Oct. 12, 1948. J. BERGER ET AL 2,451,056

KEY HOLDER

Filed Jan. 2, 1948

Fig. 1.

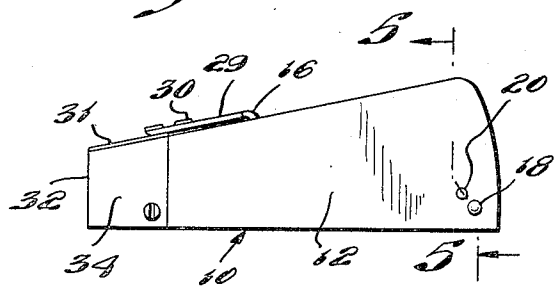
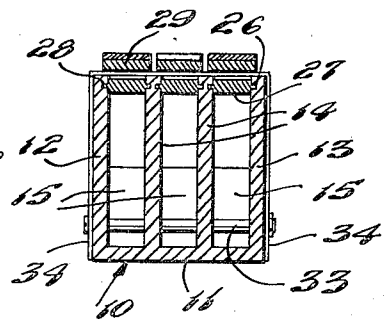


Fig. 4.



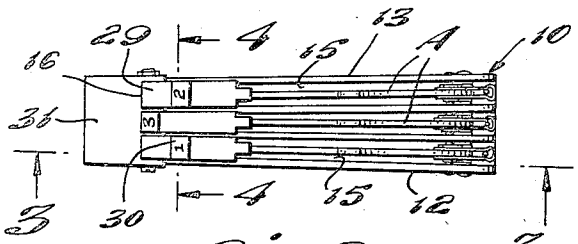


Fig. 2.

Fig. 5.

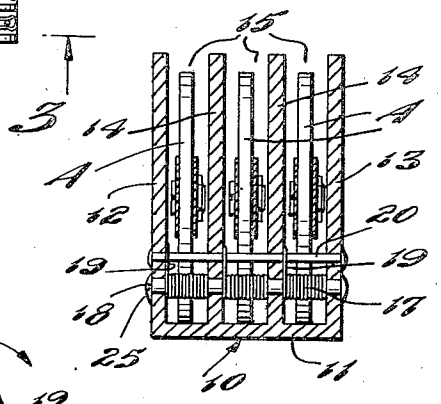


Fig. 3.

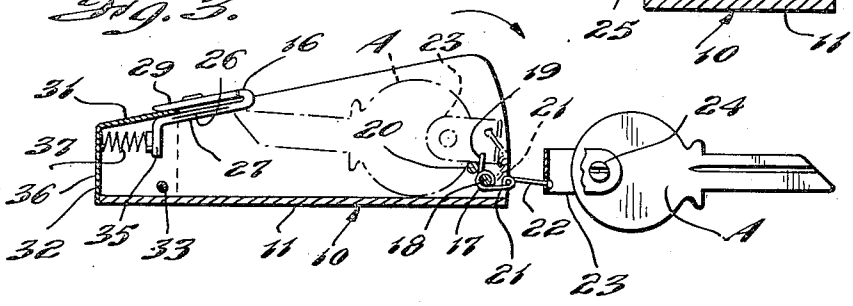
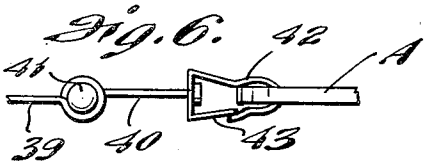


Fig. 6.



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KEY HOLDER

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2 Claims. (Cl. 70—456)

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This invention relates to a key holder for containing a plurality of keys disposed in tensioned engagement therein and adapted to be selectively projected therefrom.

The invention has for an object the provision of a key holder having coiled springs to which the keys are attached so as to permit of free swivel turning movement thereof when released from the holder.

Still another object of the invention is the provision of a key holder of the indicated character having a cross-pin about which the springs are coiled and which is removable to permit of the replacement of the springs when required.

The invention also comprehends a key holder formed with a plurality of partitions providing narrow elongated slots therebetween for receiving the keys in tensioned engagement therein and adapted to be released from tensioned engagement by slides mounted for reciprocatory movement between the partitions.

With the foregoing and other objects in view, reference is now made to the following specification and accompanying drawings in which the preferred embodiment of the invention is illustrated.

In the drawings:

Fig. 1 is a view in side elevation of a key holder constructed in accordance with the invention.

Fig. 2 is a top plan view thereof illustrating the same with a plurality of keys positioned therein.

Fig. 3 is a longitudinal vertical sectional view taken approximately on line 3—3 of Fig. 2.

Fig. 4 is an enlarged transverse vertical sectional view taken approximately on line 4—4 of Fig. 2.

Fig. 5 is a similar view taken approximately on line 5—5 of Fig. 1.

Fig. 6 is a fragmentary view showing a modified form of connecting the keys with the coiled springs.

Referring to the drawings by characters of reference, the key holder consists of a casing 10 having a bottom wall 11, opposite longitudinally extending side walls 12 and 13 and one or more partitions 14 located between the side walls 12 and 13, two partitions 14 being shown in the embodiment illustrated which extend longitudinally of the side walls and are co-extensive therewith. The side walls 12 and 13 together with the partitions 14 provide a plurality of narrow elongated slots 15 extending throughout the length of the holder and which open through the top and opposite ends thereof.

The upper edges of the side walls 12 and 13 and

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the upper edges of the partitions 14 are inclined from one end of the casing to the other whereby the slots 15 are of greater depth at the end of the casing from which the keys are projected. When arranged within the holder, the keys indicated by the reference character A are disposed with the rounded ends thereof located at the end from which the keys are projected and with the shanks of the keys disposed in position to be engaged by slides 16 for releasably retaining the keys in the holder under tension of coiled springs 17.

The coiled springs 17 are located within the slots 15 on a cross-pin 18 with the ends 19 of the springs secured in fixed relation against a cross-pin 20 and with the opposite ends 21 of the springs linked to studs 22 having their headed ends swivelly connected with U shaped yoke members 23 between which the keys are releasably secured by screw studs 24. The swivel connection of the studs 22 with the yokes 23 permits of turning movement of the yokes 23 with reference to the studs 22 to thereby permit of rotation of the keys to angular positions with reference to the slots 15. By this construction, the keys may be more readily manipulated when projected from the key holder. When the keys are arranged in alignment with the slots 15 the same may be rotated to dispose the yokes 23 against the cross-pin 20 as a fulcrum whereupon continued rotation of the keys into position within the holder functions to move the ends 21 of the springs from a horizontal relation to an upwardly directed condition as shown in broken line in Fig. 3 of the drawings. This movement of the ends 21 of the springs places the spring in tension for projecting the keys.

The cross-pin 18 extends through aligned openings in the side walls 12 and 13 and the partitions 14 and the same may be provided with a curfed head 25 and threadedly engaged at the opposite end in the threaded opening in the side wall 13 to permit of the removal of the cross-pin for replacement of the springs when required.

The slides 16 are mounted within the slots 15 for longitudinal reciprocatory movement into and out of overlying engagement with the ends of the keys. For this purpose the slides are of U shaped formation in vertical section and are provided with outwardly extending tongues 26 on the opposite side edges of the lower leads 27 thereof which slidably engage in longitudinally extending recesses 28 in the side walls and partitions defining the slots 15. The upper leads 29 of the slides protrude through the slots 15 and are provided with indicia 30 such as the numbers

1, 2 and 3 for indicating the keys contained in the slots respectively. The leads 27 and 29 of the slides are connected together at their forward ends and are spaced apart rearwardly thereof to provide a narrow recess therebetween in which is slidably received the inclined top wall 31 of a metallic end member 32 secured over the reduced end of the holder. The slides 16 thus have reciprocatory sliding movement in the recesses 28 and with the top wall 31 of the end member 32 slidably engaging between the leads thereof.

The end member 32 is of rectangular formation and is secured on the rear end of the holder by a pin 33 extending transversely through the holder and through the opposite side walls 34 of the end member.

In order to provide means for retaining the slides 16 in forward overlying relation with the shanks of the keys as illustrated more particularly in Fig. 3 of the drawings, the lower leads 27 thereof are provided with depending terminals 35 and interposed between the depending terminals and the rear wall 36 of the end member 32 are coiled expansion springs 37 which normally tension the slides against rearward movement.

In Fig. 6 of the drawings a modified form of construction is shown for releasably connecting the keys with the coiled springs. In this form the ends of the coiled springs indicated by the reference character 39 are pivotally connected with stud members 40 by pivots 41, the stud members 40 being swivelly connected with yoke members 42 having a spring catch 43 adapted to be sprung inwardly for releasing the keys from engagement with the yoke members 42.

What is claimed is:

1. In a key holder, a casing providing a plurality of longitudinally extending slots opening through one end and along one longitudinal edge thereof, a cross-pin extending through said casing, a plurality of coiled springs mounted on said cross-pin and located in said slots respectively,

yoke members releasably affixed to the keys respectively, studs swivelly connected with said yoke members and linked to the coiled springs at one end thereof respectively and slides mounted on said casing for longitudinal reciprocatory movement into and out of overlying relation with the ends of the shanks of the keys for securing the same in position in the slots in the casing under tension of said springs and for releasing the keys for projecting the same from the casing.

2 In a key holder, a casing providing a longitudinally extending slot opening through one end and along one longitudinal edge thereof, a cross-pin extending through said casing, a coiled spring mounted on said cross-pin and located in said slot, a yoke member affixed to the key, said spring having one end thereof fixed against movement and the opposite end thereof free for turning for winding said spring and swivelly connected with said yoke member for swivel turning movement of the yoke member and key with reference to the casing, and a slide mounted on said casing for longitudinal reciprocatory movement into and out of overlying relation with the end of the shank of the key for securing the same in position in the slot in the casing under tension of said spring and for releasing the key for projecting the same from the casing.

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