Aug. 21, 1951 R. C. OLD 2,564,918

KEY CONTAINER

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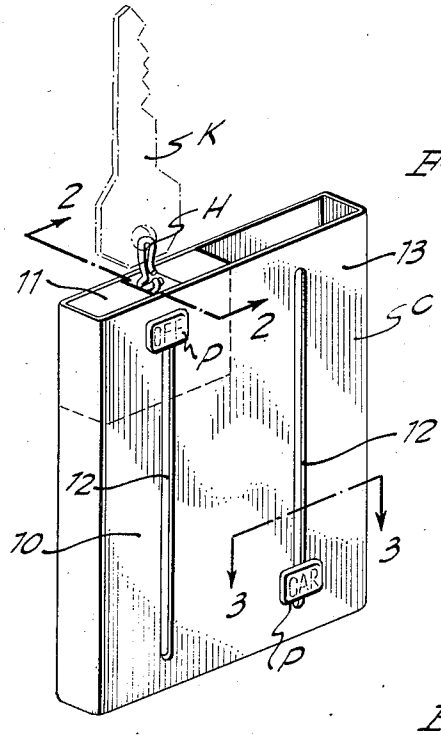


FIG. 1.

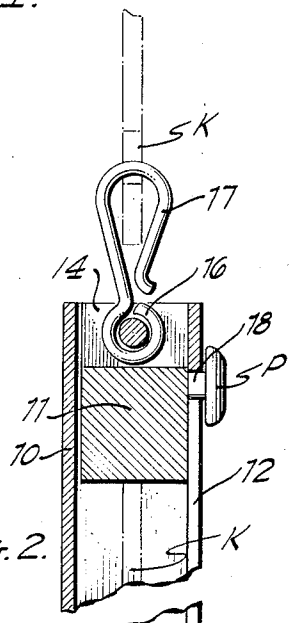


FIG. 2.

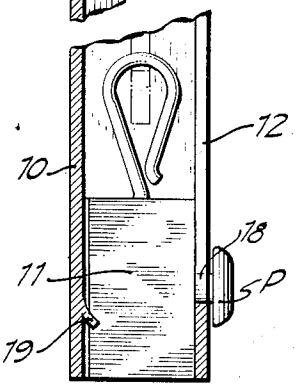


FIG. 3.

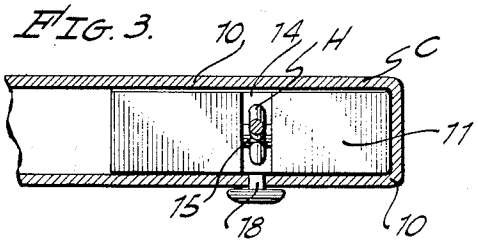
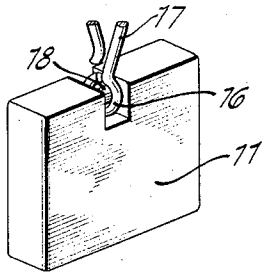


FIG. 4.



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KEY CONTAINER

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3 Claims. (Cl. 70—456)

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My invention relates to the field of holding devices, and more particularly to a key container of simplified structure.

Although numerous key containers have been devised and marketed in the past, the majority of these devices suffer from the disadvantages of having a complicated internal structure, are expensive to produce, and frequently require maintenance attention in order that the device may be placed in a condition to operate satisfactorily. The purpose of my invention is to provide a key container having a simplified mechanical structure, and one which eliminates the above-named disadvantages.

A major object of my invention is to supply a key container that is attractive in appearance, and is adapted to hold a number of keys either singly or in groups, yet with the keys being so arranged that any one of the keys or groups can be selected and brought from within the confines of the device by a simple manual operation.

Another object of my invention is to provide a key container in which each of the keys when removed to a position outside the confines of the device is freely movable in a transverse direction with relation to the container, in order that the key container can assume a substantially vertical position when a key such as the ignition key to an automobile is positioned in the lock.

Yet another object of my invention is to furnish a key container having the same general appearance as the conventional leather or plastic container, yet with the keys having no tendency to cut through the flexible material from which such a case is fabricated, as in my container the keys are at all times slidably movable in a metallic sheath. A still further object of my invention is to provide a key container in which each key contained therein is identified at all times, and the container having such a simple mechanical structure that it can be produced at a relatively low cost and hence sold at a price which will encourage its widespread use by the general public.

These and other objects and advantages of my invention will become apparent from the following description of a preferred form thereof, and from the drawing illustrating that form in which:

Fig. 1 is a perspective view of my key container, with one of the keys shown in phantom line occupying a position outside the confines of the device;

Fig. 2 is a vertical cross-sectional view of the device taken on the line 2—2 of Fig. 1;

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Fig. 3 is a fragmentary horizontal cross-sectional view of a portion of the device taken on the line 3—3 of Fig. 1; and,

Fig. 4 is a perspective view of one of the rectangular blocks having a key containing hook pivotally mounted thereon, with the block and hook comprising a unit which can be slidably mounted within the confines of my key container.

Referring now to Fig. 1 for the general arrangement of my device, it will be seen that a substantially rectangular key container C is provided, with the keys K positioned on the hooks H being adapted to be moved into the confines of the container or removed therefrom by a simple manual operation in which an appropriate key indicating plate P is moved upwardly or downwardly. The container C as may be seen in Fig. 1 is preferably formed from a shell 10, with the shell having a rectangular cross-section and being open at both the top and bottom. Although the shell 10 can be fabricated from any type of rigid material, I prefer to use a metal for this purpose. From experience I have found it unnecessary to provide a covering for the lower end of my device; however, should it be desired this can be done without interfering with the operation of the device.

As will be seen in Figs. 1 and 2, a number of rectangular blocks 11, each of which supports one of the hooks H, are slidably mounted within the confines of the container C, and are adapted to move upwardly and downwardly therein. A number of laterally spaced, narrow slots 12 are formed on the face 13 of the container C, with one of the slots being provided for each of the blocks 11 that is mounted in my device.

Formed in the upper portion of each of the blocks 11 is a rectangular recess 14, with each of the recesses having a pin 15 of annular cross-section extending thereacross. Each of the hooks H is provided with an eye portion 16 which is pivotally mounted on one of the pins 15, and each hook having a shank and hook portion 17 extending upwardly from the eye. The key K such as is shown in phantom line in Figs. 1 and 2 is mounted on one of the hooks H, and due to the hook being pivotally mounted on the pin 15 the container C will assume a vertical position when the key is horizontally situated such as in the ignition lock of a vehicle.

Each of the blocks 11 is maintained in the correct alignment within the confines of the shell 10 by having a threaded member 18 extend through the slot 12 adjacent to the block, with the member engaging a tapped bore extending inwardly

from one of the longitudinal vertical faces of the block. The outer end of the member 18 has one of the plates P formed thereon, or affixed thereto. Each of the plates P has imprinted thereon the name of the key or group of keys which is on the hook H that is mounted on the block 11 from which that particular plate P is supported. It will be apparent that the manner in which the member 18 is positioned on one of the blocks 11 may be varied to suit the convenience of the manufacturer of my device. For instance, the block 11 and member 18 can be made as an integral unit, and the plate P have a tapped bore which permits the plate P to be threaded on the member. Irrespective of how the member 18 is affixed to the block 11 the member serves the same purpose, in that it slides upwardly and downwardly in one of the slots 12 and maintains the block 11 to which it is affixed in the desired vertical alignment within the confines of the container C.

The container C is normally formed from a strip of metallic material which by a conventional mechanical operation is bent or formed into the shell 10. Prior to this forming operation the interior surface of the strip has a number of laterally spaced spring members 19 formed along the lower portion thereof. The springs 19 are preferably formed by cutting into the face of the metallic material forming the container, and bending the cut material outwardly to provide spring members 19. However, should it be desired, the springs 19 may be separate units, and affixed to the interior surface of the shell 10 by conventional methods normally used for such purposes. The methods by which the springs 19 are formed or placed within the confines of the container C are manufacturing operations which are preferably left to the discretion of the manufacturer of the device.

The function of each of the springs 19 is to bear against one of the faces of the blocks 11 which is situated in front thereof, with the spring exerting sufficient pressure to hold the block in position until manual pressure is exerted on the plate P associated therewith, whereupon the block is moved upwardly to occupy the position shown by the lefthand block 11 in Fig. 1. In this position, the key K affixed to the hook H that is mounted on that particular block is situated outside the confines of the container C, and can be freely used in the customary manner. Upon the key K having served the purpose for which it is intended, pressure is applied to the appropriate plate P, and the block 11 returned to the lower portion of the shell 10 where it will be held in the desired position due to the resiliency of the spring 19 bearing against one side thereof.

The manufacture and operation of my invention is extremely simple. The device is placed in operation by first moving the plate P upwardly until the hooks H are in a position to have the appropriate keys mounted thereon. After the keys have been so mounted, all of the plates P are moved downwardly, with the result that the blocks now occupy a position in the lower portion of the container C, and the keys affixed to the blocks are totally concealed within the confines of the device. Upon it being desired to use any one of the keys K, the plate P having the name of that key imprinted thereon is moved upwardly until the member 18 strikes the top of the slot 12. In this position, the hook H which is mounted on that block 11 is free to pivot in a transverse direction, and the key used in its normal manner.

To place the key or keys K within the confines of my device the above described operation is simply reversed.

Although I have shown a key container having but two blocks 11 slidably mounted therein, it will be apparent that the only limitation on the number of blocks 11 which may be positioned within the confines of the container C is the length that the container will occupy when of a size to accommodate these blocks. The length of each of the slots 12 is such that when the upper surface of one of the blocks 11 is flush with the upper edge of the shell 10, the member 18 is in contact with the upper end of that particular slot. Likewise, when one of the blocks 11 has the lower face thereof flush with the lower edge of the shell 10, the member 18 is in contact with the lower end of the slot 12.

It will be apparent that the shell 10 can have the exterior surface thereof covered with a sheet material such as leather or a similar material in order that the device will have a pleasing appearance to prospective customers. As the type and kind of covering which will be used on the device is entirely at the discretion of the manufacturer, no covering has been shown on the drawings.

While the key container herein shown and described in detail is fully capable of attaining the objects and providing the advantages hereinbefore stated, it is to be understood that it is merely illustrative of the presently preferred embodiment of my invention, and that I do not mean to limit myself to the details of construction, other than as defined in the appended claims.

I claim:

1. A key container which includes: a plurality of blocks; key supporting means including a hook pivotally mounted on a transverse pin mounted on each of said blocks; a flat rectangular shell with an elongated lateral end opening, said shell having a plurality of slots formed therein, and said blocks being slidably mounted in said shell in side by side relationship to hold said keys normally parallel to said end opening for retraction and withdrawal therefrom; a plurality of key identifying plates, with each of said plates being supported from one of said blocks by a member that passes through one of said slots; and resilient means on said shell to removably hold said blocks in a position whereby keys mounted on said supporting means are situated within the confines of said shell.

2. A key container which includes: a plurality of rectangular blocks, with each of said blocks having a slot formed therein; a plurality of pins, with each of said pins extending across one of said slots; a plurality of key supporting hooks, with each of said hooks being pivotally mounted on one of said pins; a shell having a flat rectangular cross-section, with said shell having a plurality of slots formed therein, and said shell slidably supporting said blocks within the confines thereof; a plurality of key identifying plates, with each of said plates being supported from one of said blocks by a member that passes through one of said slots; and a plurality of springs formed on the lower interior portion of one of the sides of said shell, with each of said springs engaging one of the faces of each of said blocks to hold said block in a position whereby a key mounted thereon is situated within the confines of said shell generally parallel to the lateral plane thereof until said block is moved upwardly by manual pressure being applied to one of said plates, whereupon

said key is free for limited twisting about said hook.

3. A key container which includes: a flat rectangular shell having a plurality of laterally spaced vertical slots perpendicular to an upper laterally elongated end opening; a plurality of blocks sildably mounted within said shell and having recesses formed in the upper face thereof; stop members secured in said blocks and engaging said slots to limit the movement of said blocks from a position within said shell to a position adjacent to the upper end thereof; a plurality of pins extending laterally across said block recesses; and a plurality of key supporting hooks pivotally mounted on said pins for movement in a plane perpendicular to said pins, said hooks adapted to loosely support a plurality of keys normally parallel to said end opening, whereby said keys are easily withdrawn and retracted into said

shell, and said keys are free for twisting movement about said hooks when withdrawn.

ROBERT C. OLD.

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