as described in the case where the rubber stiffening element 22 is used.

Figure 10 illustrates the construction and shape of the rubber stiffening member 22, where it is desired to have only two compartments opening on one end of a holder 13. It will be noted in such case that the slot 24 defining the opening to the middle compartment *b* is omitted, the construction of the compartments *a* and *c* being otherwise formed as set forth above. The solid lines 45 and 46 in Figure 10 indicate the closed openings to compartments similar to the compartments *a* and *c*. It will be understood that the operation of the container shown in Figure 10 to provide access to the compartments similar to the compartments *a* and *c* will be the same as described in connection with Figures 8 and 9, the index finger being used to control the direction of deformation by the rubber member 22.

If desired, the resilient member 18 may be dispensed with by forming the rubber stiffening or resilient member 22 as shown in Figure 11. In this showing, the rubber member 22 is provided with slots 47, 48 and 49 defining the peripheral edges of compartments similar to the compartments *a*, *b* and *c*. In this type of construction, the rubber 50 and 51 outside the slots 47 and 49 takes the place of the resilient member 18 and will function in the same manner as the resilient member 18.

Although the preferred embodiment of this invention employs pockets or compartments formed of leather or similar material to which the resilient members are secured to provide a resilient construction, it will be understood that the walls of the individual compartments could be formed of a strip of rubber in which case the rubber reinforcing members would be integral with the material forming the walls of the pocket. Accordingly, where the expression "resilient members secured to the material forming the walls of the pocket" is used, it will be understood that such expression is intended to cover the case where the resilient member is formed integral with the material forming the walls of the pocket.

It will also be understood, in view of the resilient rubber stiffening member 22 cooperating with the resilient spring member 18, that the term "resilient means" is intended to cover those cases wherein the spring is used either alone or in combination with the rubber resilient stiffening member 22, or the case where rubber alone is used as illustrated in Figure 11. In all such cases, the resilient means normally maintains the openings to all of the pockets closed and is deformable to permit opening movement of the peripheral edges of a selected one of the pockets to open position while maintaining the openings to the other pockets closed for preventing movement of the keys out of such pockets.

From the foregoing, it will be apparent that there is provided a key holder having a plurality of individual key containing pockets or compartments from which a desired key may be selected and removed for use. The resilient means, normally maintaining the openings to the pockets closed, permits opening of one compartment while maintaining the other compartments closed. The location of the peripheral edges defining the openings to the individual compartments substantially in a common plane permits the selection of a desired compartment and access to the key therein by the index finger of the hand in which the container is held.

Having thus described my invention, what I

claim as new and desire to secure by Letters Patent of the United States, is:

1. A key holder comprising a substantially flat container provided with a plurality of key receiving compartments having separate openings providing access to each of said compartments, the compartments being so arranged that the peripheral edges of the material forming said compartments and defining said openings terminate substantially in a common plane, resilient clamping means encompassing said container adjacent said openings and adapted to exert a force transversely with respect to said container whereby to embrace the walls of all of said compartments adjacent the openings thereof and to act upon all of said walls simultaneously normally to compress those portions thereof adjacent said openings into close abutting relationship closing said openings, said means being adapted upon application to force thereto and edgewise with respect to said container to permit movement of the peripheral edges of a selected one of said compartments out of abutting relationship for withdrawal of a key from such selected compartment while maintaining the walls of the other compartments in close relationship, the peripheral edges of the material forming said compartments being elastic and of sufficient rigidity to resist such edgewise pressure whereby the peripheral edges of the compartments not selected will cooperate with said means to maintain the openings to such other compartments closed.

2. A key holder comprising a substantially flat container provided with a plurality of key receiving compartments including a plurality of outer compartments and an inner compartment intermediate said outer compartments, said compartments having separate openings providing access to each of said compartments, the compartments being so arranged that the peripheral edges of the material forming said compartments and defining said openings terminate substantially in a common plane, an elastic rubber stiffening member secured to the inner peripheral edges of the outer compartments, a slot in said rubber stiffening element providing access to said inner compartment intermediate said outer compartments, the peripheral edges of said inner compartment being secured to said stiffening element along said slot, said stiffening element being adapted to normally maintain the peripheral edges of said compartments in a position closing the openings to said compartment and adapted to permit withdrawal of a key from a selected one of said compartments while maintaining the openings to the other compartments closed upon application of pressure thereto edgewise with respect to said container, the location of the peripheral edges of said compartments in a single plane permitting the selection of a desired compartment by a single finger of the hand in which the container is held.

3. A key holder comprising a substantially flat container provided with a plurality of key receiving compartments having separate openings affording access to each of said compartments, the compartments being so arranged that the peripheral edges of the material defining the openings therein terminate substantially in a common plane, an elastic rubber stiffening element secured to the container adjacent said openings and having a plurality of slots therein providing access to each of said compartments, the walls of each of said compartments terminating along the peripheral edges of said slots, said stiffening element being adapted to normally maintain said slots closed preventing movement of keys out of said compartment, said stiffening element further being deformable upon application of pressure endways with respect thereto to open one of said slots to permit withdrawal of a key from a selected one of said compartments while maintaining the other slots providing access to the other compartments in closed position, the provision of the rubber stiffening element permitting the selection of a compartment by a single finger of the hand in which said container is held.

4. A key holder comprising a substantially flat container provided with a plurality of key receiving compartments, including a plurality of outer compartments and an inner compartment intermediate said outer compartments, said compartments having separate openings providing access to each of said compartments, the peripheral edges of the material forming said compartments and defining said openings being located substantially in a common plane, a spring device secured to said container and adapted to exert a force transversely with respect to said container to hold said peripheral edges in abutting relationship closing said openings, said spring device being adapted upon application of force thereto and edgewise with respect to said container to permit movement of the peripheral edges of a selected one of said compartments out of abutting relationship for withdrawal of a key from such selected compartment, the peripheral edges of the material forming said compartments being elastic and of sufficient rigidity to resist such edgewise pressure whereby the peripheral edges of the compartments not selected will cooperate with said spring device to maintain the openings to such other compartments closed, and an elastic rubber stiffening member for imparting the necessary elasticity and rigidity to said peripheral edges, the outer peripheral edges of the outer compartments being secured to said spring device, the inner peripheral edges of said outer compartments being secured to said rubber stiffening member, a slot in said rubber stiffening element providing access to said inner compartment intermediate said outer compartments, the peripheral edges of said inner compartment being secured to said stiffening element along said slot.

5. A key holder comprising a container provided with a plurality of key receiving compartments having separate openings affording access to each of said compartments, the compartments being so arranged that the peripheral edges of the material defining the openings therein terminate substantially in a common plane, resilient clamping means encompassing said container adjacent said openings and adapted to exert a force transversely respecting said container to normally compress the peripheral edges of said compartments adjacent said openings into close abutting relationship closing said openings, said means being responsive upon application of pressure edgewise respecting said container to permit movement of the peripheral edges of a selected compartment out of abutting relationship for withdrawal of a key from such selected compartment while maintaining the peripheral edges of the other compartments in close relationship.

HENRY H. CAMPBELL.