Feb. 11, 1958 W. J. RAY 2,822,684

KEY HOLDER

Filed July 2, 1956

Fig. 1

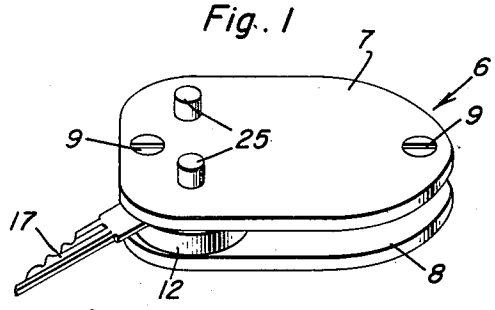


Fig. 3

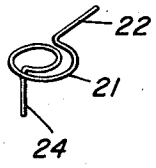


Fig. 2

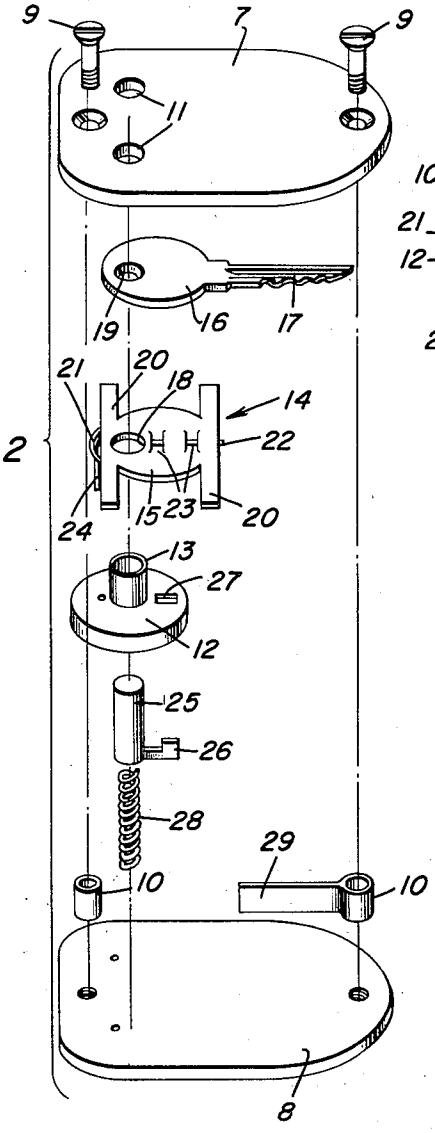
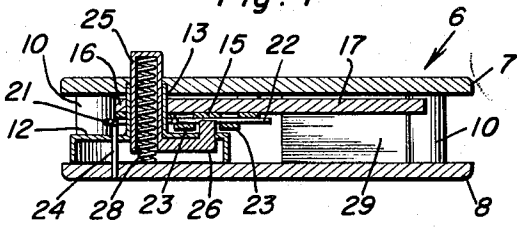


Fig. 4



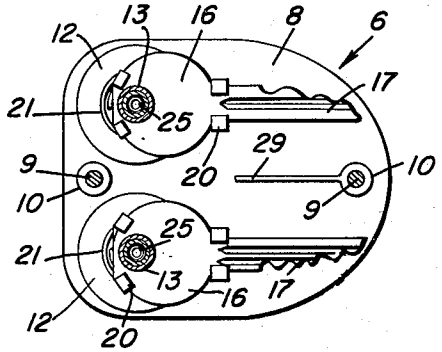


Fig. 5

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KEY HOLDER

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4 Claims. (Cl. 70—456)

The present invention relates to new and useful improvements in key holders and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character which, regardless of light conditions, will greatly facilitate selecting the desired key and ejecting or swinging same outwardly into position for convenient use.

Another very important object of the invention is to provide a multiple key holder of the aforementioned character comprising novel means for mounting the keys in the device.

Other objects of the invention are to provide a key holder of the character described which will be comparatively simple in construction, strong and durable, compact, of light weight, attractive in appearance and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawing forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a perspective view of a holder constructed in accordance with the present invention, showing one of the keys in position for use;

Figure 2 is an exploded perspective view of the device;

Figure 3 is a detail view in perspective of one of the key actuating springs;

Figure 4 is a view in vertical longitudinal section through the device; and

Figure 5 is a horizontal sectional view.

Referring now to the drawing in detail, it will be seen that the embodiment of the invention which has been illustrated comprises a case of suitable dimensions which is designated by reference character 6. The case includes a pair of spaced, opposed, somewhat elongated upper and lower plates 7 and 8, respectively, of substantially the shape shown, which plates may be of any desired metal. Countersunk screws 9 secure the plates 7 and 8 together. It will be noted that the screws 9 are located in the end portions of the plates 7 and 8. Spacing sleeves 10 are provided on the screws 9 between the plates 7 and 8. The upper plate 7 is provided, in one end portion thereof, with transversely spaced openings 11, the purpose of which will be presently set forth.

Secured by welding on the lower plate 8, beneath the openings 11, is a pair of substantially cup-shaped metallic disks 12. The disks 12 include, in the embodiment shown, centrally located upstanding tubular sleeves 13 having their upper end portions engaged in the openings 11. Key adapters 14 are journaled for swinging movement on the sleeves 13. As illustrated to advantage in Figure 2 of the drawing, the adapters 14 include plates 15 adapted to be mounted on the heads 16 of the keys 17. Each plate 15 is provided with an opening 18 which is aligned with the usual opening 19 in the key head 16. The openings 18 and 19 of the adapters 14 and the keys

17 accommodate the sleeves 13. Formed integrally with the end portions of the plates 14 are tongues 20 adapted to be bent around the keys 17 for securing the adapters thereon.

Mounted beneath the adapters 14 are coiled springs 21 which encircle the sleeves 13. One end portion of the springs 21, as indicated at 22, are anchored beneath the plates 15 of the adapters 14, as at 23. The springs 21 are tensioned and the other end portions 24 thereof are anchored in the disks 12.

Substantially cup-shaped plungers 25 are slidable in the sleeves 13 and the openings 11 and rise above the upper plate 7 of the case 6. The plungers 25 extend downwardly below the disks 12 and are provided on their lower end portions with angular, horizontally and then upwardly extending stops or latches 26 which are engageable with the end portions 22 of the springs 21 for releasably securing the keys 17 in retracted position in the case 6 against the tension of said springs 21. The upturned latches 26 are operable in openings 27 provided therefor in the disks 12. Coil springs 28 are engaged in the plungers 25 for yieldingly urging said plungers and latches 26 thereon upwardly to operative position.

It is thought that the use or operation of the holder will be readily apparent from a consideration of the foregoing. Briefly, the latches 26 secure the keys 17 in retracted position in the case 6 against the tension of the springs 21, as hereinbefore stated. When the use of either of the keys is desired, the respective plunger 25 is depressed against the tension of its coil spring 28, thus moving the latch 26 downwardly out of engagement with the end portion 22 of the spring 21. The desired key 17 is then instantly swung outwardly to the position shown in Figure 2 of the drawing. After the key has been used it is manually returned to the case 6, the respective latch 26 being again lowered to permit the passage of the end portion 22 of the respective spring 21. A longitudinal divider or partition 29 is provided on one of the spacing sleeves 10 for the keys 17 in the case 6. While the embodiment which has been shown accommodates two keys, the device may be made to hold any desired number of keys.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A key holder of the character described comprising: a case including a pair of spaced, opposed plates, a tubular sleeve mounted in the case, an adapter journaled on said sleeve, said adapter having means for securing a key thereto, a spring in the case engaged under tension with the adapter for actuating same for swinging the key outwardly from the case, a plunger slidable in the sleeve, and a latch on said plunger engageable with the spring for releasably securing the key in retracted position.

2. A key holder of the character described comprising: a case including a pair of spaced, opposed plates, a disk mounted in the case between said plates, a sleeve on said disk, an adapter journaled for swinging movement on the sleeve, said adapter having means for securing a key thereto, a spring encircling the sleeve and connected to the adapter for swinging the key outwardly in the case, and a spring pressed, manually actuated plunger slidable in the sleeve and including means for releasably securing the key in retracted position in the case.

3. A holder for keys of the type having an opening therein, said holder comprising: a case including a pair of spaced, opposed plates for the reception of a key therebetween, a tubular member in the case engaged in the opening for pivotally securing the key between the plates for swinging movement out of the case, spring actuated means journaled on the member and fixed to the key for swinging said key out of the case, and means for releasably securing the key in the case, the first named means including an apertured plate journaled on the member, bendable retaining fingers on the second named plate engaged with the key for securing said second named plate thereto, and a tensioned spring encircling the member and having one end anchored to the case and its other end anchored to said second named plate, the last named means comprising a substantially cup-shaped plunger slidable in the member and protruding from the case, a latch on said plunger engageable with said other end portion of the spring for retaining the key in the case, and a coil spring engaged in the plunger for yieldingly securing the latch in operative position, said plunger being manually operable for disengaging the latch from the spring.

4. A holder for keys of the type having an opening therein, said holder comprising: a case including spaced, opposed, upper and lower plates for the reception of a key therebetween, said upper plate having an opening therein, a substantially cup-shaped member mounted in the case

on the lower plate, a sleeve rising from said member and engaged in the opening, said sleeve being adapted to engage in an opening for pivotally securing a key between the plates for swinging movement out of the case, an adapter comprising an apertured plate journaled on the sleeve and secured to the key, a tensioned spring encircling the sleeve and having one end anchored to the cup-shaped member and its other end anchored to the adapter for swinging the key out of the case, a substantially cup-shaped plunger slidable in the sleeve and opening in the upper plate and rising above said upper plate, an angular latch on the lower end of said plunger operable in said cup-shaped member and including an upturned end portion engageable with the spring for releasably securing the key in the case, a coil spring engaged in the plunger for yieldingly securing the latch in operative position, said plunger being manually operable against the tension of the coil spring for releasing the key.

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